N4R | Nutrition for Resilience

Micronutrient FORUM

Micronutrient Forum 6th Global Conference

The Hague, the Netherlands & Online

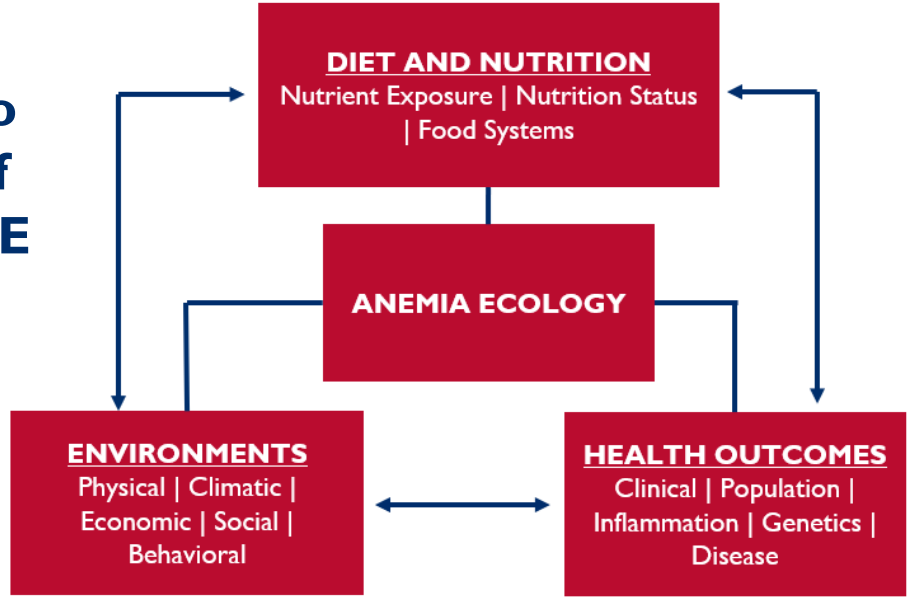
16-20 October 2023

Resilience and Ecological Approach to Anemia

#MNF2023 | MNForum2023.org

Resilience and Ecological Approach to Anemia: Interaction with Members of the Anemia Task Force and the HEME Study—USAID-Funded Anemia Initiatives

Moderated by USAID Advancing Nutrition



Micronutrient Forum 6th Global Conference
Friday, 20 October 2023
1:45–3:15 pm

Welcome

Introduction to the Session and Objectives

Denish Moorthy, Senior Technical Advisor
USAID Advancing Nutrition

Agenda for this Session

Time	Title	Speaker
13.45–13:50	Introduction to Session and Objectives	Denish Moorthy, USA
13:50–14:05	Building Resilience—Ecological Approach to Anemia Programming from the Anemia Task Force & Accuracy and Precision in Anemia Assessment—HEmoglobin MEasurement (HEME) Project	Laura Hackl, USAID Advancing Nutrition and Nestle R&D
14:05–14:55	Panel Round Table	1) Cornelia Loechl, Austria 2) Dora Inés Mazariegos, Guatemala 3) Layal Jaafar, Lebanon 4) Omar Obeid, Lebanon
14:55–15:05	Audience Response Panel	All attendees
15.05–15:15	USAID and the Anemia Agenda	Omar Dary, USAID Washington

Building Resilience—The Ecological Approach to Anemia Programming from the Anemia Task Force & Accuracy and Precision in Anemia Assessment—HEmoglobin MEasurement (HEME) Project

Laura Hackl
USAID Advancing Nutrition
&
Nestle Research

Building Resilience—The Ecological Approach to Anemia Programming

Laura Hackl on behalf of the USAID Advancing Nutrition Anemia Task Force and the HEmoglobin MEasurement team

Credit: Liam Wright/ICRISAT

Resilience and Ecological Approach to Anemia

Micronutrient Forum
October 20, 2023

USAID Advancing Nutrition Anemia Task Force

Assessment Working Group
Parminder Suchdev, Emory University (Chair)
Anne Williams, Emory University
Kenneth Brown, University of California, Davis
Lindsay Allen, University of California, Davis
Omar Dary, USAID
Rahul Rawat, Gates Foundation
Denish Moorthy, USAID Advancing Nutrition

Biology Working Group
Gary Brittenham, Columbia University (Chair)
Carla Cerami, Medical Research Council, The Gambia
Gemma Moir-Meyer, University of Melbourne
Sant-Rayn Pasricha, University of Melbourne
Ralph Green, University of California, Davis
Ananya Datta Mitra, University of California, Davis
Sarah Atkinson, Kenya Medical Research Institute (KEMRI)
Kelvin Mokaya Abuga, KEMRI

Chair
Dan Raiten, National Institutes of Health

Interventions Working Group
Cornelia Loechl, International Atomic Energy Agency (IAEA) (Chair)
Ananya Datta Mitra, University of California, Davis
Lindy Fenlason, USAID
Ralph Green, University of California, Davis
Laura Hackl, USAID Advancing Nutrition
Laura Itzkowitz, USAID
Marion Koso-Thomas, National Institutes of Health
Denish Moorthy, USAID Advancing Nutrition
Victor Ochieng Owino, IAEA
Helena Pachón, Food Fortification Initiative
Nicole Stoffel, Swiss Federal Institute of Technology (ETH)
Michael Zimmerman, ETH
Daniel J Raiten, National Institutes of Health

USAID Advancing Nutrition Secretariat
Victoria Anders; Sharmila Mysore; Emily Vance; Courtney Meyer; Silvia Alayon

Globally Endorsed Goals for Anemia Reduction

By the year 2025*:

"Achieve a **50% reduction** in **anemia** [vs. 2012 figures] in women of reproductive age"

Source: WHO (World Health Assembly). 2012 "World Health Assembly Nutrition Targets." Accessed October 1, 2023. https://www.who.int/teams/nutrition-and-food-safety/global-targets-2025
*Extended to 2030 as an United Nations Sustainable Development Goal

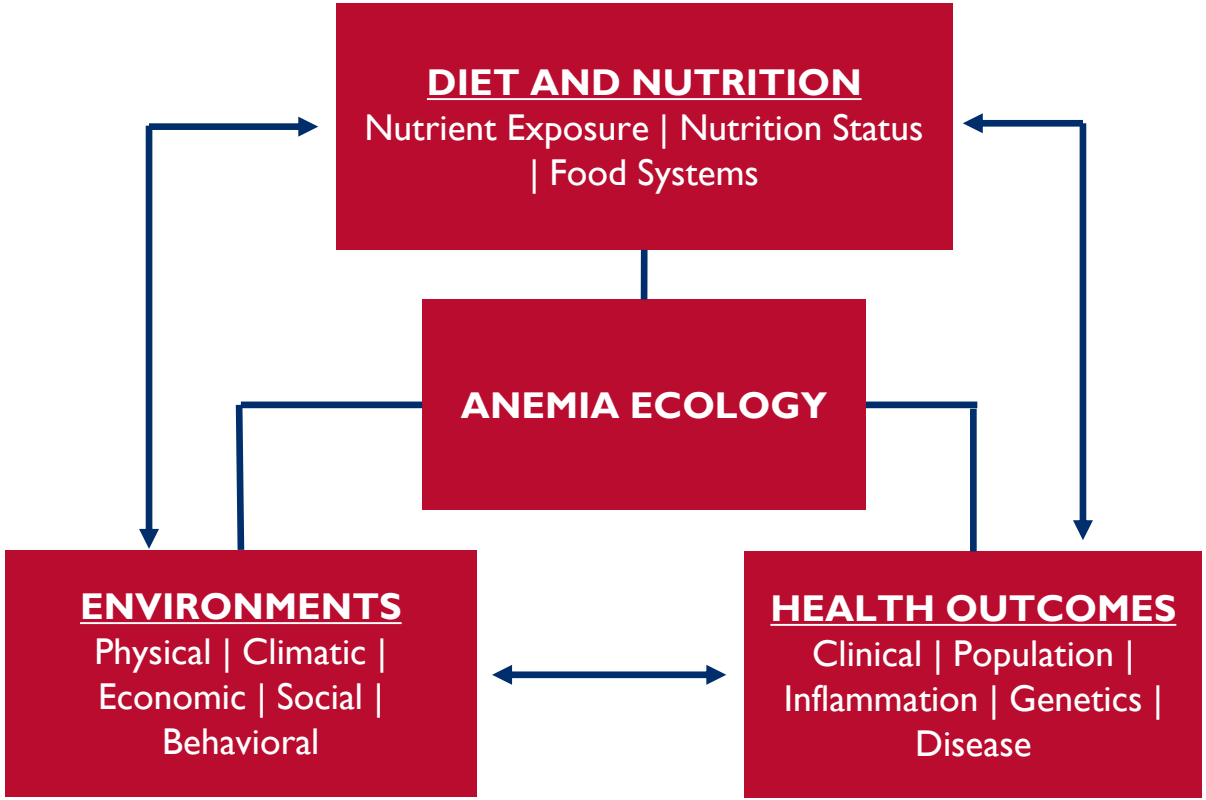
Is this type of commitment new?

By the year 2000:

"Reduction of ***iron deficiency*** **anemia** in women by one third of the 1990 levels"

Source: UNICEF. 1990. "World Summit for Children." Accessed October 1, 2023. https://www.unicef.org/documents/world-summit-children

The Ecology of Anemia

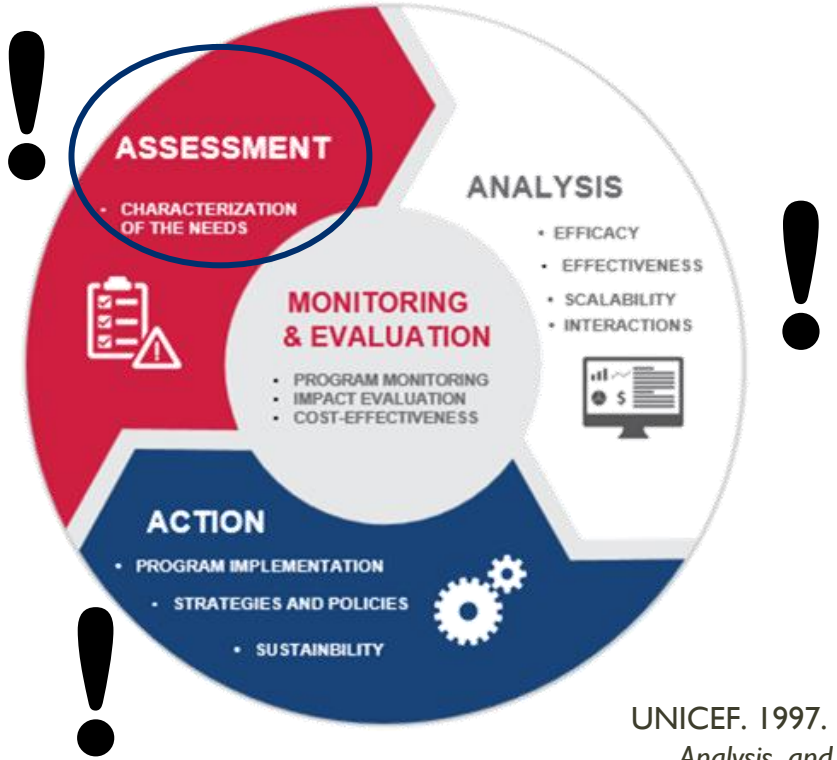


Operating assumptions

- Anemia has multiple causal factors
- An ecology defines the interactions between a complex system (i.e., internal and external environments).

Understanding the components of the anemia ecology is critical to identify and treat with precision at individual and population levels.

Challenges in Assessing/Addressing Anemia



UNICEF. 1997. *The Care Initiative: Assessment, Analysis, and Action to Improve Care for Nutrition.* New York: UNICEF.

Building Resilience—Accuracy and Precision in Anemia Assessment—HEmoglobin MEasurement (HEME) Project

Laura Hackl on behalf of the HEME team

Credit: Liam Wright, Smart Food, ICRISAT

Resilience and Ecological Approach to Anemia

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HEME Objective

Identify *best procedures/methods for determining hemoglobin concentration/anemia prevalence* in population-based surveys

Specifically—

- assess the performance of three HemoCue® models vs. certified hemoglobin autoanalyzer
- using venous, pooled capillary, and single-drop capillary blood samples.

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Nutrition International
Sara Wuehler

We would like to thank
all participants and **caretakers**
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Veronica Varela
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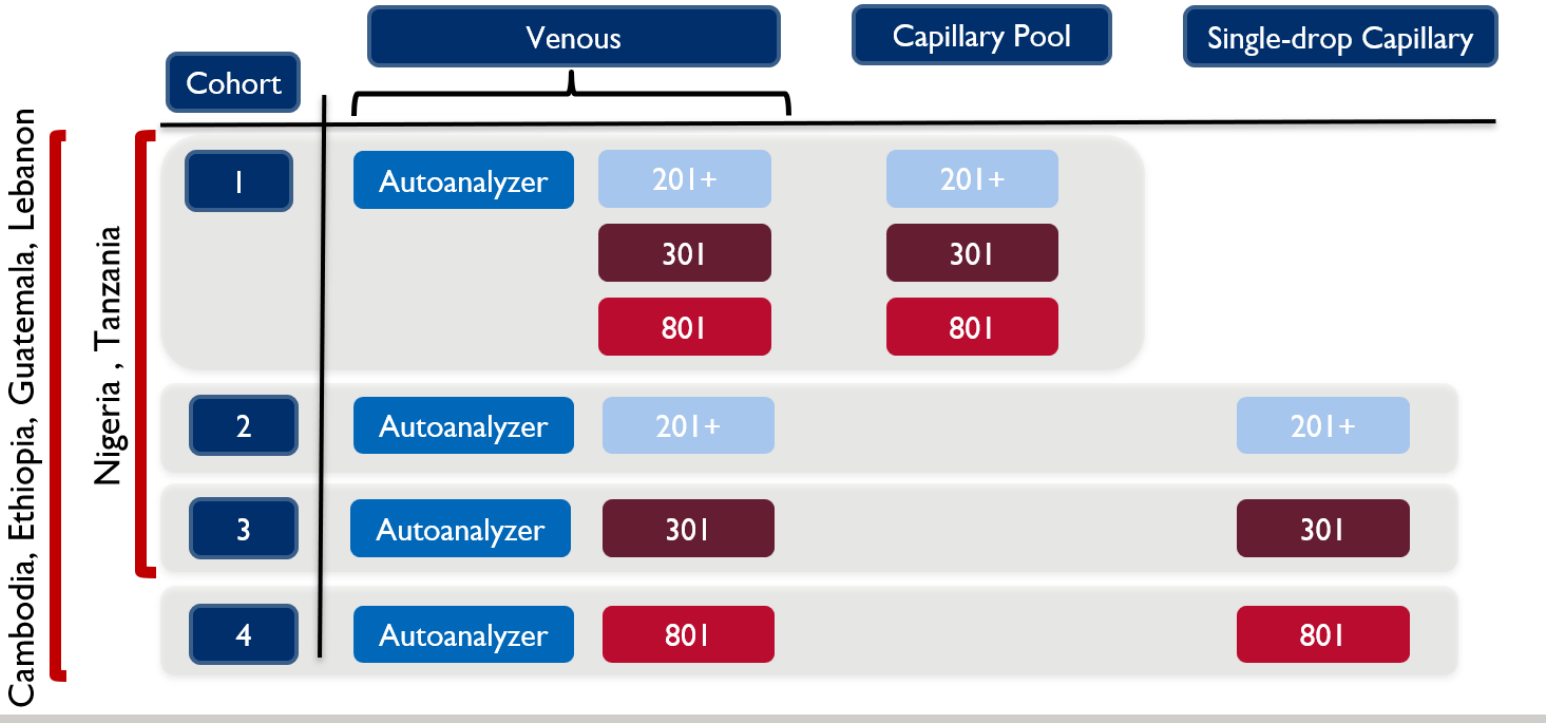
Multi-Country Collaboration



18 women and 18 children per cohort

How Can We Further Support Building Resilience?

- Consider an ecological approach
  - How do the physiology and response to infection/disease blend with the specific aspects of dietary iron nutrition and bioavailability?
  - How should we represent iron deficiency anemia in the context of anemia, given its multifactorial causation?
  - Can we improve our precision by considering the role of multiple other nutrients/factors?
- Assess—analyze—act
- Collaborate

USAID Advancing Nutrition's Anemia Resources

- Please scan the QR codes below or visit USAID Advancing Nutrition's Resource Hub at advancingnutrition.org/anemia

Anemia Toolkit

Anemia Task Force Supplement

Round Table Panelists

Cornelia Loechl
International Atomic Energy Agency (IAEA), Austria

Dora Inés Mazariegos, Institute of Nutrition of Central America and Panama (INCAP), Guatemala

Omar Obeid
American University of Beirut (AUB), Lebanon

Layal Jaafar
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USAID and the Anemia Agenda

Omar Dary
Senior Nutrition Science Specialist
USAID Bureau for Global Health

USAID
FROM THE AMERICAN PEOPLE

USAID ADVANCING NUTRITION

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