2023

Double Burden of Malnutrition Workshop Facilitation Manual: Iquitos, Peru

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Additional File 3. Workshop Facilitation Manual Iquitos
https://doi.org/10.7936/vn0n-h668
Supplementary material to: Mapping food system drivers of the double burden of malnutrition using community-based system dynamics: a case study in Peru by Carmen Quinteros-Reyes, Paraskevi Seferidi, Laura Guzman-Abello, Christopher Millett, Antonio Bernabé-Ortiz, Ellis Ballard

Double Burden of Malnutrition Group Model Building Workshop Facilitation Manual

Iquitos, Peru
April 2022

Acknowledgments

The following facilitation manual was developed for the project “Addressing the double burden of malnutrition in Peru: using a community-based system dynamics approach to improve food systems”. The project is a collaboration between investigators at the Center of Excellence in Chronic Diseases (CRONICAS) at the University of Peruana Cayetano Heredia, Universidad de los Andes in Bogota, Peru, the Social System Design Lab at Washington University in St. Louis, USA and Imperial College London funded by the Biotechnology and Biological Science Research Council (Grant Ref: BB/T009004/1).

Materials in this facilitation manual are adapted from resources of Scriptapedia (https://en.wikibooks.org/wiki/Scriptapedia) This facilitation manual is shared as a learning resource and as an artifact of a workshop hosted in Iquitos, Peru in April 2022.

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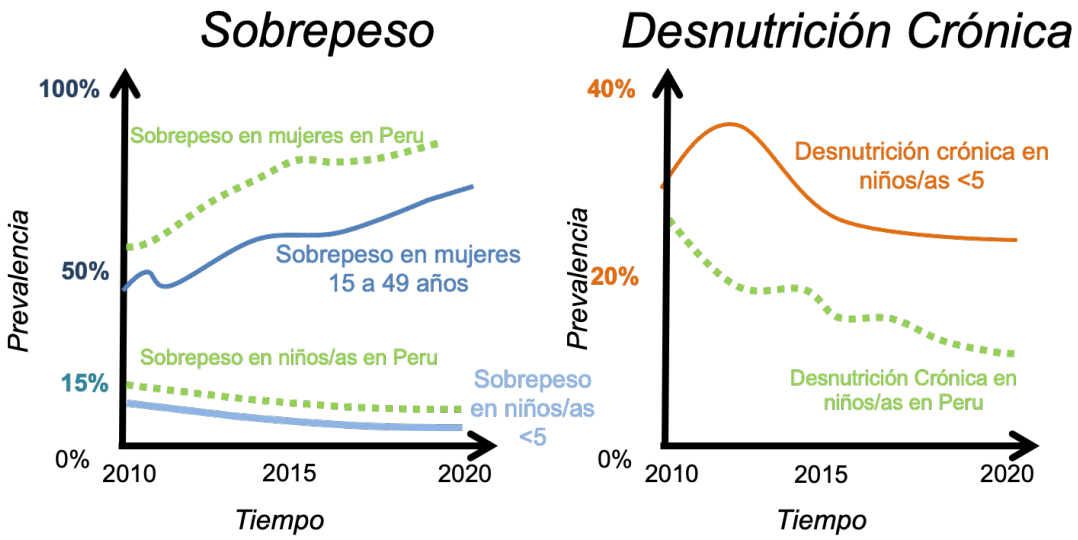
Project Background

The concept of the Double Burden of Malnutrition (DBM) arose out the coexisting issues of both undernutrition and overnutrition. In Peru, undernutrition has been a concern for decades, with stunting affecting more than 12% of children under the age of 5 in 2019. At the same time, the dramatic change of how people eat in Peru has increased overnutrition, which refers to dietary excess and related health outcomes, like overweight, obesity and non-communicable disease, such as cardiovascular disease. The problem of the DBM has been presented in this workshop using the reference modes shown below, which reflect dynamic trends in overweight and stunting in Loreto, Peru.



Policy interventions have historically only been one-sided, addressing either undernutrition or overnutrition. These efforts have been siloed and thus precipitate the need for double-duty policies to address the DBM and avoid unintended consequences of one-sided policy.

In order to address this knowledge gap and identify opportunities for double-duty policies in Peru, the research team is developing a conceptual simulation model to inform understanding of the wider food system and how it affects the DBM. As a formative step, representatives of CRONICAS and system dynamics professionals from Imperial College London, Universidad de los Andes Colombia, and the Social System Design Lab hosted a series of group model building sessions in Lima and Iquitos, Peru. Stakeholders tapped for their experience included policymakers, NGOs representatives, health practitioners, academics/researchers, and community members. Insights and model structure gleaned from these workshops will inform the adaptation and further development of the conceptual simulation model.

The facilitation manual here presents the design of a workshop hosted in Iquitos, Peru, in April 2022.

Objectives

Explicit Objectives

- Map the drivers of the food system that contribute to the double burden of malnutrition in two diverse regions in Peru using a CBSD approach.
- Orient relevant stakeholders to a systems perspective of the double burden of malnutrition.
- Identify potential policy levers that could address the double burden of malnutrition through changes in the food system to be explored in future simulation analysis.

Implicit Objectives

- Build group model building capabilities within the project research team to facilitate community workshops.
- Support the development of a cohort of community stakeholders with exposure to system dynamics approaches to continue involvement in the project moving forward.
- Generate resources to replicate application of the CBSD approach in relevant future work

Facilitation Team Roles

Members of the Core Modeling Team (CMT) will adopt various roles throughout the course of the workshops. Below are basic descriptions and expectations of each role. Specific tasks will be covered in the detailed agenda.

Workshop Convener
Task: Welcomes participants and thanks them for attendance. Introduces workshop and provides context for the workshop within the larger project. Facilitates introductions among CMT and stakeholders. Reviews agenda, norms, and goals of workshop.
Attributes: Community based member of CMT

Presenter
Task: Presents the project with the use of PowerPoint slides. Introduces the concept of DBM. Introduces the current simulation model.
Attributes: Currently conducting research on DBM. Should have system dynamics background to introduce model. More than one presenter may be used. Should be a Spanish speaker.

Facilitator
Task: Leads the script/activity. Depending on activity, engages with participants through posing prompts and questions, responds to participants' questions, and reflects on participants' contributions.
Attributes: Should have systems dynamics expertise or content expertise with the Double Burden of Malnutrition. Should have experience with group facilitation. Should be native Spanish speaker.

Modeler
Task: Constructs model based on input from participants and reflections from facilitator.
Attributes: Should have background in system dynamics modeling and be a native Spanish speaker. Can also have the role of the facilitator at the same time.

Wall-builder
Task: Takes participants' contributions (e.g., sheets of paper) and tapes them to wall in clusters of themes. Reflects on group's ideas and explains clustered themes to group.
Attributes: Can identify core concepts and themes from group participation. Two members of CMT can simultaneously be wall-builders, but at least one should be a Spanish speaker

Reflector
Task: Reflects on the workshop's activities and emerging themes. Explains how activities and models created fit into the context of DBM project and model. Describes next steps in the workshop process and overall project goals.
Attributes: Community based member of CMT. Can speak to the connection to simulation model. Can be more than one CMT member, should have at least one Spanish speaker.

Notetaker
Task: Captures participants' contributions to workshop.
Attributes: Native Spanish speaker.

Logistics/Timekeeper
Task: Sets up technology for presentation, as well as materials for connection circle and causal mapping activities. Keeps track of time for each script and signals to facilitator when time is nearly up.
Attributes: Familiarity with tech and presentation.

Planning Logistics

Workshop Space

- Tables organized for 3-5 participants per table, facing each other
- Wall space – open wall space or windows to allow for taping chart paper and A4 papers. Alternatively, a whiteboard could be used, depending on format of workshop.
- Technology – availability of projector & screen for projecting
- Refreshments – Water & snacks as appropriate, space to serve

Materials Needed

- Technology
  - Digital Projector
  - Computer with PowerPoint
  - Microphone if necessary, depending on space
- Office Supplies
  - White A4-sized paper
  - Tape - Painter's tape that doesn't pull off paint from walls
  - Colorful, fat-tipped markers – enough for each participant to have 1 + some extra. Flip-chart markers preferable so they don't bleed through
  - Chart paper or Flip charts
  - Name tags – sticky name tags for people to wear

Interpretation Approach

Workshops were facilitated in Spanish with simultaneous English interpretation for English-language observers provided by professional interpreters. Notes were taken primarily in Spanish, with supplemental notes from observers in English.

Summary Agenda

The summary agenda illustrates the order of activities, how long is set aside for each activity, and which roles are needed.

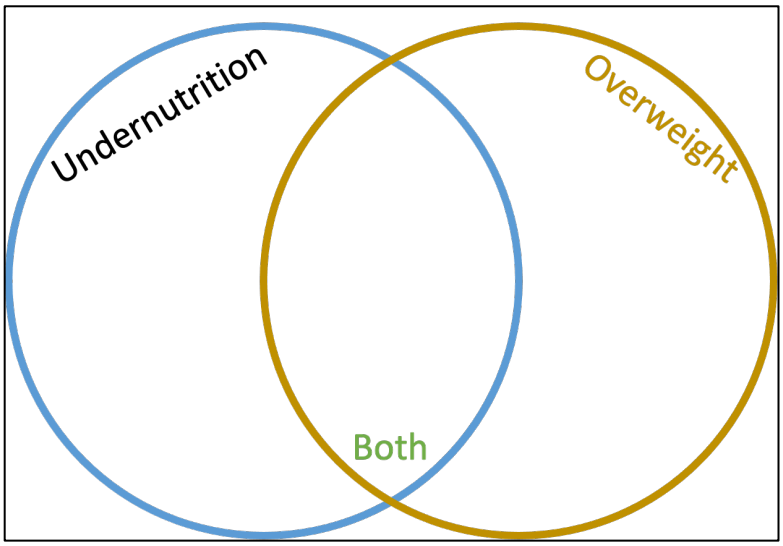
Time	Activity	Roles
30 minutes	Welcome	Convener(s) Logistics
20 minutes	Introductions Activity	Facilitator Logistics/Timekeeper
40 minutes	Identifying Drivers of the Double Burden of Malnutrition – Variable elicitation	Facilitator Wall-builder Logistics/Timekeeper Notetaker
15 minutes	*Break*	
45 minutes	Graphs Over Time	Facilitator(s) Wall-builder Logistics/Timekeeper
5 minutes	Dots	Facilitator Logistics/Timekeeper
15 minutes	*Break*	
70 minutes	Connection Circles	Facilitator Reflector Logistics/Timekeeper
60 minutes	*Lunch*	
60 minutes	Large Group Causal Loop Diagram	Facilitator Modeler Logistics/Timekeeper
30 minutes	Intervention Strategies (if time)	Facilitator Wall-builder Logistics/Timekeeper
30 minutes	Reflections & Closing	Facilitator Reflector

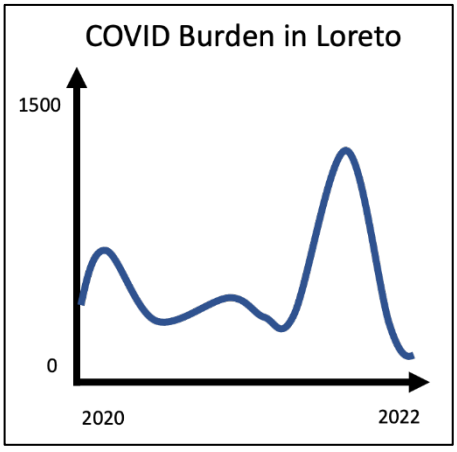
Detailed Agenda

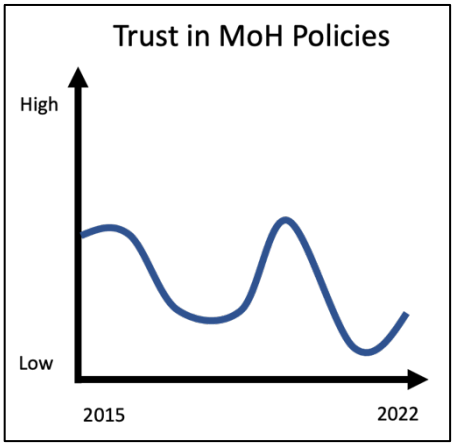
The detailed agenda walks through each activity including timing and roles, prompts, props, and other details for a successful activity.

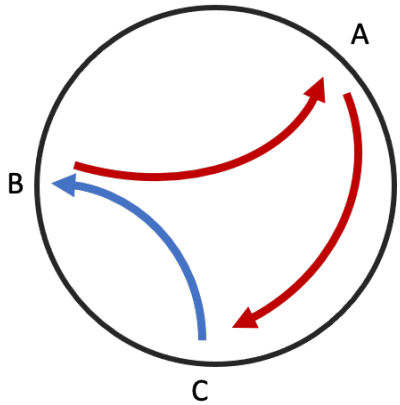
Timing & Roles	**Activity**
Time: 30 minutes	**Room Set-up** • Table lay out • Materials on table • Rip tape for each activity • Create templates or spaces on walls for each activity • Technology – PowerPoint ready • Refreshments
Time: 30 minutes	**Participants arrive** • Welcome participants in • Ask participants to create a nametag
<u>Welcome and Introductions</u>	
Time: 30 minutes Roles: Conveners Logistics/Timekeeper	*Conveners: Welcome everyone* **<u>CMT Introductions (10 mins)</u>** The entire team introduces themselves and the convener provides an overview of the project **<u>Norm Setting and Expectations (10 mins)</u>** Convener mentions some norms and asks participants if they want to add any additional norms to the group Convener: “We will be taking notes and photos throughout the sessions, if you share something you do not want recorded, please let the notetaker or someone on the core modeling team know.” **<u>Present Agenda (5 mins)</u>** Convener presents the agenda and ask if the group has any questions
Time: 20 minutes Roles: Facilitator Logistics/Timekeeper	**<u>Participant Introductions</u>** *Facilitator brings out yarn ball and gets members to stand in a circle* **<u>Web of Yarn (10 mins)</u>** Facilitator: Explain that we will be doing an introduction activity that both introduces members of the group to each other and illustrate system concepts. Facilitator: “Each participant will say their name, organization

	and role in the organization, and then throw the ball of yarn to another person who has not received it yet, and the next person does the same." Ask for a volunteer to go first and then pass the ball of yarn to the next person Once everyone has had the chance to introduce themselves, ask all participants to either change their location or how they are holding the yarn. **Reflections (10 mins)** Facilitator: "Now I want everyone to think about what happened after we were all connected with the yarn and then were instructed to move. What did you notice?" Participants share reflections on the activity, specifically what happened after everyone moved. Provide concluding remarks about why we are here and how decisions of one part can impact other parts of the system
# Variable Elicitation (These activities are a variation on the Variable Elicitation activity)	
Time: 40 minutes Roles: Facilitator Wall-builder Logistics/timekeeper Notetaker	*Facilitator passes out pieces of paper and markers* *Wall-builder puts up/makes Venn Diagram (e.g., with tape) and rips tape for taping variables into Venn Diagram* **Introduction to Activity (5 mins)** Facilitator: Introduce the two graphs that define the problem of interest in this workshop: - Change over time in stunting in Loreto - Change over time in overweight in Loreto. Explain how stunting and overweight are defined and highlight that these two behaviors over time are the subject of this workshop. **Writing Variables (10 mins)** Facilitator: Ask participants to think for 2 minutes & take notes for themselves to the prompt **PROMPT: What are some drivers of stunting in Loreto?** Facilitator: Ask participants to work in their small groups to write one variable each on pieces of paper for the next 4 minutes and provide example

	Facilitator: Ask participants to think for 2 minutes & take notes for themselves to the prompt **PROMPT: What are some drivers of overweight in Loreto?** Facilitator: Ask participants to write one variable each on pieces of paper for the next 4 minutes **Share out (25 mins)** Facilitator: "Now we want to have the group share out one driver and briefly describe what it is. If someone else shares something similar, pick something different to share." *If the variable needs clarification or further explanation, the facilitator can ask to elaborate or provide an example.* *Wall-builder takes the variable and asks whether this factor is a driver of overweight or stunting or both & places the graph in that space.*  Participants continue to share out graphs until the Venn diagram is full OR everyone has gone 2 rounds.
Time: 15 minutes	**BREAK** CMT checks in to review dual-function factors. CMT pulls additional variables into the "Both" section if needed
<u>Graphs Over Time</u> (This activity is a variation on the Graphs over Time activity with CMT identifying new variables from the share outs)	
Time: 10 minutes Roles:	**Introduction to Issue of the Double Burden of Malnutrition** **<u>Defining the Issue (2 mins)</u>**

Presenter Logistics/Timekeeper	Presenter reviews any proposed changes to the Venn diagram & asks for disagreement or challenges. **<u>PowerPoint Presentation (4 mins)</u>** Presenter: Introduce the idea of the double burden of malnutrition as the overlapping occurrence of over and under-nutrition in communities using Slides. **<u>Systems Thinking Iceberg (4 mins)</u>** Presenter: Introduce the idea of the iceberg as a framework for understanding the double burden of malnutrition.
Time: 35 minutes Roles: Presenter Facilitator Logistics/Timekeeper Wall Builder Notetaker	*Pass out white paper to each table of participants. Aim to have a sufficient amount of paper so no participant will run out.* **<u>Introduction to Activity (5 mins)</u>** Presenter: Create 2 demonstration graphs 1. X-axis: Time The time should start in the past and end in the present, and could vary (such as days, months, or years). 2. Y-axis: scale of the variable to be described Numeric or qualitative, such as “high/low.” 3. Use a line to draw the pattern of behavior How it has changed over the timescale. Is the factor increasing or decreasing over time? Or both? Or not changing? 4. Title to your graph to indicate the pattern of behavior Focus on: • Different time scales • Qualitative and Quantitative factors • Change over time (dynamics) 

	 Presenter: Explain that CMT wants participants to think about variables shared in our previous activity *Facilitator splits up participants into pairs or threes to work.* **<u>Draw Graphs Individually (10 mins)</u>** Facilitator: "Draw 2 graphs individually first and then we'll share in small groups. We'll be walking around if you have any questions" *Logistics/timekeeper provides a 2 minute warning* **<u>Full Group Share Out (15 mins)</u>** *Wall builder tapes graphs to the wall* Facilitator: Ask participants to tell the story of the graph to the whole group **<u>Extracting Variables from Graphs (5 mins)</u>** *While participants share out their graphs, CMT (at least 2 people) will identify new food system variables from their presentations & write them on individual pieces of paper.* Facilitator "Now we want to share out variables that emerged from presentations" *Wall builder tapes variables next to graphs that inspired them.*
<u>Dot Vote</u> (This activity is a variation on the Dots activity)	
Time: 5 minutes Role: Facilitator	*Pass out 5 dot stickers per participant* Facilitator: Explain to participants to place dots on the graphs which are most important to the drivers of the double

	burden of malnutrition. They can place as many dots as they would like (up to 5) on a graph. Colors do not matter. Facilitator: “Come up all at once and place your votes.” Facilitator: Reflect on observations in where the voting is clustered.
BREAK	
Time: 15 minutes	**BREAK** CMT checks in & discusses the prompt for Connection Circles activity
Connection Circles (This activity is a variation on the Connection Circle activity)	
Time: 70 minutes Roles: Facilitator Reflector Logistics/Timekeeper Notetaker	*Pass out materials needed (black and blue pen) and make sure flipchart papers are distributed across tables* **Introduction to Activity (10 mins)** Facilitator: Explain that groups will be using the variables created in earlier brainstorm activities to explore interconnections to understand the problem of double burden of malnutrition. Facilitator: Introduce the diagramming convention by identifying 1-2 variables from the list and write them around the perimeter of the circle. Ask participants to describe how the factors are interconnected. - Add new variables that are not on the list such as intermediate variables - For positive polarity (change in the same connection) use blue marker to draw an arrow - For negative polarity (change in opposite direction) use black markers to draw the arrow 

	Connection Circles in Small Groups (30 mins) *Split group into 3-4 groups* Facilitator: Remind group of instructions: 1. Start to populate the circle 2. Write these variables around the edge of the circle 3. Discuss how they are interconnected. 4. Draw arrows describing how they are interconnected: a. Black for same direction b. Blue for opposite direction 5. Add additional variables as needed 6. Be prepared to tell the stories from your connection circle when done. **Full Group Share Out (30 mins)** Facilitator: Ask groups to share out their connection circles. Have each group highlight initial variables, insights or "ah-ha" moments and things to explore more deeply. Reflector: Reflect on what was interesting, surprising or compelling about what came up in the connection circles.
Lunch	
Time: 60 minutes	CMT Working lunch • Check-in on group dynamics • Review connection circles made by participants to identify connections to be further explored with group when we reconvene Decide prompts for large group modeling
Large Group Causal Loop Diagram (This activity is a variation on the Causal Mapping with Seed Structure activity and model synthesis using a seed structure as the start of the model synthesis activity)	
Time: 60 minutes Roles: Facilitator Modeler Logistics/Timekeeper Notetaker	*Tape seed structure onto a space on the wall or draw on a whiteboard* Facilitator: "We are going to explore the interconnections between these factors by developing a causal loop diagram together." *Facilitator introduces the first few variables of overweight and stunting to initiate the development of the model.*

	Facilitator: Ask participants to propose additional chains or links based on their connection circle or other reflections. Participants propose a link or variable to add to the model. The facilitator clarifies the nature of the link between variables, and in the process reviews the concept of positive and negative polarity. The facilitator requests contributions from each participant, then opens up participation to any participant who wants to add additional links. As feedback loops emerge, the facilitator identifies and retells the story of each feedback loop. As more variables are added, the facilitator may ask pointed questions about how loops might be closed – for example, highlighting that many factors are influencing overweight adults, but then asking what the consequences of a larger number of overweight adults are. Model development continues until either time runs out or all potential contributions are made. The facilitator retells the story of major causal chains and feedback loops to close the modeling session.
Intervention Points (OPTIONAL) (This activity is a variation on the Places to Intervene activity)	
Time: 40 minutes Roles: Facilitator Wall Builder Logistics/Timekeeper Notetaker	**Identity Intervention Points in Small Groups (20 mins)** *Split group into 3-4 groups and give each group a piece of A4 paper* Facilitator: Request that participants identify where on this map or model there might be opportunities for system intervention. Facilitator shares instructions: 1. Identify 4 places to intervene in this model to address double burden of malnutrition –i.e., opportunities for double duty policies. 2. Write out a description of each policy, who would be responsible, and how it would work. Write one policy per piece of paper. **Large Group Share Out (20 mins)** Facilitator: Ask groups to share out their one of their policies. Have groups highlight intervention points and where they act

	in the system, insights or “ah-ha” moments and things to explore more deeply.
Reflection & Closing (This activity is a variation on Next Steps & Closing activity)	
Time: 20 minutes Roles: Facilitator Reflector	**Reflection (10 mins)** Reflector: Reflect on insights and themes gained today and their meaning for larger context of the project **Closing (10 mins)** Facilitator: Discuss next steps of model development, interviews & communication Thank everyone for attending