NIPN countries LiST training and Analysis experience

Presenters:
Youssouf Keita, C4N-NIPN Global Support

MADY Gouda Roland Mesmer, PNMIN Cote d'Ivoire

Daniel Ouedraogo, PNIN Burkina Faso

Webinar #1, March 2022
- Introduce LiST to participants
- Familiarise NIP country teams with the use of the LiST model for strategic planning and impact assessment
- Share the main lessons learned from the experiences of the Burkina Faso and Ivory Coast NIP platforms with the LiST tool with other countries
Introduction to LiST
LiST: A multi-cause mortality model

- Uses inputs
  - Basic description of the health status of a country
  - Effectiveness of interventions
  - Changes in coverage of MNCH&N interventions with demonstrated effect

- In order to project
  - Number of lives saved
  - Number of deaths
  - Mortality rate
    - Reduction of Malnutrition
Objectives of LiST

- Immediate objective:
  - Estimate the number of lives saved when new interventions are introduced or coverage of certain interventions is increased
    - Gain due to reduction of malnutrition-related effects

- The ultimate goal:
  - Promoting evidence-based decision making
  - Support for planning or decision-making related to increasing coverage of maternal, newborn and child health interventions
LiST: the history of the model

Created in the context of the child survival series published in *The Lancet* in 2003 to estimate the impact of increasing the coverage of community-based interventions on children under five.

Transferred to the public domain as part of Spectrum’s policy monitoring system.

- Modelling at sub-national level
- Sensitivity in uncertainty of results
- Cost estimates

2003

- Interventions delivered in a health centre,
- Neonatal mortality
- Risk factors

New results
- Birth outcomes and stillbirths
- Maternal mortality
- Morbidity due to pneumonia, diarrhoea and meningitis

- Teenage mortality
- Use and availability of services/quality of care

- LiST online
- Webinars on youtube
Updates on nutrition

- Effectiveness of nutritional interventions
- Review of possible new interventions related to nutrition and growth.
  - Based on their relationship with birth outcomes
- Estimation of capital gains
  - The number of years of schooling gained and the lifetime earnings gained from reducing stunting.
Why do we use LiST?

**Prospective analyses**
- Strategic planning
- Projecting lives saved
- Projecting effects related to malnutrition

**Retrospective analyses**
- Project/programme evaluation
- Attribution of lives saved due to interventions

**Advocacy**
- Global, national and sub-national level
Who has used LiST?

Funders
- Children’s Investment Fund Foundation
- Bill & Melinda Gates Foundation
- Save the Children

International organisations
- Gavi (The Vaccine Alliance)
- World Health Organization
- UNICEF
- The World Bank
- PAHO-WHO

NGO
- MSH
- Jhpiego

Development agencies
- Canada
- USAID

Governments
- DRC
- Malawi
- Mali
- Nigeria
- India
- Peru
- Mozambique
- Tanzania

Academic institutions
- Johns Hopkins Bloomberg School of Public Health
- London School of Hygiene & Tropical Medicine
- The Aga Khan University

How does LiST calculate the impact?

Mortality by cause \times \text{Changes in the coverage of interventions} \times \text{Fraction affected x Efficiency} = \text{Lives saved} = \text{Effects of malnutrition}
What interventions are in LiST?

**Immediate factors**
The distal factors improve the coverage of the immediate factors.

**Works through health programmes**
Community-based and in health services

**Feasible in a low-income country**
±80 countries with the highest maternal, newborn and child mortality rates

**Evidence of cause-specific effects**
Systematic reviews, meta-analyses, RCTs, Delphi method
Frequently updated
Organisation of interventions in LiST

- Periconceptual
- Pregnancy
- Birth
- Breastfeeding
- Preventive
- Vaccine
- Curative
Which interventions to choose?
Results available in LiST

Lives saved
- Total
- By cause
- By intervention
- By age group

Number of deaths
- Total
- By cause
- By intervention
- By age group

Mortality
- Rates and ratios
- Neonatal
- Children under 5 years of age
- Kindergarten
- Stillbirths

Risk factors
- Chronic malnutrition
- Acute malnutrition
- Breastfeeding

View by:
- Tables, graphs, pie charts
- Single/multiple country
- Single/multiple scenario
LiST can NOT be used for:

**The final answer**
The results will be as good as the inputs
Must also consider cost, feasibility, acceptability

**To decide HOW to do anything**
Those who run the programmes must decide this
The context is very important
Benefits of LiST

- Ability to see the impact of several interventions on several causes of mortality
- Evidence-based
- Validated
- Published
- Updated regularly
- Free and available in the public domain
Benefits of LiST

▪ The default data sources are all of high quality
▪ Highly flexible tool
  ▪ Allows the user to enter his/her own data
  ▪ Allows the user to create interventions
▪ Allows you to quickly visualise the path to impact via http://listvisualizer.org/
▪ Visualise the interventions with the highest potential impact using the missed opportunities tool
▪ Adaptable tool to see the impact of:
  ▪ A unique intervention
  ▪ A package of interventions
  ▪ Several countries simultaneously
Additional features of LiST

- Missed opportunities* (1)
- Equity tool
- Sub-national Assistant* (SNA)
- LiST costing
- Uncertainty analysis

*pre-recorded webinars available on the LiST website and on Youtube
LiST training: strategic planning
The experience of Cote D' Ivoire

PRESENTATION:
PNMIN COTE D’IVOIRE
PLAN

1. RATIONAL
2. PREPARATION OF THE TRAINING
3. RESOURCES MOBILISED
4. THE TRAINING PROCESS (COMPLEXITY, MEETING EXPECTATIONS, TAKING THE CONTEXT INTO ACCOUNT)
5. SCOPE AND POTENTIAL IMPACT OF THE RESULTS
6. NEXT STEPS (EXPLOITATION OF RESULTS)
1

RATIONAL
• **Question**: What is the contribution of the coverage rate of IYCF and growth monitoring interventions in reducing the prevalence of chronic malnutrition in the coverage areas of the ESPCs and social centres from 2012 to 2019?

➢ *Issue requiring the use of LiST hence the need for capacity building*
Opportunity for PNMIN to contribute to the development of the multisectoral nutrition plan...

*need to rephrase the original question:*

**What is the contribution of the coverage rate of IYCF and growth monitoring interventions in the reduction of the prevalence of chronic malnutrition in the coverage areas of the ESPCs and social centres from 2012 to 2019?**

**What realistic nutrition intervention packages can guide policy makers in the development of the next multisectoral nutrition plan for maximum impact on reducing the rate of chronic malnutrition in children under five in Côte d’Ivoire?**
2

PREPARATION OF THE TRAINING
Chronogram of the training preparations

1. Assessment of data needs
2. Mapping of necessary data
3. Summary of data
4. Identification of nutrition interventions in IC
5. Preparation of projection files
6. Entering projection files into LiST
7. Finalising the training materials
8. Quality control of data used and projection files
9. Holding the meeting

PREPARATORY STAGES

30 DAYS
3

RESOURCES MOBILISED

March 2022  LiST Webinar
Resources mobilised

- **Human resources: 3 consultants**
  - a C4N consultant in charge of training,
  - a consultant for training support and
  - a consultant in charge of quality control.

- **Teams mobilised: SE CONNAPE, SANTE (DIIS, DPPS, PNN), INS, Ministry of Planning and Development, PNMIN**

- **Financial resources**:
  - The PNMIN national platform covered the logistical costs of organisation (meeting room, meals, consultants)
  - The GS covered the cost of the international consultant
4

THE COURSE OF THE TRAINING
• Lack of recent data from national surveys
  – MICS 2016 data used for the base year
  – Triangulation of data

• Definition of targets
  – Observation of trends from national surveys (MICS 2006, DHS 2012, MICS 2016)

• Selection of appropriate interventions
  – Use of dictionaries of indicators (nominator, denominator, method of calculation, etc.)

• Interventions mainly limited to the health field
  – Other interventions can be added, but make sure you have all the resources to justify their impact on malnutrition in quantifiable proportions
5

SCOPE AND POTENTIAL IMPACT OF THE RESULTS
SCENARIO BUILDING APPROACH

The strategic packages were developed taking into account four main elements:

- **Availability of the intervention Côte d'Ivoire** (current implementation status)
- **Existence of evidence on the intervention** (effectiveness and fraction affected)
- **Average level of change in intervention coverage** estimated from the two available household surveys in the country
- **Effective but not yet implemented interventions in IC**
## Summary description of the scenarios

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Description</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>ps1+25%CI</td>
<td>Strategic projection + 25% of the most recent level available of nutrition interventions currently implemented in Côte d'Ivoire</td>
<td></td>
</tr>
<tr>
<td>ps2+30%CI</td>
<td>Strategic projection + 30% of the most recent level available of nutrition interventions currently implemented in Côte d'Ivoire</td>
<td></td>
</tr>
<tr>
<td>ps3+40%CI</td>
<td>Strategic projection + 40% of the most recent available level of nutrition interventions currently implemented in Côte d'Ivoire</td>
<td></td>
</tr>
<tr>
<td>ps4+25%CI+</td>
<td>Strategic projection + 25% of the most recent level available of implemented nutrition interventions + those not currently implemented in Côte d'Ivoire (5%)</td>
<td>2022 - 2026</td>
</tr>
<tr>
<td>ps5+30%CI+</td>
<td>Strategic projection + 30% of the most recent level available of implemented nutrition interventions + those not currently implemented in Côte d'Ivoire (10%)</td>
<td></td>
</tr>
<tr>
<td>ps6+40%CI+</td>
<td>Strategic projection + 40% of the most recent level available of implemented nutrition interventions + those not currently implemented in Côte d'Ivoire (15%)</td>
<td></td>
</tr>
</tbody>
</table>
Number of cases of stunting prevented by scenario over the period 2022-2026

<table>
<thead>
<tr>
<th>Scenario</th>
<th>BASE YEAR</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>ps1+25%CI</td>
<td>0</td>
<td>1 429</td>
<td>3 454</td>
<td>6 005</td>
<td>9 056</td>
<td>19 944</td>
</tr>
<tr>
<td>ps2+30% CI</td>
<td>0</td>
<td>1 523</td>
<td>3 657</td>
<td>6 326</td>
<td>9 497</td>
<td>21 003</td>
</tr>
<tr>
<td>ps3+40%CI</td>
<td>0</td>
<td>1 976</td>
<td>4 782</td>
<td>8 289</td>
<td>12 430</td>
<td>27 477</td>
</tr>
<tr>
<td>ps4+25%CI</td>
<td>0</td>
<td>2 702</td>
<td>6 339</td>
<td>10 809</td>
<td>16 069</td>
<td>35 919</td>
</tr>
<tr>
<td>ps5+30% CI+</td>
<td>0</td>
<td>4 174</td>
<td>9 682</td>
<td>16 359</td>
<td>24 116</td>
<td>54 331</td>
</tr>
<tr>
<td>ps6+40%CI+</td>
<td>0</td>
<td>5 821</td>
<td>13 416</td>
<td>22 498</td>
<td>32 861</td>
<td>74 596</td>
</tr>
</tbody>
</table>
• Practical and relatively easy to use.

• Expectations met with regard to the identification of effective intervention packages.

• Contextualisation was ensured by taking a practical case study based on real data collected by the stakeholders and also through the identification of interventions carried out and those not carried out in Côte d'Ivoire.
NEXT STEPS (EXPLOITATION OF RESULTS)
Next steps (exploitation of results)

- To make quantifiable proposals to policy makers in the development of the new Nutrition and Early Childhood Development Plan.
  - Training in the costing module to evaluate the cost of interventions (7-10 March 2022)
  - Training in policy brief development and evidence communication (mid-March 2022)
  - Develop policy notes (April 2022)
  - Editing the analysis report (April 2022)
THANK YOU
LiST training: impact assessment
The experience of Burkina Faso

Presentation:
PNIN Burkina Faso
Contents

1. Preparations for and conduct of the LiST training
2. Analysis of the results
3. Feedback on the training
4. Next steps
Preparations for and conduct of the LiST training
Why this training in Burkina?

• Burkina Faso has a National Multisectoral Nutrition Policy (PNMN) 2020-2029. With this policy, the country aligns itself with regional and international commitments and objectives in the fight against malnutrition.

• This policy is operationalised through a Multisectoral Strategic Nutrition Plan (MSP).

• As part of the implementation of the Burkina Faso NIP, stakeholders considered it important to assess the impact of the implementation of this plan on chronic malnutrition in children under 5 from 2020 to 2024 using the Lives Saved Tool (LiST).
Preparations for and conduct of the LiST training

How long does it take to prepare?

• Minimum one month of preparation
  – Mapping and collecting documents and assessing their quality;
  – extractions of indicators that can be modelled on LiST;
  – finalisation of the indicator file with the consultant and;
  – development of LiST projection files;

• Cost/logistics
  – Meeting room to meet barrier measures;
  – Good connection *(sharing documents, installing and downloading country data in LiST, using the web version of LiST)*;
  – Projector;
  – Printer.
Analysis question

**QUESTION:** What will be the impact of the implementation of the nutrition action plans on the number of cases of chronic malnutrition averted and under-five mortality (LiST analysis)?

1. What will be the impact of achieving the targets of the nutrition coverage indicators contained in the Multi-Sectoral Nutrition Strategic Plan (MSSP) 2020 - 2024 and available in LiST, at national level?
   - A. on the number of cases of chronic malnutrition avoided?
   - B. on the number of lives saved?
   - C. on reducing the mortality rate among children under 5?

2. Which interventions will have the greatest impact in reducing the prevalence of chronic malnutrition?
2

LiST analysis results
- PSMN interventions that can be modelled in LiST

<table>
<thead>
<tr>
<th>INTERVENTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contraceptive use</td>
</tr>
<tr>
<td>TPI (pregnant women)</td>
</tr>
<tr>
<td>Exclusive breastfeeding (0-5 months)</td>
</tr>
<tr>
<td>Advice on supplementary and supportive feeding</td>
</tr>
<tr>
<td>Vitamin A supplementation for infants and children 6-59 months</td>
</tr>
<tr>
<td>Rotavirus vaccine</td>
</tr>
<tr>
<td>Management of severe malnutrition (children)</td>
</tr>
</tbody>
</table>
Impact on the number of cases of chronic malnutrition prevented between 2020 and 2024

The various combinations of interventions programmed in the PSMN would prevent more than 7,800 cases of chronic malnutrition in children under five.
Impact on the number of lives saved in children under 5 between 2020 and 2024

<table>
<thead>
<tr>
<th>Age range</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 12 months</td>
<td>0</td>
<td>40</td>
<td>77</td>
<td>110</td>
<td>140</td>
<td>367</td>
</tr>
<tr>
<td>12-59 months</td>
<td>0</td>
<td>655</td>
<td>1279</td>
<td>1860</td>
<td>2317</td>
<td>6111</td>
</tr>
<tr>
<td>Set</td>
<td>0</td>
<td>695</td>
<td>1356</td>
<td>1970</td>
<td>2457</td>
<td>6478</td>
</tr>
</tbody>
</table>
Impact on the reduction of infant and child mortality rates

Evolution of the infant and child mortality rate, < 5 months according to the MSSP 2020-2024

Reduction in neonatal mortality, < 3 months according to SHP 2020-2024
Number of children saved from malnutrition by intervention
3

Feedback on the training
Feedback on the training

• Was it sufficiently linked to the local context?
The data used for the practical phase was taken from the Burkina PSMN. This allowed some shortcomings in the document to be identified and corrected.

• Did the training meet its objectives?
It achieved its objectives in that it enabled participants to understand how LiST works and to use it for impact modelling of the Burkina Faso MSSP.
CHALLENGES ENCOUNTERED

• Data availability
• Discrepancy in strategic plan to be addressed before training - agreement needed with sectors - long process
• Limited number of nutritional interventions that can be modelled with LiST
4

NEXT STEPS
Next Steps

• Sessions to disseminate the results of the analysis to decision-makers are planned this year.

• Capacity building sessions for monitoring and evaluation to improve indicator formulation and target setting.

• Press releases and key messages based on the results of the analysis;

• Disseminate the results to policy makers and donors;

• Disseminate the results to users of nutrition information;

• Advocate for the consideration of high impact indicators in the review of the MSSP;
Conclusion