NUTRITION FINANCING WEEK
Nutrition for Growth (N4G) Side Event Series

Opening Address

Meera Shekar

Global Nutrition Lead
World Bank

Optima
Nutrition

...for allocative efficiency in nutrition investments

Global Analytics: Global Investment Framework

Global Targets (WHA/SDGs)

Stunting Anemia Breastfeeding Wasting Low **birth** weight Overweight

- How much it will cost?
- What will we buy with this investment?
  - Nutrition outcomes
  - Health/lives saved
  - Economic benefits
- How can it be financed?

Key question we could not answer:

What is the optimal allocation of resources across interventions?

What Optima Nutrition does

For different funding levels, how should resources be allocated across a mix of nutrition interventions and what impact is achievable?

Overall public health budget available for nutrition

Which investment combination leads to optimal outcomes?

| Balanced energy protein supplementation | Multiple micronutrient supplementation | Breastfeeding promotion | Vitamin A supplements | Prophylactic Zinc supplements | Complementary feeding education | Public food provision |

Today's session

❖ **Brief overview of the Optima Nutrition tool:** Jonathan Kweku Akuoku

❖ **Process of conducting Optima Nutrition analyses** from experiences across three countries:
  ▪ **Nigeria**, Senior Health Specialist : Ritgak Asabe will present on the experience of engaging stakeholders for the Optima Nutrition analysis
  ▪ **Tajikistan**, Health Specialist Mutriba Latypova will share the experience with data gathering and collation, and the process they undertook to validate the input data for the analysis.
  ▪ **Sindh Province (Pakistan),** Senior Health Specialist Aliya Kashif will share some lessons learned and the importance of conducting the Optima Nutrition analysis at subnational levels

❖ **Panel discussion** with country presenters

❖ **Q & A session**: Based on questions posed in the chat.

❖ **Next steps and way forward**:
  ❖ Meera Shekar, World Bank

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N4G NUTRITION FINANCING WEEK

ALLOCATIVE EFFICIENCY ANALYSIS FOR MORE NUTRITION FOR THE MONEY:
COUNTRY EXPERIENCES WITH OPTIMA NUTRITION

A BRIEF INTRODUCTION TO THE OPTIMA NUTRITION MODEL

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Jonathan Kweku Akuoku
Nutrition Specialist, World Bank

HOW OPTIMA NUTRITION CAN BE USED:

To assess impact and identify best allocations:

- Impact of **current and alternative allocations** of nutrition resources
- **Optimal allocation** of fixed resources across nutrition programs achieve greatest impact
- Which **geographic areas and populations to target**, and with which interventions, for greatest impact
- The **minimum resources needed**, if allocated optimally, for a country to achieve key nutrition targets

To inform decision-making process for:

- **Key policy documents**
  - National nutrition plans
  - Sectoral plans
- **New investments** (e.g., new WB funded projects)
- **Reallocations within existing** programs or projects
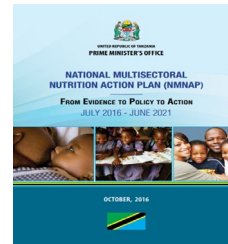
How does **Optima Nutrition** work?

1. Burden of malnutrition

- Data synthesis
- Model projections

2. Programmatic responses

- Identify interventions & delivery modes
- Costs and effects

3. Objectives and constraints

- Strategic goals
- Ethical, logistic & economic constraints

4. Optimization algorithm

RELATIONSHIP BETWEEN INTERVENTIONS, RISK FACTORS, STUNTING AND MORTALITY
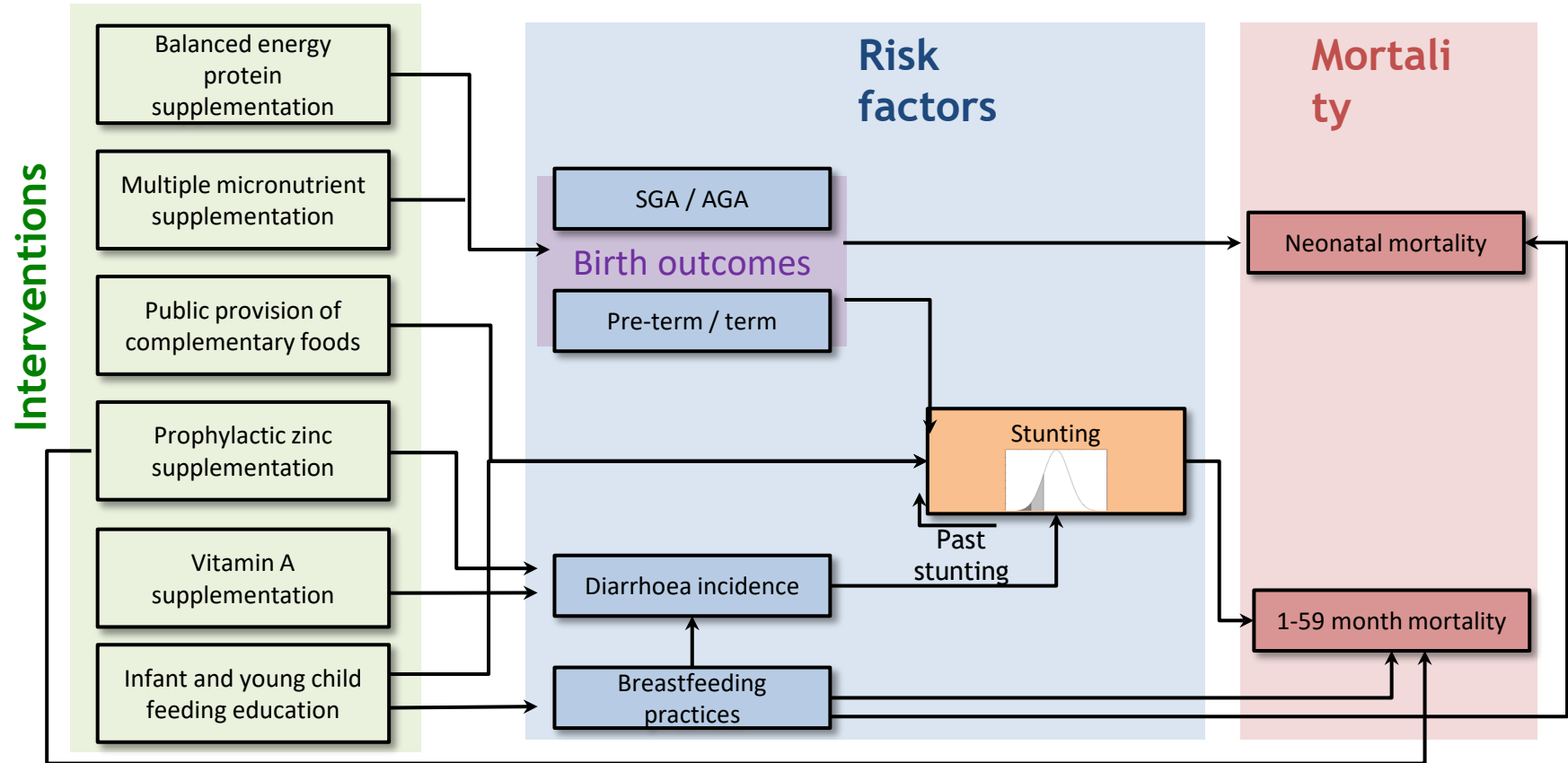
OPTIMIZATION: **CONSIDER JUST TWO DIMENSIONS**

Objective function: e.g. number of stunted children

Funding to Program B

Funding to Program A

Apply an optimization algorithm to calculate best resource allocation
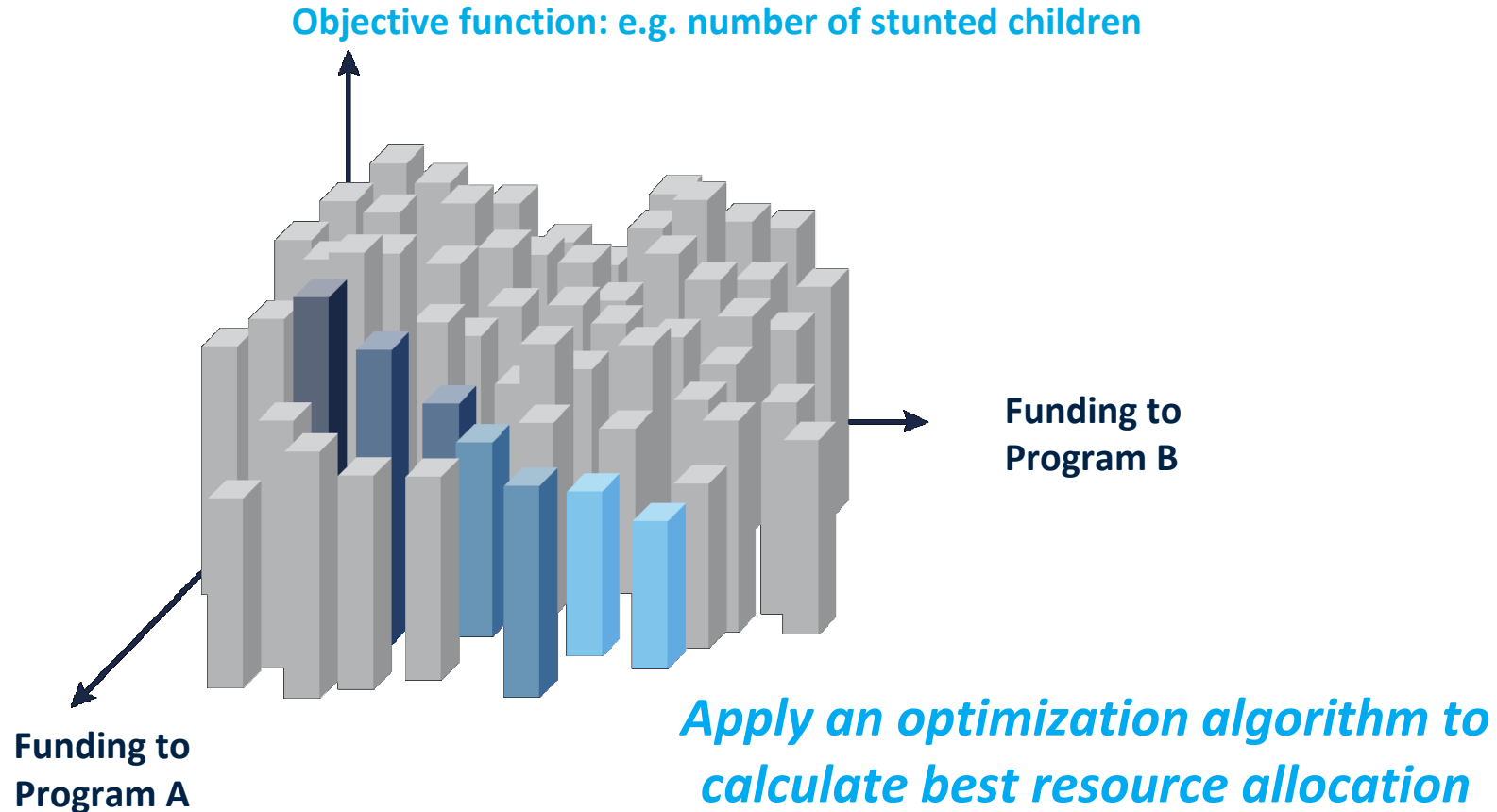
DATA NEEDED

Data Type	Data Sources
Nutrition and health status	Population health/nutrition surveys (e.g. DHS)
Demographic and socio-economic data	Official population statistics (e.g. census);
Intervention coverage	Health management information system(s); partner data
Unit costs	Expenditure data; standard unit cost (e.g. WHO); country-specific unit cost estimates

WHAT DOES IT TAKE?

- Government
- Development partners
- Other stakeholders

Sensitization

Technical working group
- Objective setting
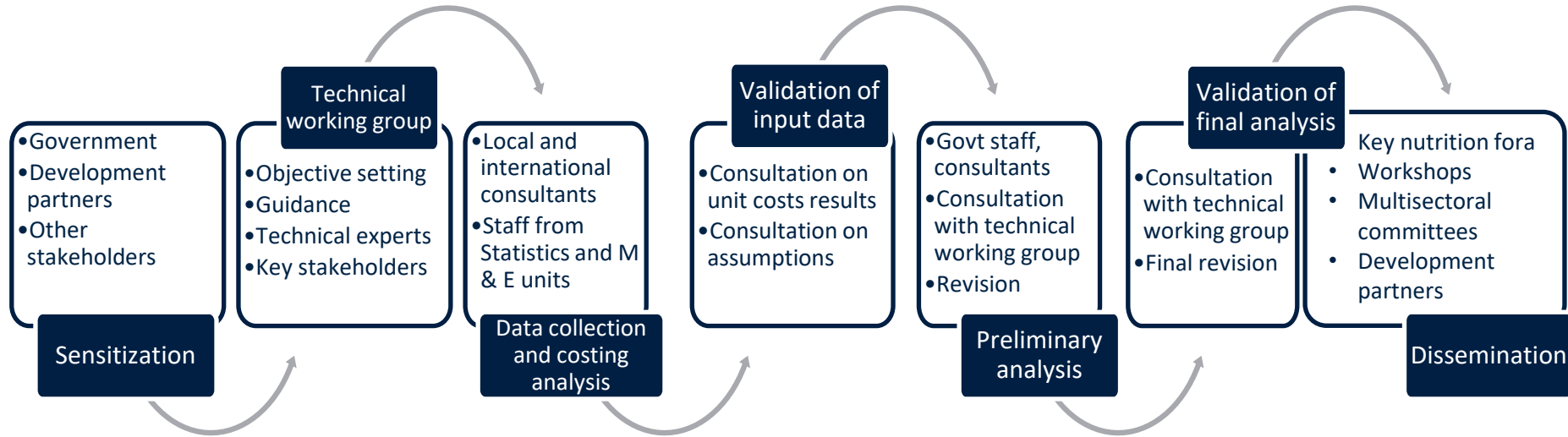- Guidance
- Technical experts
- Key stakeholders

- Local and international consultants
- Staff from Statistics and M & E units

Data collection and costing analysis

Validation of input data
- Consultation on unit costs results
- Consultation on assumptions

- Govt staff, consultants
- Consultation with technical working group
- Revision

Preliminary analysis

Validation of final analysis
- Consultation with technical working group
- Final revision

Key nutrition fora
- Workshops
- Multisectoral committees
- Development partners

Dissemination

Optima Nutrition

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THANK YOU
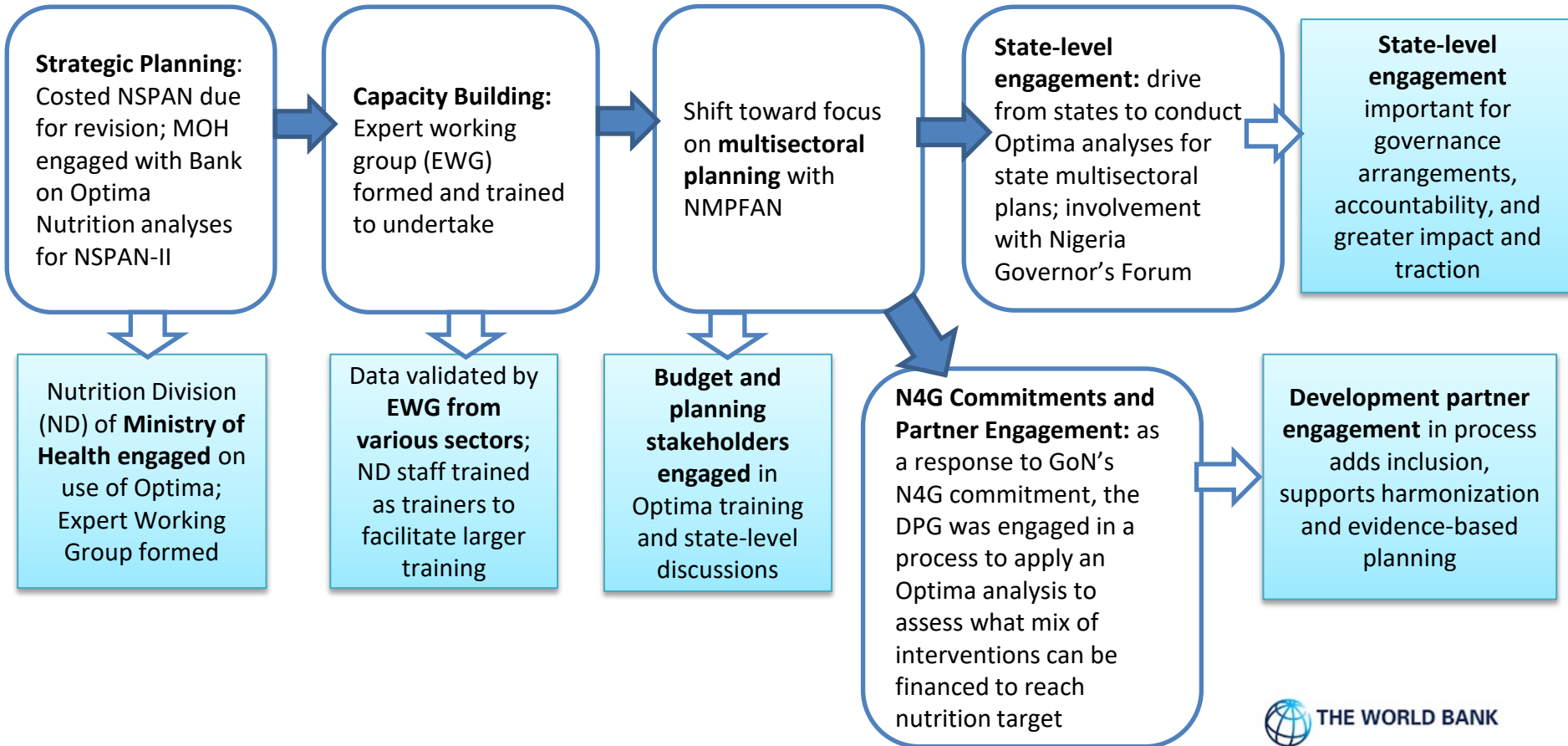
Nigeria Optima Nutrition

Stakeholder Engagement for Optima Nutrition Analysis

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Optima Nutrition Process and Stakeholder Engagement

Strategic Planning: Costed NSPAN due for revision; MOH engaged with Bank on Optima Nutrition analyses for NSPAN-II

→

Capacity Building: Expert working group (EWG) formed and trained to undertake

→

Shift toward focus on **multisectoral planning** with NMPFAN

→

State-level engagement: drive from states to conduct Optima analyses for state multisectoral plans; involvement with Nigeria Governor's Forum

→

State-level engagement important for governance arrangements, accountability, and greater impact and traction

Nutrition Division (ND) of **Ministry of Health engaged** on use of Optima; Expert Working Group formed

Data validated by **EWG from various sectors**; ND staff trained as trainers to facilitate larger training

Budget and planning stakeholders engaged in Optima training and state-level discussions

N4G Commitments and Partner Engagement: as a response to GoN's N4G commitment, the DPG was engaged in a process to apply an Optima analysis to assess what mix of interventions can be financed to reach nutrition target

→

Development partner engagement in process adds inclusion, supports harmonization and evidence-based planning

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Future direction

Shift toward focus on **multisectoral planning** with NMPFAN

→ Optima analyses will be used to determine allocative efficiency of NMPFAN across nutrition interventions

State-level engagement: drive from states to conduct Optima analyses for state multisectoral plans; involvement with Nigeria Governor's Forum

→ State-level data collection on intervention costs and coverage

Thank you for your attention!

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Mutriba Latypova

Health Specialist
World Bank (Tajikistan Country Office)

N4G NUTRITION FINANCING WEEK

ALLOCATIVE EFFICIENCY ANALYSIS FOR MORE NUTRITION FOR THE MONEY:
COUNTRY EXPERIENCES WITH OPTIMA NUTRITION

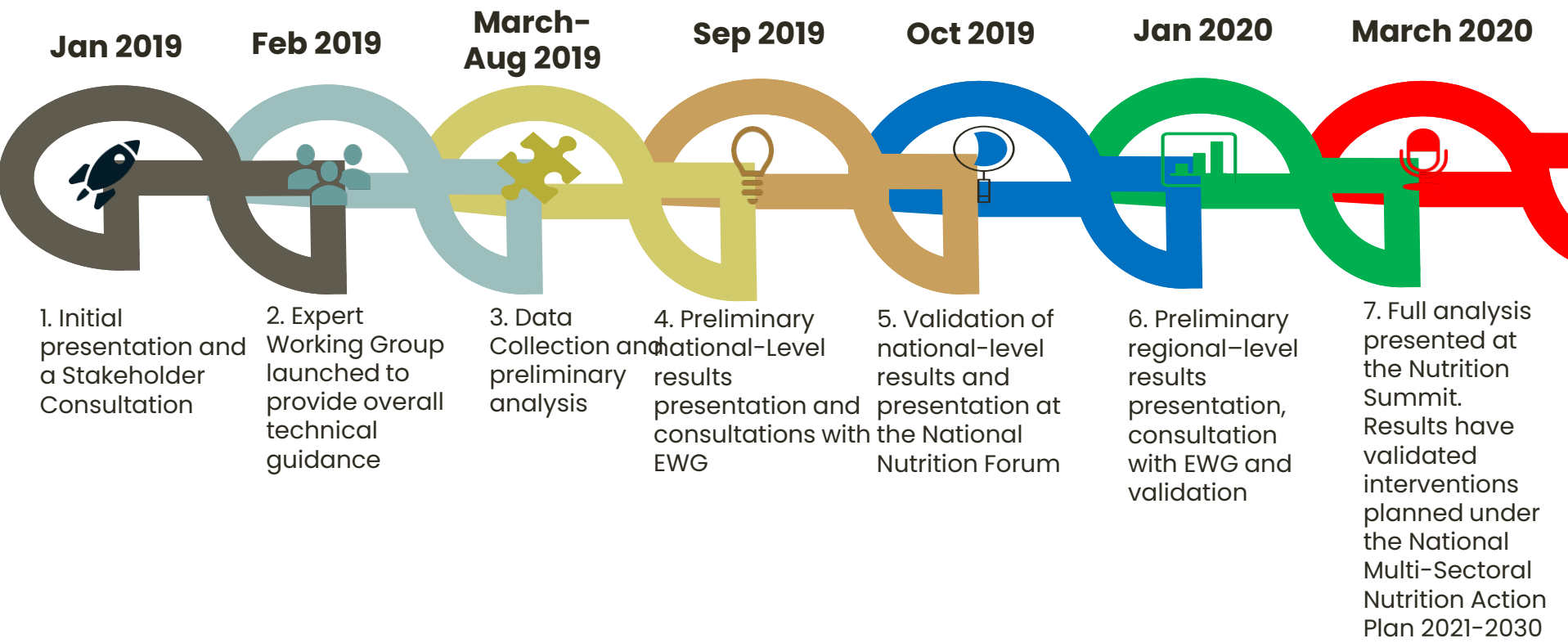## TAJIKISTAN: EXPERIENCE WITH DATA COLLECTION, COLLATION, ANALYSIS, AND VALIDATION

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MUTRIBA LATYPOVA
HEALTH SPECIALIST, WORLD BANK
TAJIKISTAN

PROCESS OF OPTIMA NUTRITION IN TAJIKISTAN

Jan 2019

Feb 2019

March-Aug 2019

Sep 2019

Oct 2019

Jan 2020

March 2020

1. Initial presentation and a Stakeholder Consultation

2. Expert Working Group launched to provide overall technical guidance

3. Data Collection and preliminary analysis

4. Preliminary national-Level results presentation and consultations with EWG

5. Validation of national-level results and presentation at the National Nutrition Forum

6. Preliminary regional–level results presentation, consultation with EWG and validation

7. Full analysis presented at the Nutrition Summit. Results have validated interventions planned under the National Multi-Sectoral Nutrition Action Plan 2021–2030

DATA COLLECTION, COLLATION, ANALYSIS, AND VALIDATION

1. Country-Specific Data
Stunting, wasting, anemia, diarrhoea, exclusive breasfeeding and demographics (population size, poverty) and coverage and cost per person of nutrition programs reached (inclusive of commodity costs, delivery costs, staffing, and infrastructure)

2. Data Sources
DHS, MICS, National Nutrition Surveys, Annual National Stats, UNICEF website, other online sources and other MOHSP report Forms No. 5, 32 and 12, Department of Pharmacy and Medical Products of the MOHSPP of the Republic of Tajikistan, other reports of development partners.

3. Data Collection Process
National level data was collected in a specific format in the form of a excel table (ready provided), processed and entered to the Optima Nutrition analysis tool and sub-national data was collected, processed and entered separately in the Optima Nutrition and analyzed.

4. Cost Calculation Methodology
A bottom-up methodology was used, based on standard costs according to the existing clinical protocol, expenses for medicines and medical products, their transportation and storage, labor costs of medical workers, and other indirect costs.
- The rest of the required data for costing was collected from various sources and calculated manually in consultation with internal and external experts. Creativity and additional efforts were required.

LESSONS LEARNT AND CHALLENGES: DATA COLLECTION, COLLATION, ANALYSIS, AND VALIDATION

1. High-Level Engagement and Commitment of Key Stakeholders provided a strong umbrella for the process of data collection to validation. Inclusion of officials from National Statistics Agency, Ministry of Finance, Center for Medical Statistics and MCH department into the Expert Working Group.

2. Selection of Data Collectors.

3. Ongoing Technical Support from Optima Nutrition Tool developers.

4. Efficiency and optimization are often not part of the usual vocabulary in the health sector. It was important with to engage the client early on and spend time explaining/discussing those concepts and showing how and why they are relevant for nutrition and for the health sector in general.

5. It was also important to present the results is plain/layman language to make sure that the key message of getting more impact for the same among of funding comes across clearly.

6. National capacity building on nutrition and enforced multisectoral engagement.

7. Tajikistan needs to improve availability of its nutrition-related data.

THANK YOU!

Optima Nutrition Analysis in Tajikistan was led by Jakub Kakietek.

Team members: Kate Mandeville, Mutriba Latypova, Farrukh Egamov (Costing Data Collector), and Mayram Kyronova (Data Collector)

For questions: mlatypova@worldbank.org

KEY MESSAGES

Investing in nutrition is critical to achieving the SDGs and mitigating losses in gross GDP and is an **indispensable step in building human capital.**

Improving nutrition outcomes in Tajikistan is an **investment into Tajikistan's future human capital and prosperity**.

Making the most of available nutrition funding in Tajikistan is particularly important, as a child born in Tajikistan **today will be 50 percent as productive** when she grows up as she/he could be if she/he enjoyed complete education and full health

The results Optima Nutrition Analysis are not only important in **understanding how effectively to invest to achieve the greatest impact** and but also **how to obtain greater results with the same level of funding.**

If implemented the findings, the specific potential outcomes of **280 fewer child deaths, 1,200 fewer cases of stunting, 7,400 fewer cases of anemia in children and 18,100 fewer cases of anemia.**

RECOMMENDATIONS

1. Substantial impact on health and nutrition outcomes in Tajikistan can be achieved by improving allocative efficiency (allocation of funding across interventions) and by prioritizing:

Preventive interventions for children (especially counseling on correct child feeding practices, including breastfeeding); Preventive interventions for women; Modern family planning methods; and Fortification of wheat flour.

2. Improving efficiency of current funding generates greater impact than even very substantial budget increases (30%).

3. The current (estimated) allocation of funding across different regions is equitable in relation to nutrition investments:

Changing budget allocations across regions does not substantially improve impact on health and nutrition outcomes; and It will be important to maintain equitable allocation in the future.
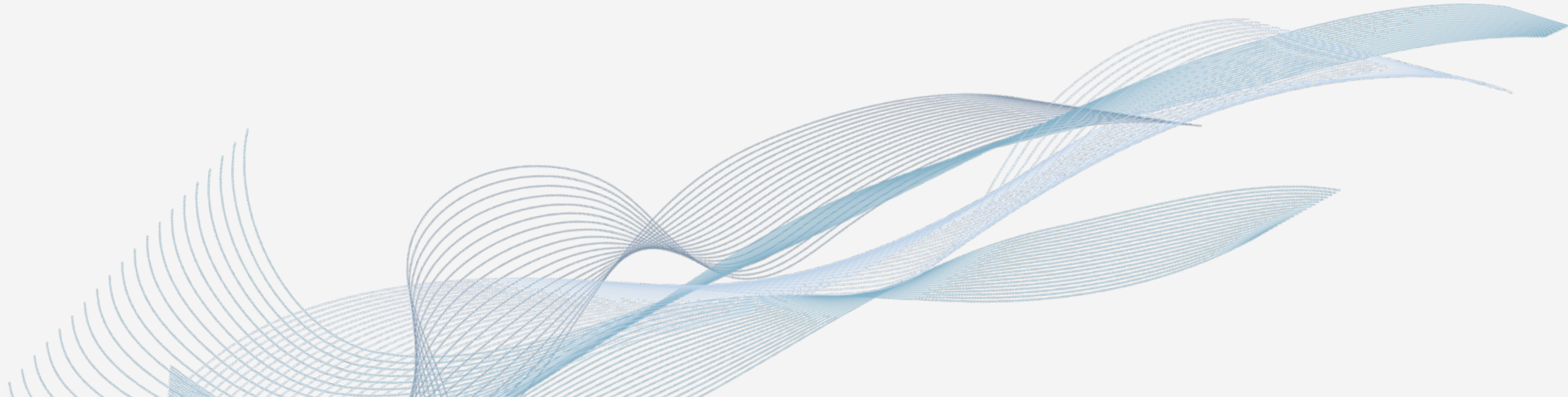
Aliya Kashif
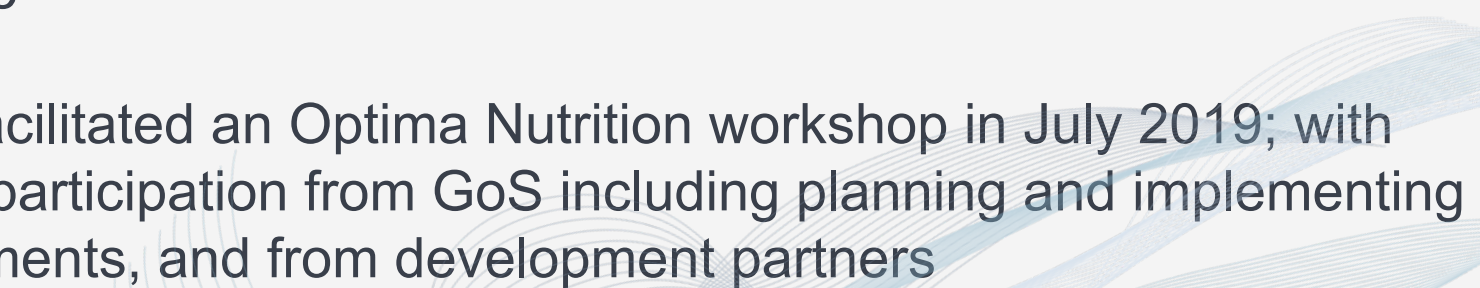**Senior Health Specialist**
World Bank

Optima Nutrition in Sindh, Pakistan

Update January 2022

Optima Nutrition in Sindh: Background

- After a national-level Optima training, Government of Sindh (GoS) expressed interest in Sindh-specific analysis

- GoS constituted a technical working group (TWG), chaired by Secretary P&D (Planning and Development Department), for this purpose

- Bank facilitated an Optima Nutrition workshop in July 2019; with strong participation from GoS including planning and implementing departments, and from development partners

Optima Nutrition Analysis, Sindh, 2020

- Detailed Optima analysis conducted at GoS request
- Model aimed to estimate impact of optimizing nutrition spending within each of Sindh's 29 districts
- 10-year outcomes modelled to reduce stunting & wasting in children under 5

- Optimised spending within each district could lead to:
  - 9% more alive and non-stunted children over 10 years
  - 5.9% reduction in stunting
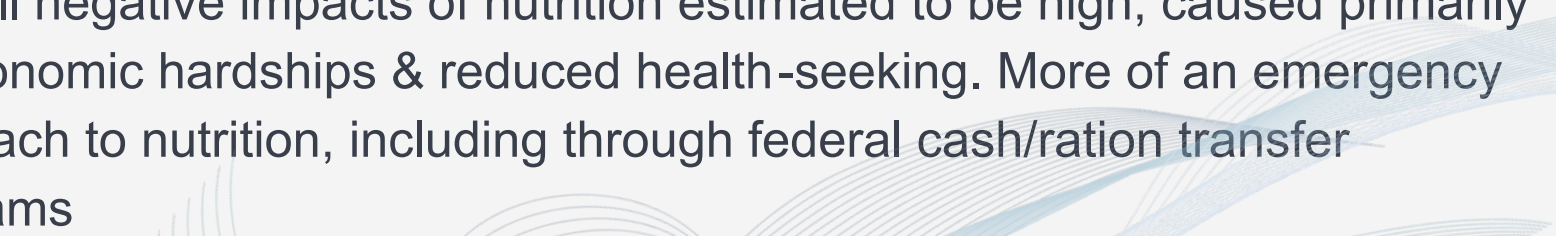 - 0.6% reduction in wasting

Optima Nutrition Analysis, Sindh, Contd 2

- The analysis called, within each district, for:

  - Diverting funds from existing specialized nutritious foods (SNF) for children and PLWs*, and ORS+Zn# interventions and to use these funds to expand vitamin A supplementation and IYCF to high (>90%) coverage.

  - **In case of remaining funds**, to provide support and training for kangaroo mother care to improve early initiation of breastfeeding, and replace IFAS with multiple micronutrient supplementation.

- In Thatta, Sujawal, where total funding is greatest, invest in a combination of treatment of MAM, cash transfers and ORS + Zinc for children, a package for all districts to aim towards if funding should be available.

*SNF is effective at reducing stunting, but expensive.

Since the Analysis...

- The Departments of Health and Planning & Development (GOS) have demonstrated interest in the optima analysis ; the results have yet to be incorporated in the upcoming policies and strategies.

- COVID-19:
  - Impacts on routine Health programming led to shift in focus towards service delivery & COVID prevention
  - Overall negative impacts of nutrition estimated to be high, caused primarily by economic hardships & reduced health-seeking. More of an emergency approach to nutrition, including through federal cash/ration transfer programs
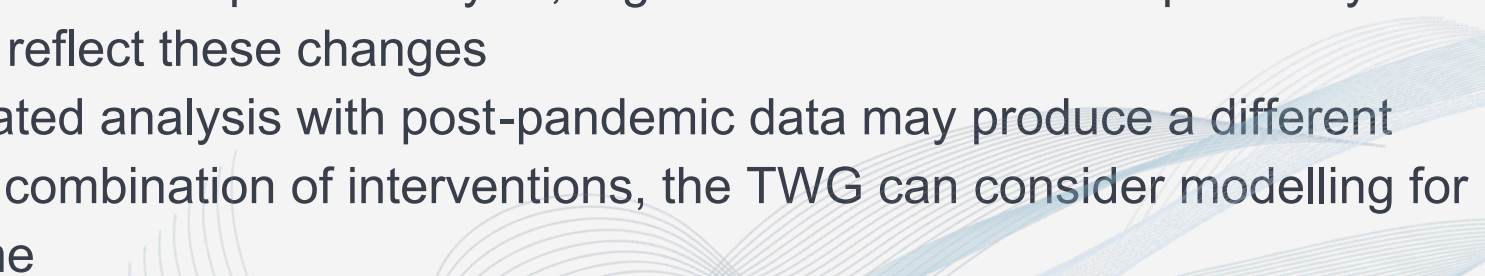
Since the Analysis, Some Programmatic Shifts

- At the Department of Health level, in Sindh results of the Optima Nutrition analysis are being factored into nutrition programming.
    - There is increasing emphasis on IYCF
    - Recent programming has emphasized Vitamin A supplementation
    - Recent programming has supported MNP supplementation

Insights

- Subnational analysis demonstrates sensitivity of programming to geospatial factors
- Especially useful in Pakistan where provinces separately plan, program, and finance for nutrition
- Sindh's receptiveness to the analysis, and the engagement of implementation departments and partners has facilitated a more agile response to the Optima analysis, regardless of the fact that policies yet have to reflect these changes
- An updated analysis with post-pandemic data may produce a different optimal combination of interventions, the TWG can consider modelling for the same

Thank You

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The way forward – tools and evidence for prioritizing nutrition interventions

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Health, Nutrition & Population

GLOBAL FINANCING FACILITY

R4D RESULTS FOR DEVELOPMENT

World Health Organization

BILL & MELINDA GATES foundation

KEMENTERIAN KESEHATAN REPUBLIK INDONESIA

Hari Gizi Nasional

JOINT LEARNING NETWORK
For Universal Health Coverage

Thank You!

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Nutrition for Growth (N4G) Side Event Series

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GLOBAL FINANCING FACILITY

RESULTS FOR DEVELOPMENT

World Health Organization

BILL & MELINDA GATES foundation

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