Conference co-hosts
_In alphabetical order:_

1. Aga Khan University (_Pakistan_)  
2. Alive & Thrive (_India_)  
3. Bill & Melinda Gates Foundation (BMGF) (_India_)  
4. Helen Keller International (HKI) (_Nepal_)  
5. IDinsight (_South Asia_)  
6. Institute of Policy Studies (IPS) (_Sri Lanka_)  
7. International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b) (_Bangladesh_)  
8. International Food Policy Research Institute (IFPRI) (_South Asia_)  
9. National Institute of Nutrition (NIN) (_India_)  
10. NITI Aayog (_India_)  
11. SickKids Centre for Global Child Health (_South Asia_)  
12. Standing Together for Nutrition (STfN) (_Global_)  
13. Society for Implementation Science in Nutrition (SISN) (_Global_)  
14. UNICEF Regional Office for South Asia (ROSA) (_Regional_)  
15. World Health Organization Regional Office for South-East Asia (WHO-SEARO) (_Regional_)  

**Design credits**  
The banner design was created by Jason Chow, Graphic Designer in IFPRI’s Communications and Public Affairs team.
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Conference background and overview

Delivering for Nutrition (D4N) in South Asia: Implementation Research in the Context of COVID-19 was the fourth nutrition implementation research conference, first regional, and second virtual conference. Previous in-person conferences were held in 2016, 2019, and 2020.

COVID-19 has disrupted health systems, nutrition services, and food systems around the world, including in South Asia. Research-based evidence and programmatic experiences are essential to support stakeholders to restore services and re-orient programs and policies to support better nutrition outcomes.

A consortium of 15 co-hosts organized the D4N conference on December 1-2, 2021, with an overarching purpose of bringing together evidence to inform and support policy and program initiatives in South Asia for maternal and child nutrition during and beyond the COVID-19 pandemic.

The key objectives of the conference were to:
- Share evidence of the impact of COVID-19 on maternal and child nutrition
- Highlight adaptations to support implementation of health and nutrition interventions and social safety net programs
- Identify lessons learned from implementing programs to support maternal and child nutrition during the pandemic

Why implementation research?
Implementation research can help identify challenges, test solutions, and inform program scale-up and sustainability, and is therefore critical for ensuring coverage of essential interventions and social safety net programs for mothers and children during the pandemic and beyond.

Process
Through an open call, abstracts were invited for research studies and implementation experiences focused on various aspects of COVID-19. Abstracts for oral and poster presentations were selected through a double-blind review process.

Participants
More than 800 academics, implementers, development partners, and policymakers from South Asia and beyond registered for this conference to share and discuss evidence on strengthening the implementation of maternal and child nutrition initiatives. Average participation in conference sessions varied between 100-250 people.

Presentations
During the two-day conference, a total of 27 abstract-based oral presentations and 39 poster presentations were programmed under three carefully selected themes, representing research and implementation experiences from across eight countries including, Bangladesh, Cambodia, India, Indonesia, Nepal, Pakistan, Sri Lanka, and Vietnam.
The program featured two pre-conference workshops and opening and closing panels with policymakers and donor and development organization representatives. Researchers and implementers shared evidence and experiences during the three conference sessions focused on the impacts of the COVID-19 pandemic; disruptions, adaptations, and restorations in response to COVID-19; and the role of social safety nets on food security amid the COVID context. The closing session brought together national and regional perspectives to discuss the key challenges and opportunities for improving essential service delivery, food security and nutrition for mothers and children in the COVID context.

**About this report**
This conference summary report curates the agenda and a summary of the sessions. Recordings of oral and poster presentations and all conference sessions are available online. The oral presentations can be accessed by clicking on the presentation title in the respective abstract-based thematic sessions, whereas the theme-wise poster showcases can be accessed in the ‘Poster Presentations’ section.

Please visit the [event website](#) to learn more. Furthermore, the [agenda booklet](#) also includes speaker biographies and accepted oral and poster presentation abstracts.
## AGENDA OVERVIEW

### Day 1: Wednesday, December 1

<table>
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**Workshop 1:** Conducting phone surveys in the time of the pandemic IDinsight

**Workshop 2:** Measuring food insecurity in the context of COVID-19 International Food Policy Research Institute (IFPRI)

**Break & Poster Viewing**

**Opening Plenary:** What do we know so far about the impact of COVID-19 on food security and nutrition in South Asia?

**Thematic Session 1:** Impact of COVID-19 on nutrition outcomes and its determinants

### Day 2: Thursday, December 2

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**Thematic Session 2a:** Disruptions, restorations, and adaptations to nutrition and health interventions during COVID-19

**Break & Poster Viewing**

**Thematic Session 2b:** Disruptions, restorations, and adaptations to nutrition and health interventions during COVID-19

**Break & Poster Viewing**

**Thematic Session 3:** Impact of COVID-19 on food security and the role of social safety net programs

**Break & Poster Viewing**

**Closing Session:** From evidence to policies, programs, and better lives: Key insights from Delivering for Nutrition 2021
The purpose of the pre-conference workshops was to promote learning and capacity building around implementation research in the context of COVID-19.

PRE-CONFERENCE WORKSHOPS: DECEMBER 1, 2021

Pre-conference workshop 1: Phone surveys to measure health and nutrition indicators: Practical learnings from COVID-19-focused surveys, IDinsight

IDinsight facilitated a pre-conference workshop on the use of phone surveys to measure health and nutrition indicators in the context of COVID-19. The workshop opened with a presentation, which examined pre-survey and during-survey best practices. Pre-survey best practices looked at how to effectively design quantitative and qualitative surveys, hire enumerators for phone surveys, organize survey trainings to maximize engagement, and sampling. During-survey best practices included discussions on call-back protocols to improve response rates, building rapport with respondents to maximize consent rates, the use of (nominal) compensation to incentivize participation, and ways to maintain data quality and security throughout the process.

The presentation was followed by an interactive case study. Participants were divided into two breakout rooms for increased engagement. In one breakout room, participants reviewed a case study on take-home rations provided in India during the COVID-19 pandemic and were encouraged to consider the pre-survey and during-survey best practices that applied. Likewise, in the second breakout room, participants examined the pre-survey and during-survey best practices in a study focused on consumption, the public distribution system, and healthcare during COVID-19 in India.
IDinsight collated and shared several practical resources with participants, which are listed below:

- Phone survey blogs by IDinsight
- Reduce bias in phone surveys by IDinsight and SurveyCTO
- Patchy signals: Capturing women’s voices in mobile phone surveys of rural India by IDinsight
- Webinar: Rich remote data by IDinsight, IPA, JPAL, and Busara
- Resources to conduct phone surveys by JPAL and IPA

Specific materials from COVID-19-focused quantitative phone surveys

- Visualize COVID-19’s effect on India’s rural economy
- Economic effects of COVID-19: Rapid surveys of rural households in India
- Data on Demand COVID-19 survey instrument
- COVID-19 remote data collection services

Specific materials from COVID-19-focused qualitative phone surveys

- Implementation Status of Take-Home Ration (THR) Program under ICDS during COVID-19 Pandemic.mp4 - In this session, Signe Stroming and Rohan Raj talk in detail about the process followed by IDinsight at each stage of conducting this qualitative survey.
- Improving the implementation of the Take Home Ration Programme Under ICDS - In this report, we share the methodology used by IDinsight to execute the qualitative phone survey. The report also includes the findings from this study as well as emerging recommendations.

Pre-conference workshop 2: Improving the measurement of food security to assess COVID-19 impacts, *International Food Policy Research Institute (IFPRI)*

Approximately 20 participants joined this workshop on the measurement of food security to assess COVID-19 impacts, facilitated by Purnima Menon, IFPRI; Edward A. Frongillo, University of South Carolina; and Manita Jangid, formerly affiliated with IFPRI-New Delhi. This session was in the format of a ‘master class,’ which aimed to stimulate dialogue among mid-level researchers and development practitioners on the different food security measures available.

To introduce these concepts, IFPRI used an interactive poll on Zoom to ask questions on food insecurity amid the pandemic. This poll set the stage for Edward Frongillo’s presentation.

Several questions were raised on the methodological issues of measuring food security. For instance, participants asked about adapting the Food Insecurity Experience Scale (FIES) recall periods to fit different research needs, whether diet diversity cut-offs vary in communities that do not consume certain food groups entirely, how to account for empowerment in measuring women’s dietary diversity, and whether there are available measures for assessing children’s experience of food insecurity.
Next, Manita Jangid presented, “Measuring food security during COVID: Why harmonize measurement?” This presentation provided the background for asking deeper questions on FIES, such as how this scale captures variations in intra-household food insecurity and how this measure reconciles differing perceptions among household members on food security and what qualifies as ‘healthy, nutritious’ food.

Before closing this interactive workshop, Purnima Menon highlighted three key points on food security: (1) measurement matters, (2) there is a long history of food security measures, and (3) there are different measures for different contexts and to meet different objectives. The United States Census Bureau uses validated tools in its household pulse surveys to track food security consistently over time. While there is a shared interest across the region to collect data on household-level food security, the way that food security is measured in the region has been inconsistent, which makes it challenging to understand the trends over time. Lastly, she stressed that food insecurity is an experience and not just a number: it has an impact on psychological wellbeing, parenting, and children’s wellbeing.
“This conference on Delivering for Nutrition is an opportunity for us to renew our commitments to improving food security and nutrition for the most vulnerable across the region.” Purnima Menon, International Food Policy Research Institute

“COVID-19 brings about a renewed sense of purpose and urgency on the moral and professional obligation for changing the harsh realities of nutrition challenges in South Asia.” Shahidur Rashid, International Food Policy Research Institute

DAY 1: DECEMBER 1, 2021

Opening plenary
What do we know so far about the impact of COVID-19 on food security and nutrition in South Asia?
This inaugural session set the stage for the two-day conference. It included predictions based on the modeling studies of impact of COVID-19 on maternal and child nutrition globally and for the South Asia region, and lessons learned from country contexts in supporting and scaling up resilient approaches to programmatic actions for continuity of services. The session concluded with thoughts on the way forward.

The opening plenary program is outlined below:
- Welcome by moderator, Purnima Menon, IFPRI
- Opening remarks by co-chairs, Shahidur Rashid, IFPRI & Vinod Paul, NITI Aayog
• Importance of implementation research for improving programs for women and children in the context of COVID-19, Margaret Bentley, The Society for Implementation Science in Nutrition (SISN)
• Impact of COVID-19 on maternal and child health and nutrition: Global situation analysis, Saskia Osendarp, Micronutrient Forum
• Impact of COVID-19 on maternal and child health and nutrition: South Asia situation, Aatekah Owais, SickKids Centre for Global Child Health
• Adapting program actions and implementation research to support nutrition during COVID-19: An example from Nepal, Pooja Pandey, Helen Keller International (HKI), Nepal
• Question & Answer
• Overview of conference, Rasmi Avula, IFPRI
• Closing reflections, Vinod Paul, NITI Aayog, Zulfiqar Bhutta, Aga Khan University and SickKids Centre for Global Child Health, Shahidur Rashid, IFPRI

“Projections need not become destiny.” Saskia Osendarp, Executive Director, Micronutrient Forum
KEY MESSAGE: Impact of COVID-19 on nutrition outcomes and its determinants

Research studies and implementation experiences highlighted the myriad impacts of the COVID-19 pandemic on food security and nutrition and on health and nutrition service delivery. Evidence suggests that children are presenting to health facilities with more severe illness and worse nutrition, there are higher rates of malnutrition among infants born since COVID-19 versus infants born before the pandemic, increased prevalence of anemia among children, lower dietary diversity compared with the pre-pandemic period, lower pregnancy weight gain compared with before the pandemic, and more.

ABSTRACT-BASED THEMATIC SESSION 1

Impact of COVID-19 on nutrition outcomes and its determinants
Co-chaired by Tahmeed Ahmed, icddr,b and Phuong Nguyen, International Food Policy Research Institute, this session included six oral presentations from Bangladesh, India, and Pakistan.

1. The consequences of the pandemic on pregnancy outcomes: Efforts in ensuring pregnancy weight gain in the times of COVID-19; Sreeparna Mukherjee and Ipsita Bhattacharjee, Child In Need Institute

This study followed a cohort of 312 pregnant women from two districts of West Bengal to assess the effectiveness of different interventions on adequate pregnancy weight gain and healthy birth outcomes in 2020-21—amid nutrition service disruptions in India due to the COVID-19 pandemic. The study stressed the importance of exploring alternative models for filling service delivery gaps amid COVID-19 and future crises.

2. Impact of COVID-19 pandemic on nutritional status of children between 6 months to 3 years enrolled under creche program in southern Odisha; Shahnawaz Khan, Public Health Resource Society
This study looked at how one program in India pivoted from a creche-based program for community management of malnutrition serving hot-cooked meals to door-to-door ration delivery as a result of the COVID-19 lockdown. Key challenges in program adaptation included increased difficulty in supervised feeding among severely malnourished children, which, in turn, undermined the ability to enhance their nutritional status.

3. **Impact of COVID-19 on nutritional status and other morbidities among under-five children including those born during the pandemic and treated in a diarrheal disease hospital in Bangladesh**, Sharika Nuzhat, icddr,b

This study used data from a hospital in Dhaka, Bangladesh to assess the impact of COVID-19 on morbidity, mortality, and nutritional status among under-5 children, comparing the pre-COVID and post-pandemic onset period. Findings from the study highlight the importance of rapid identification, management, and monitoring of malnutrition and food security, particularly for pregnant mothers and children who are negatively affected as a result of the pandemic.

4. **Understanding child nutrition during the pandemic: A qualitative study of mothers of under-two children from urban informal settlements of Mumbai**, Nikhat Shaikh, Society for Nutrition Education & Health Action (SNEHA)

This qualitative study explored growth-promoting behaviors and practices of mothers of children under-2 year of age during the pandemic (June-September 2021) in an urban slum of Mumbai, India. Findings from the study suggest that surveyed mothers in these urban informal settlements had adopted improved hygiene practices.

5. **Impact of COVID-19 on dietary diversity and nutritional status of pregnant women and under-two years children among beneficiaries of a livelihood improvement program**, Gulshan Ara, icddr,b

This study assessed the impact of COVID-19 on the dietary diversity and nutritional status of children under-2 in rural Bangladesh who were exposed to a nutrition awareness support and services intervention from a livelihood improvement project for 2 years. The study reported that dietary diversity had deteriorated and underweight had increased among the children, necessitating the design and implementation of nutrition-sensitive interventions to address COVID-19 impacts on food security and nutrition among this vulnerable age group.


This presentation investigated the findings from a cross-sectional, multi-stage household survey on the health and nutrition of in-school and out-of-school school-age children (5-9.9 years) in certain areas of Pakistan. This study found that the pandemic and associated lockdown measures had an indirect impact on children’s social, health, and wellbeing, and that further evidence is needed on the indirect effects of the pandemic.
KEY MESSAGE: Disruptions, restorations, and adaptations to nutrition and health interventions during COVID-19

Across the region, there were substantial disruptions in various nutrition and health services, including in quality of services, due to the COVID-19 pandemic. Reasons have included both supply and demand-side challenges and fears. Over the course of the pandemic, restorations in these services are increasingly observed.

DAY 2: DECEMBER 2, 2021

ABSTRACT-BASED THEMATIC SESSION 2A

Disruptions, restorations, and adaptations to nutrition and health interventions during COVID-19

Co-chaired by Avula Laxmaiah, National Institute of Nutrition, and Ruchika Chugh Sachdeva, Bill & Melinda Gates Foundation, this session included eight presentations from Bangladesh, India, and Nepal.

1. Using high frequency health information system data to quantify effects of COVID-19 on disruption and restoration of health and nutrition services in India, Anita Christopher, IFPRI

This presentation examined the changes in the provision of essential health and nutrition services during different waves of the COVID-19 pandemic in India and assessed the inequalities in disruption and restoration by geography (rural-urban) and health facility type (private-public). This study stressed the importance of targeted efforts to improve delivery of essential services, particularly early childhood.
services, which were severely impacted by the pandemic and have low baseline coverage.


   This cross-sectional study implemented in July-August 2020 assessed women’s access to and utilization of maternal healthcare services during the pandemic in informal settlements Mumbai, which found that lack of information on the status of available services was a key constraint for accessing services and emphasized the importance of effective communication channels to make this information publicly available to all.

3. **COVID-19 adaptations in the implementation of an MIYCN counseling intervention in urban Bangladesh**, Santhia Ireen, Alive & Thrive

   This presentation explored adaptations to implementation of MIYCN counseling services in the maternal, newborn and child health (MNCH) facilities in selected urban areas in Bangladesh. This Bangladesh case study highlights the effectiveness of using mobile phones, online platforms, and flyer distribution for continuing MIYCN counseling service provision in a crisis in the urban context.

4. **Tele-monitoring continuity of adolescents and women’s nutrition services in eastern India during and after the COVID-19 lockdown: Results and lessons from Swabhimaan impact evaluation sites**, Neha Abraham, ROSHNI – Centre of Women Collectives led Social Action, Lady Irwin College

   This presentation showcased a tele-monitoring system that was established in response to the COVID-19 disruptions of nutrition service delivery under the Swabhimaan Programme, a multi-sectoral maternal and adolescent nutrition program in rural Bihar, Chhattisgarh, and Odisha. Overall, the study concluded that tele-monitoring enabled timely situational awareness, and the use of tele-monitoring was feasible—even in low-technology areas.

5. **Social innovations to nudge behavior change in maternal and adolescent nutrition practices across 11 districts of India**, Shantanu Sharma, MAMTA Health Institute for Mother and Child

   This presentation highlighted the work of Project Jagriti, which is implemented across 11 districts in India to increase women and adolescents' access to counseling on nutrition, covid precautions, and health. The study identified several social innovations and lessons learned to help connect with women and ensure knowledge transfer for behavior change, which may be explored for continuity in community-based interventions in the post-COVID context.

This study analyzed the impact of COVID-19 on the iron-folic acid (IFA) supply chain in India and identified several bottlenecks in the IFA supply chain. This study provides evidence that could guide the formulation of policy guidelines to design an effective and efficient supply chain.

7. **Improvements in IFA supplementation coverage under Anemia Mukt Bharat (AMB): Evidence from Health Management Information System (HMIS)**, Archa Misra, Institute of Economic Growth (IEG)

The study analyzed multi-level data publicly available at the Anemia Mukt Bharat portal. Evidence from the study suggests that, to achieve the pre-Covid-19 levels in coverage, there must be an increase in demand generation for IFA supplements across beneficiary groups, and synergies must be harnessed in program implementation to ensure timely distribution, coverage, and reporting.

8. **Health and nutrition services during COVID 19 in Nepal: Interruptions and restoration**, Kenda Cunningham, HKI

This presentation assessed the changes in health and nutrition services across different municipalities nationwide using 3-4 rounds of cross-sectional surveys. The study found reduced availability of child health and nutrition services and lower utilization of various child health services during the first wave (January 2021), which showed signs of recovery by July 2021. The presentation stressed monitoring ongoing investments in data collection, adapting interventions to evolving contexts, managing the workload of service providers, addressing supply- and demand-side barriers to service delivery, and prioritizing equity.
KEY MESSAGE: Disruptions, restorations, and adaptations to nutrition and health interventions during COVID-19

Research studies and implementation experiences highlight insights on restorations and adaptations, which indicate the prominent role of technology and the incredible role played by frontline health workers.

ABSTRACT-BASED THEMATIC SESSION 2B

Disruptions, restorations, and adaptations to nutrition and health interventions during COVID-19

Co-chaired by Robert Johnston, UNICEF, and Neha Raykar, IDinsight, this session included six oral presentations from Bangladesh, Cambodia, India, and Nepal.

1. Adaptive implementation of a community nutrition and asset transfer program during COVID-19 pandemic in rural Bangladesh, Yunhee Kang, Johns Hopkins School of Public Health

   This presentation explores how the implementation modality of a community nutrition program involving social behavior change communication and economic development of asset transfer for income generation in Bangladesh was adapted in response to the COVID-19 pandemic. Although the program was able to sustain the asset management and the quality of short-term outcomes, further research is needed to understand whether adaptive program implementation would achieve the expected long-term impact at population-level.

2. Delivery of routine maternal and child vaccines and nutritional services in India during the COVID-19 pandemic, Averi Chakrabarti, University of Pennsylvania
Using monthly, district-level data from India, this study identified various disruptions in the provision of health and nutrition services in India. The study points to the costs of government service disruption during the COVID-19 pandemic for some of India’s most vulnerable populations. Thus, the study concludes that there is a crucial need for nutrition programming to compensate for the service delivery interruptions that have occurred.

3. **Mobile Interventions for Upscaling Participation and Videos for Agriculture and Nutrition (m-UPAVAN): A feasibility study**, Emily Fivian, London School of Hygiene & Tropical Medicine

This study assessed whether delivering nutrition-sensitive agriculture videos to the mobile phones of women’s group beneficiaries is feasible and equitable in rural communities and whether such approaches can be more family-centric in India. The study found that mobile intervention coverage is high among mothers with intra-household phone access, providing potential for engaging whole families, and community cooperation may enable phoneless households to benefit. However, those on the wrong side of the digital divide were excluded during stringent COVID-19 mitigation measures.


This presentation highlighted an implementation experience from India, which used a digital platform to continue nutrition and early child development (ECD) counselling in India amid the COVID context. The platform used various channels to communicate messages to beneficiaries (e.g., IVR helpline, broadcast calls, Whatsapp chatbot, and social media handles). The presenter recommended that these digital platforms can be promoted during home visits, and can even be expanded to cover other issues (e.g., women’s and child’s rights, other SBCC initiatives, etc.). Further work is needed to measure the effectiveness of digital platforms in generating positive changes in food security and nutrition.

5. **Program impact pathway of the Positive Deviance/Hearth Interactive Voice Calling Program in a peri-urban context of Cambodia**, Kate Reinsma, World Vision International

This presentation showed a program impact pathway analysis to identify the essential activities required for adaptation of positive deviance/hearth (PDH) to a PDH-interactive voice call (IVC) program. IVC is an innovative approach that may be effective in providing targeted nutrition counseling while saving time, reducing the workload of frontline workers, and preventing exposure to COVID-19. When integrating IVC into traditional nutrition programs contextual factors must be considered during the design phase and quality assurance tools adapted to fit the new way of providing counseling over the phone. We recommend further research to determine if video calling or other innovative approaches using mobile phones, may effectively provide nutrition counseling.
6. **Transitioning from in-person to telephone-based counseling during the COVID-19 pandemic: Lessons from a large-scale, multi-sector nutrition program in Nepal**, Indra Dhoj Kshetri, Helen Keller International (HKI)

This presentation highlighted a program’s experiencing in shifting from in-person activities to virtual in Nepal. SMS and Facebook messenger were used to equip frontline workers with the necessary information for tele-counseling. Telephone counseling messages were reinforced by SMS, social media, radio programs and community announcements. The presentation identified several key factors for facilitating these adaptations: frontline workers had phones with internet connectivity and had access to electronic lists of 1,000-day households to contact; information was mainstreamed to ensure consistent communications across popular media; and the program interacted with audiences through different channels to continuously monitor and address concerns, queries, and information needs. Using a mix of channels and targeting all age groups with different messages can be effective for tracking and dispelling rumors and misinformation.
**ABSTRACT-BASED THEMATIC SESSION 3**

*Impact of COVID-19 on Food Security and the Role of Social Safety Net Programs*

Co-chaired by KD Renuka Silva, Wayamba University, Sri Lanka, and Dipa Sinha, Dr. B.R. Ambedkar University, India, this session included eight presentations from India, Indonesia, and Sri Lanka.

1. **Impacts of COVID-19 on food and nutrition security on migrant families in Chhatapur and Sheopur districts Madhya Pradesh, India**, Archana Sarkar, GIZ

   This presentation assessed the impact of COVID-19 on the food and nutrition security of returning migrants in select districts in Madhya Pradesh, India, which found that COVID-19 had an impact on food security and nutrition of returning migrant families in these districts, particularly as a result of the national lockdowns affecting migrant workers. The presentation stresses the importance of migrant families accessing social security benefits to mitigate impacts of the COVID-19 pandemic and future crises.
2. **Understanding the reality: The pandemic and its effects**, Isha Rangnekar, Action Against Hunger

This study assessed the impact of the COVID-19 pandemic and the subsequent lockdown on access to health and nutrition services, food security, and livelihoods of fragile communities served by Action Against Hunger in India. The presentation emphasized the importance of conducting rapid assessments to identify ‘hotspots’ demanding immediate attention to ensure continuity of nutrition and health services.

3. **Collaborations that addressed food insecurity during the COVID-19 pandemic**, Vinita Ajgaonkar, Society for Nutrition Education and Health Action (SNEHA)

The results of a telephonic needs assessment conducted in Mumbai, India highlighted the challenges to access food among poor, vulnerable communities, and opportunities for raising awareness, access, and uptake of social protection schemes for these vulnerable communities.


This study examines the changes in the public distribution system (PDS) since the 2013 National Food Security Act and at the system’s response to shocks like COVID-19. The study underscores the importance of conducting a needs assessment for to public programs in the domain of public health and nutrition.

5. **Do ration cards predict ration volumes? Findings from household surveys across six Indian states**, Prateek Pillai and Victor Zhenyi Wang, IDinsight

This study gauged the progressivity of relief targeting under the Public Distribution System (PDS) during the COVID-19 pandemic and sought to understand whether the type of ration card (BPL/Antyodaya/APL) held by a household is predictive of the volume of rations it receives. The results highlight the challenges to progressive relief targeting under PDS in a pandemic context, how even relief measures specifically designed to enable progressive targeting can fall short and provides an opportunity to discuss how to better ensure that the most vulnerable get access to one of the government’s most accessible programs.

6. **Revision of the wheat flour fortification standard in Indonesia and disruption in its implementation due to COVID-19**, Rozy Afrial Jafar, Nutrition International

This implementation study investigated the implementation of the wheat flour fortification standard in Indonesia and the disruptions as a result of the COVID-19 pandemic. This implementation experience underscored the need for strengthening monitoring to sustain the implementation of such measures and the importance of the sustainability of such interventions for improving anemia in the population.
7. **Recovery and ongoing challenges in food insecurity among Asia Pacific poor households in 2020-2021**, Yunhee Kang, Johns Hopkins School of Public Health

This research examined the change in livelihood activities and monthly income between pre-pandemic and 2021 and the time-trend of food security domains between 2020 and 2021. Among Asia Pacific poor households, food availability and affordability of essential items improved in 2021 or kept a similar status of 2020. However, the economic condition in the region was not restored yet to the level of pre-pandemic. Continued monitoring activities are needed to identify vulnerable groups and changes in livelihood patterns.


This research assessed the food insecurity experience and perceived COVID-19 impacts on income, livelihoods, and coping mechanisms among rural households during the two waves of COVID-19 cases in Sri Lanka. The results suggest that the COVID-19 relief programs may have not worsened food supply, but access and utilization were hampered. This research calls for studying factors affecting resilience of local food-systems beyond production.
KEY MESSAGE: From evidence to policies, programs, and better lives: Key insights from Delivering for Nutrition 2021

The closing session brought together high-level national- and regional-level representatives to discuss the key challenges and lessons learned from the conference. Although countries across South Asia were affected differently and had diverging policy responses to the pandemic, the conference highlighted common ground: health and nutrition outcomes worsened, health and nutrition services were disrupted, and governments and development partners have acted quickly to mitigate the impacts of the pandemic. There was consensus among the panellists on the importance of conducting research and disseminating evidence in a timely fashion to guide program and policy decisions for improving food security and nutrition.

Closing session
From evidence to policies, programs, and better lives: Key insights from Delivering for Nutrition 2021
Moderated by Purnima Menon, IFPRI

After 1.5-days of sharing, discussing, and deliberating over implementation research presented by junior- and senior-level researchers and implementers from across the region, the closing session invited panellists from the national- and regional-level to identify the challenges, lessons learned, and way forward.

National perspectives
Rakesh Sarwal, Additional Secretary highlighted the Indian Government’s efforts to restore essential health and nutrition service delivery during the pandemic, such as home delivery of rations, use of tele-communications and social media for raising awareness, leveraging existing safety net programs (e.g., MNREGA) and Jan Dhan Bank accounts to restore livelihoods. He also highlighted the importance of
community health approaches and behavioral change campaigns to improve program design in a post-pandemic world.

Md. Khalilur Rahman, Director General, Bangladesh National Nutrition Council (BNNC) indicated that the Bangladesh Government took a similar approach to tackling the negative impacts of COVID-19, relying on active governance and innovative methods. This included organizing home-based delivery of rations; conducting real-time monitoring (ICT) at the community-level; and raising awareness of the impacts of COVID-19 and preventive measures on social media.

Kiran Rupakhetee, Joint Secretary, National Planning Commission, Nepal shared that, although Nepal has observed significant reductions in stunting and child underweight, there has been limited progress on wasting and anemia. The onset of the pandemic resulted in resources being diverted to address the immediate and short-term impacts of COVID-19, which negatively affected women’s and children’s diets and food security. The government is preparing a National Commitment in Nutritional Support for a summit in Tokyo.

Shagufta Zareen, Director, Policy & Strategic Planning Unit (PSPU), Pakistan indicated that the country’s immediate focus during the onset of the pandemic was COVID management, which inadvertently neglected nutrition. Over time, the Pakistan Government used outreach teams to raise awareness on the impacts of the pandemic, identify vulnerable children, opened basic health centers in rural areas to manage high priority nutrition cases, and used social media to promote nutrition information. They are developing policy and strategic framework for nutrition. Since Pakistan depends on import of nutrition supplies, the country had to use reserve stocks.

Renuka Jayatissa, Medical Research Institute, Sri Lanka highlighted the impacts of COVID-19 in the country, such as sharp increases in food prices; declines in household income; reduced quantity and quality of food consumed, particularly among the poor; increased vitamin D deficiency; and so on. The impacts of COVID-19 have compounded issues that predated COVID, such as issues associated with climate change, rising overweight and obesity, iron deficiencies, and so on. Renuka emphasized the importance of multisectoral approaches for tackling nutrition issues.

"Lessons and evidence from the [Delivering for Nutrition] conference can help us return to a normal life.” Md. Khalilur Rahman, Director General, Bangladesh National Nutrition Council

“Good lessons should be circulated within the region so we can make progress together.” Renuka Jayatissa, Medical Research Institute, Government of Sri Lanka
Regional perspectives

Panellists were invited from various regional agencies to share their perspectives on the major challenges because of the COVID-19 pandemic and reflect on key lessons learned from the conference.

Zivai Murira, UNICEF-South Asia reinforced the importance of bringing together stakeholders from across the region to share lessons learned. He commended the diligent work of governments and development partners in restoring nutrition and health interventions in response to the COVID-19 outbreak; nevertheless, the impact of the pandemic has been devastating, particularly on exacerbating malnutrition among women and children. Many of the conference presentations underscored that health systems are shock-responsive and adaptable in an evolving context. He highlighted the importance of making substantial, long-term investments in primary health centers and social safety nets to improve health and nutrition. Zivai concluded, noting that there is an urgent need for better and more regular data to better understand the pandemic in the region.

Angela de Silva, WHO-SEARO urged for more frequent learning touchpoints similar to the Delivering for Nutrition conference to share implementation experiences and research across the region. Angela reiterated the multiple impacts of the pandemic on social safety net programs, education, and the effects on food security and hunger due to disruptions to nutrition services and reduced utilization of services. Angela highlighted some of the knock-on effects of the pandemic: lower supplementary and complementary feeding; reduced school enrollment among girl children, which may lead to early marriage and adolescent pregnancy, which could lead to intergenerational malnutrition; increased consumption of ultra-processed foods; and so on. She closed by recommending that the insights generated from the conference should be translated to policy.

Temina Lalani-Shariff, Regional Director, CGIAR stated that COVID-19 has had a powerful reckoning in South Asia—it has affected a large number of families and has severely disrupted supply chains, affecting food security and diets, and in turn, nutrition. COVID-19 poses serious risks for derailing the region’s progress towards achieving the Sustainable Development Goals (SDGs), yet at the same time, she acknowledged the myriad innovations that have been developed to maintain supply chains. Temina indicated that the CGIAR COVID Hub collated knowledge on food transformations and that were observed in the early stages of the COVID-19 pandemic, which generated important lessons learned. Still, she mentioned that very little is known on the extent of these challenges and on which strategies to invest. She referred to this conference as an ‘important steppingstone’ to help identify insights from across the region that can be translated to policy and action.

Meera Shekar, World Bank commended the response by policymakers and development partners to adapt service delivery in the region. She noted that conferences like the Nutrition for Growth Summit and the Delivering for Nutrition Conference brings key stakeholders together to review the available evidence and assess where to most effectively invest to improve food security and nutrition. She mentioned that the pandemic has dealt a major blow to nutrition, emphasizing the
rising rates of obesity, which in turn, is increasing the risk of COVID-19 during a time that health systems are under immense pressure. Encouragingly, Meera mentioned that the COVID-19 pandemic may bring about key changes that could improve food security and nutrition, including (1) increasing emphasis on food security in the ‘post-COVID’ context; (2) revamping interest in introducing universal health coverage; and (3) strengthening social safety nets to link cash assistance with nutrition outcomes. Meera closed, indicating that many of the lessons from the conference may inform actions and investments at a global-level, and with political commitment, results can be seen relatively quickly.

Purnima Menon, IFPRI stressed the lessons learned from the conference, and acknowledged the hard work of governments and other agencies in addressing the impacts of COVID-19. There are big issues that require further attention, including but not limited to tackling the commercial determinants of undernutrition.

"There is an extensive base of research studies and implementation experiences. The development community must advocate for improvements in nutrition and health. We need translate these lessons learned into policy." Angela de Silva, WHO-SEARO

“The Delivering for Nutrition Conference is a stepping stone for research across the region. There is need to understand the breadth and width of the nutrition challenge,” Temina Lalani-Shariff, CGIAR
Summary of conference findings

The Delivering for Nutrition 2021 conference showcased a wealth of practical experiences and rigorous research, which examined the pandemic’s impacts and deliberated on opportunities to use this existing knowledge to course correct for enhancing nutrition and health.

Research studies and implementation experiences presented during the conference provided sobering insights on the impacts of COVID-19 on maternal and child health and nutrition, food security, and diets across the region. Impacts among young children have been staggering: in Bangladesh, children presented to hospitals with more severe illness and infants born during the pandemic were more malnourished compared with those born pre-COVID; and anemia increased among children post-lockdown compared with pre-lockdown in Pakistan. Research from India found that women gained less weight during pregnancy during COVID-19 compared to pre-COVID-19, which may have negative spillover effects on later life maternal and child nutrition. The household-level impacts are also worrying.

Substantial supply- and demand-side disruptions to maternal and child nutrition services across the region were also reported. In Mumbai, India, the majority of surveyed pregnant women and lactating women experienced interrupted antenatal, delivery, and postnatal care services. Along the same vein, evidence from Pakistan and Nepal found a substantial decline in healthcare utilization including antenatal care, scheduled child immunization, visits for iron and folic acid (IFA) supplementation, growth monitoring, and overall care-seeking for childhood illness.

The COVID-19 shock led to the abrupt loss of incomes and livelihoods for millions. Findings from Sri Lanka, echoed in other countries, found diminished livelihoods and household food security amid COVID. Leveraging social protection was crucial to meet the immediate needs of the poor and vulnerable. The public distribution system in India, for example, appears to have delivered on ensuring reach of food grains to households, but there were issues with eligibility and the lack of commodity choices that pertained program design elements prior to COVID-19. To add, although food availability and access improved to pre-pandemic levels in some Asian-Pacific countries, economic conditions continue to lag and warrant further attention on how social safety nets may be used to protect those still struggling in the wake of the pandemic.

The research and implementation experiences reveal remarkable restorations and adaptations underway across South Asia. A myriad of novel approaches have emerged to close gaps in nutrition service delivery, such as adapting digital platforms for tele-counselling in India and Nepal; reimagining mHealth and eHealth interventions to continue maternal, infant, and young child nutrition (MIYCN) education in Bangladesh; exploring the feasibility of replacing in-person counselling visits with an interactive voice calling nutrition rehabilitation program in Cambodia; and many more.

National- and regional-level leadership also took stock of the key challenges and priority actions for turning the tide on the impacts of COVID-19 on food security and
nutrition. Although evidence from the conference demonstrates that the pandemic’s impacts have varied across countries, national representatives from Bangladesh, India, Nepal, Pakistan, and Sri Lanka consistently highlighted the role of innovation in tackling the pandemic—leveraging social media, complemented with other traditional media, to raise mass awareness; piloting digital methods to compensate for the absence of in-person service delivery,

National- and regional-level panellists highlighted the many concurrent challenges alongside the pandemic, many of which pre-dated and are compounded by the COVID crisis: rising overweight and obesity; increasing rates of non-communicable diseases, much of which can be attributed to sub-optimal diets; climate-related issues; to name a few.

Although, the impacts of COVID-19 uncovered the weaknesses in health and social protection systems, regional representatives noted that COVID-19 has catalyzed much-needed action to make systems more shock-responsive. The conference closed with a commitment to review the policy and program implications presented as part of the conference and use these findings as an entry point to deepen country- and regional-level engagement for confronting the impacts of COVID-19 together.
Virtual awards

Virtual awards for various categories were announced during the closing session. Presentations were selected based on the scores assigned during the double-blinded abstract review process.

Top-ranked research submissions

- **Averi Chakrabarti**, University of Pennsylvania, "Delivery of Routine Maternal and Child Vaccines and Nutritional Services in India during the COVID-19 Pandemic"
- **Isha Rangnekar**, Action Against Hunger, "Understanding the Reality: The Pandemic and Its Effects"

Top-ranked implementation submissions

- **Indra Dhoj Kshetri**, Helen Keller International, "Transitioning from in-person to telephone based counseling during the COVID-19 pandemic: Lessons from a large-scale multisector nutrition program in Nepal"
- **Rozy Afrial Jafar**, Nutrition International, "Revision of the wheat flour fortification standard in Indonesia and disruption in its implementation due to COVID-19"

Organizations with the most accepted research abstracts

- International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b) *(Bangladesh)*
- International Food Policy Research Institute (IFPRI) *(South Asia)*

Organization with the most accepted implementation abstracts

- Helen Keller International (HKI)
- ROSHNI - Centre of Women Collectives led by Social Action, Lady Irwin College *(India)*
- UNICEF Rajasthan *(India)*
39 poster presentations were programmed under three themes. Each poster was accompanied by a 60-second audio recording by the presenter. Please view the poster videos by clicking on the theme headings below or by visiting the official conference website here: https://bit.ly/D4N2021

**Poster presentations**

**Thematic session 1: Impact on nutrition outcomes and its determinants**

2. Maternal and child nutrition and health behavior during the COVID-19 pandemic in Nepal; Manisha Laxmi Shrestha, Family Health International
3. Impact of Covid-19 on psychological stress & its association with dietary practices of Indian youth (18-25 years); Chandni Chopra, Nirmala Niketan College of Home Science
4. Association between early initiation of breastfeeding and respiratory infection in Nepal: implications for non-separation of infant and mother in the COVID context; Bindi Borg, University of Western Sydney
5. Nutrition outcomes and dietary patterns among children of tribal communities of West Sighbhum & Gumla districts of Jharkhand in COVID-19 era; Sharmistha Das, Save the Children
6. Pandemic, Poverty and People- Reality of the Urban Poor of Ahmedabad city, Gujarat during the Lockdown; Hetvi Shah, Centre for Health, Education, Training and Nutrition Awareness
7. Effects of COVID-19 lockdown on the Feeding Practices of Children of Urban Slum in Bangladesh; Farzana Akter Shammy, Shahjalal University of Science and Technology
8. Complementary Feeding Practices of 6-23 months old children from selected villages of jambusar block of Bharuch district during Covid-19; Bhumika Thakur, The Maharaja Sayajirao University of Baroda
9. Assessing Changes in Dietary Habits and Physical Activity of Children Due to COVID-19 Imposed Restrictions in Pakistan; Sidra Raza, National Institute of Cardiovascular Diseases Karachi

**Thematic session 2: Disruptions, restorations, and adaptations to nutrition and health interventions during COVID-19**

1. Piloting Telecounseling through Female Community Health Volunteers (FCHVs); Gyandeep Acharya, Helen Keller International
2. Integrated approaches for Severe Acute Malnutrition management: Field implementation experiences from Devbhumi Dwarka, Gujarat, India; Ankita Sharma, Indian Institute of Public Health Gandhinagar
3. Effect of COVID-19 pandemic on the implementation of a strengthened GMP programme in rural Bangladesh: experience from an implementation research; Muttaquina Hossain, icddr,b
4. Unlocking potential of Agri-Nutri Connect for Combatting Malnutrition and Building Resilience; Santarpana Choudhury, BAIF Development Research Foundation
5. Impact of childcare and nutrition services during the COVID pandemic on nutritional status of children among tribal communities in Southern Rajasthan; Anupriya Saxena, Basic Healthcare Services
6. Ensuring coverage: Programmatic adaptations during COVID-19; Pawankumar Patil, Action Against Hunger India
7. Accelerated scale-up of Community Based Management of Children with SAM through home-based energy dense feeding and regular counselling while addressing Operational and Technical Challenges; Madhusudan Singh, UNICEF Rajasthan
8. Strengthening Early Childhood Development using existing service delivery platforms during Covid-19 through telecommunication as a means to reach out to the functionaries and community; Madhusudan Singh, UNICEF Rajasthan
9. Experiences of Frontline Workers in Rajasthan and Himachal Pradesh during the COVID-19 Pandemic; Ritwik Shukla, Accountability Initiative, Centre for Policy Research
10. Impact of Health Spoken Tutorials on Effective Breastfeeding & Growth Monitoring on Prevention & Treatment of Wasting Under 6 Months Babies: Preliminary Findings of a Case-Control Study from Dept of Health, Govt of Banaskantha, Gujarat; Rupal Dalal, Shrimati Malati Dahanukar Trust
11. Use of expanded MUAC-only programming in the context of COVID-19: Key lessons from cross-sectional surveys and community-based management of acute malnutrition programme (CMAM) data in the Rohingya refugee camps, Cox's Bazar, Bangladesh; Md. Lalan Miah, Action Against Hunger Bangladesh
12. Evaluation of Mobile Phone-based Positive Deviance/Hearth Child Undernutrition Program in Cambodia; Kate Reinsma, World Vision International
14. Micronutrient deficiency and food consumption among adolescent aged 10-19 years in India; Tarique Anwar, IIPS
15. Awareness and Utilization of Integrated Children Development Services (ICDS) scheme in urban slums of Delhi: A Post-Pandemic Assessment; Safa Fazal Haque, Hamdard Institute of Medical Sciences and Research, New Delhi
17. Comparison of extended MUAC criteria for the admission of children with Severe Acute Malnutrition children in the pre and COVID-19 pandemic; Karanjeer Singh, UNICEF
18. Continued delivery and use of health and nutrition services during COVID-19 in Tamil Nadu, India; Sattvika Ashok, International Food Policy Research Institute (IFPRI)
19. How did COVID-19 pandemic affect the public health nutrition services of pregnant women in India: A qualitative assessment; Shantanu Sharma, MAMTA Health Institute for Mother and Child
20. AAA Platform: Simple solution for complex health crises; Krupa Varghese, The Antara Foundation
21. Quality and Utilisation Patterns of Maternal Supplementary Nutrition by Antenatal Mothers during COVID in Tribal Block of Odisha; B. Lakshmi Priyanka, Kalinga Institute of Medical Sciences

**Thematic session 3: Impact of COVID-19 on food security and the role of social safety net programs**

1. Channeling the Power of Social Media for Nutrition; Sijo John, IPE Global Limited
2. Fast-food consumption among young population in Hanoi City, Vietnam and the availability of fast-food at household during the COVID-19 lockdown duration; Ngan TD Hoang, National Institute of Nutrition
3. Workforce nutrition during COVID: Assessing the implementation of GAIN’s Keeping Food Markets Working grant in South Asia and Kenya; Anna Grace Tribble, Emory University
4. Nutritional status assessment of children between 36-59 months during the COVID-19 pandemic in urban Vadodara; Deepa Tiwari, The M S University of Baroda, Vadodara, Gujarat
5. Household food insecurity and nutritional status of pregnant women in rural Bangladesh amid the COVID-19 pandemic; S. M. Tafsir Hasan, International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b)
6. Impact of COVID-19 on Household Nutrition; Deepika Luthra, Save the Children
7. Can Homestead Food Production (HFP) Program Improve a Household’s Resilience to the COVID-19 Pandemic: Evidence from Rural Bangladesh; Aminuzzaman Talukder, Helen Keller International
8. Income loss and food insecurity due to COVID-19 and poor child dietary practices in Nepal: is maternal psychological distress a mediator of these relationships?; Ramesh Adhikari, Helen Keller International