

INDONESIA

INVESTING IN NUTRITION AND EARLY YEARS (INEY) PHASE 2

PROGRAM-FOR-RESULTS (PforR)

Technical Assessment (Summary)

MAY 2023

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ABBREVIATIONS AND ACRONYMS

Acronym	Definition
AF	Additional Financing
ANC	Antenatal Care
ASF	Administration Service Firm
AM	Accountability Mechanism
Balitbangkes	National Institute of Health Research and Development (<i>Badan Penelitian dan Pengembangan Kesehatan</i>)
Bangda	Directorate General of Regional Development (<i>Direktorat Jenderal Bina Pembangunan Daerah</i>)
Bappenas	National Development Planning Agency (<i>Badan Perencanaan Pembangunan Nasional</i>)
BCC	Behavior Change Communication
BCG	Bacillus Calmette–Guérin
BKB	Toddler and Family Development <i>Kader</i> (<i>Kader Bina Keluarga Balita</i>)
BKKBN	National Population and Family Planning Board (<i>Badan Kependudukan dan Keluarga Berencana Nasional</i>)
BOK	Health Operational Assistance/Fund (<i>Bantuan Operasional Kesehatan</i>)
BPKP	Finance and Development Monitoring Agency (<i>Badan Pengawasan Keuangan dan Pembangunan</i>)
BPNT	Noncash Food Assistance (<i>Bantuan Pangan Non Tunai</i>)
BPS	National Statistics Agency (<i>Badan Pusat Statistik</i>)
BPK	Indonesia Supreme Audit Institution (<i>Badan Pemeriksa Keuangan</i>)
CNAP	Climate and Nutrition Adaptation Plan
CPMU	Coordinating Project Management Unit
CPF	Country Partnership Framework
DJA	Directorate General of Budget (<i>Direktorat Jenderal Anggaran</i>)
DAK	Special Allocation Funds (<i>Dana Alokasi Khusus</i>)
DA	Designated Account
DLI	Disbursement-Linked Indicator
DLR	Disbursement-Linked Result
DTP	Diphtheria, Tetanus toxoid and Pertussis
ECED	Early Childhood Education and Development
e-warung	Distribution Center
eHDW	The application used to input village convergence reports by the Human Development Workers
EA	Executing Agency
EAP	East Asia and the Pacific
E&S	Environmental and Social
FM	Financial Management
FSA	Fiduciary Systems Assessment
Germas	Community Campaign for Healthy Living (<i>Gerakan Masyarakat Hidup Sehat</i>)

GFF	Global Financing Facility for Women, Children and Adolescents
GoI	Government of Indonesia
GRS	Grievance Redress Service
GDP	Gross Domestic Product
HDW	Human Development Worker
HCP	Human Capital Project
HCI	Human Capital Index
H-NAP	Health-National Adaptation Plan
I-CAN	Initiative of Climate Action and Nutrition
IFA	Iron Folic Acid
IFAS	Iron-Folic Acid Supplementation
IKPS	Special Index for Handling Stunting (<i>Indeks Khusus Penanganan Stunting</i>)
INEY	Investing in Nutrition and Early Years Program
IP	Implementation Progress
IPC	Interpersonal Communication
IPF	Investment Project Financing
ILP	<i>Integrasi Layanan Primer</i>
IRI	Intermediate Results Indicator
ISR	Implementation Status and Results Report
IVA	Independent Verification Agency
IHCA	Indonesia Human Capital Acceleration
ISPHERE	Indonesia – Supporting Primary Health Care Reform Program
IBRD	International Bank for Reconstruction and Development
Kemendo PMK	Coordinating Ministry for Human Development and Cultural Affairs
MoECRT	Ministry of Education, Culture, Research and Technology
MoF	Ministry of Finance
MoH	Ministry of Health
MoHA	Ministry of Home Affairs
MoSA	Ministry of Social Affairs
MoV	Ministry of Villages, Disadvantaged Areas and Transmigration
MTR	Midterm Review
MoEF	Ministry of Environment and Forestry
M&E	Monitoring & Evaluation
MIC	Middle Income Country
MR	Measles and Rubella
NPP	National Procurement Procedures
NAP	National Adaptation Plan
OECD	Organization for Economic Co-Operation and Development
OHS	Occupational Health and Safety
OPV	Oral Poliovirus Vaccine
PAP	Program Action Plan
PDO	Program Development Objective

Permenkes	MoH Regulation (<i>Peraturan Menteri Kesehatan</i>)
Perpres	Presidential Regulation (<i>Peraturan Presiden</i>)
PPSD	Project Procurement Strategy for Development
PforR	Program-for-Results
PIU	Program Implementation Unit
PMO	Program Management Office
Puskesmas	Health Center at Sub-District Level (<i>Pusat Kesehatan Masyarakat</i>)
PHC	Primary Health Care
PPK	Commitment Making Officers (<i>Pejabat Pembuat Komitmen</i>)
POM	Project Operation Manual
PPLI	Environment Waste Management Service (<i>Prasada Pamunah Limbah Indonesia</i>)
RISKESDAS	National Health Survey (<i>Riset Kesehatan Dasar</i>)
RPJMN	National Medium-Term Development Plan (<i>Rencana Pembangunan Jangka Menengah Nasional</i>)
RA	Result Area
RDS	Healthy Village Home (<i>Rumah Desa Sehat</i>)
StraNas Stunting	National Strategy to Accelerate Stunting Reduction (<i>Strategi Nasional Percepatan Penurunan Stunting</i>)
Sembako Program	Indonesia's National Food Assistance Program
Setwapres or SoVP	Secretariat of the Vice President (<i>Sekretariat Wakil Presiden</i>)
SOP	Standard Operating Procedures
SSGI	Indonesia Survey for Nutrition Status (<i>Survei Status Gizi Indonesia</i>)
STEP	Systematic Tracking of Exchanges in Procurement
SUSENAS	National Socio-Economic Survey (<i>Survei Sosial Ekonomi Nasional</i>)
SDG	Sustainable Development Goals
SOE	Statement of Expenditures
Satker	Project Working Unit (<i>Satuan Kerja</i>)
TA	Technical Assistance
ToT	Training of Trainers
TPPS	Stunting Reduction Acceleration Teams (<i>Team Percepatan Penurunan Stunting</i>)
TP2S	Team for the Acceleration of Stunting Prevention Secretariat (<i>Team Percepatan Penurunan Stunting</i>)
TPK	Family Companion Team (<i>Team Pendamping Keluarga</i>)
ToC	Theory of Change
WASH	Water, Sanitation, and Hygiene

INTRODUCTION

Purpose of the Technical Assessment

- 1. This technical assessment evaluates the adequacy of the Program arrangements and their performance in four areas:** (i) strategic relevance and technical soundness, (ii) expenditure framework, (iii) results framework and monitoring and evaluation (M&E) capacity, and (iv) economic justification. The assessment describes the rationale driving Program design and defines the relevant key risks to the achievement of the Program's stated results and associated mitigation measures.
- 2. In addition to providing an evidence-based foundation for the Program, the technical assessment of INEY Phase 2 builds on institutional memory and findings from INEY phase 1's technical assessment, Mid-Term Review (MTR), and ISR mission aide memoires.** The World Bank carried out a Technical Assessment for Phase 1 of INEY that analyzed the capacity of the Indonesian Government in delivering stunting reduction interventions across four levels of implementation: central government, sector line ministries, districts, and villages. Drawing on the findings of the technical assessment, the Mid-Term Review (MTR) of INEY Phase 1, and ISR mission aide memoires, this technical assessment further examines the design of the INEY Phase 2 PforR Program in its aim to support the Government of Indonesia in strengthening intervention delivery systems; improving the flow of information; strengthening capacity and incentives for multisectoral data collection, diagnosis, planning, and learning across the delivery chain; and strengthening household, village, district, and national-level coordination for stunting reduction.

Country context

- 3. Indonesia – a diverse archipelago nation of more than 300 ethnic groups – has charted impressive economic growth since overcoming the Asian financial crisis of the late 1990s.** Indonesia has a population of over 273 million people, of which approximately 10% are children under the age of five¹. Today, the country is the tenth largest economy in terms of purchasing power parity. Indonesia has made enormous gains in poverty reduction, cutting the poverty rate by more than half since 1999, to under 10 percent in 2019 before the COVID-19 pandemic hit.
- 4. Despite global slowdown, Indonesia has experienced strong growth in 2022 thanks to robust commodity prices and a reopening of the economy.** Real Gross Domestic Product (GDP) growth has accelerated from 3.7 percent in 2021 to 5.4 percent year-over-year (YOY) in the first three quarters of 2022. The spike in coal and palm oil prices since the start of the Russian invasion of Ukraine has generated significantly higher export revenues. A drop in COVID-19 infection rates and a successful vaccination program prompted the lifting of mobility restrictions, releasing pent-up demand and igniting a sharp acceleration in commodities consumption. The unemployment rate has fallen below six percent and average wages rose by 12 percent YOY². In 2019, Indonesia briefly graduated to upper middle-income country status, though in 2020, the economic impacts of the COVID-19 pandemic returned the country to low middle-income country status. Nevertheless, the country aspires to become a high-income country

¹ Total Population by Age Group and Gender, 2022. Badan Pusat Statistik.

https://www.bps.go.id/indikator/indikator/view_data_pub/0000/api_pub/YW40a21pdTU1cnJxOGt6dm43ZEdoZz09/da_03/1

² World Bank. (Dec 2022). Indonesia Economic Prospects December 2022.

by 2045. Economic conditions in Indonesia have remained stable amidst global shocks, but it has not been insulated from price pressures. Inflation has picked up, reaching 5.7 percent (YOY) in October 2022 though this has been declining in the first quarter of 2023 (to 4.3 percent in April 2023). Price pressures have been driven by rising international commodity prices, increased domestic energy tariffs, and higher producer prices. Indonesia is projected to have a robust growth over the next three years though with significant downside risks emanating from the global economic environment

5. The Government of Indonesia (GoI) has committed to accelerate human capital as part of its 2045 Vision³. Human capital has been estimated to account for more than half of the country’s wealth⁴. In parallel with robust economic performance, job growth and poverty reduction over the period 2010-2019, Indonesia reduced stunting, progressed toward universal health coverage, and expanded student enrollment in education (Table below). Indonesia has also been an early and strong champion of the World Bank’s Human Capital Project (HCP)⁵, launched at the 2018 Annual Meetings in Bali, and is committed to further accelerating multisectoral efforts to enhance human capital outcomes.

Table 1: Key Human Capital Indicators

Indicator	Indonesia 2020 or latest	Indonesia 2010	East Asia and Pacific 2020 or latest
Human Capital Index (HCI)	0.54	0.50	0.59
Probability of Survival to Age 5	0.975	0.966	0.978
Expected Years of School	12.4	11.4	11.9
Harmonized Test Scores	395	398	432
Survival Rate from Age 15-60	0.850	0.828	0.864
Fraction of Children Under 5 Not Stunted	0.723	0.608	0.759

Source: World Bank. 2020.

6. Human capital—the knowledge, skills, and health that people accumulate throughout their lives—is key to Indonesia’s future, but lower-than-expected levels of human capital represent a key structural bottleneck to achieving the country’s aspirations for inclusive growth and poverty reduction.^{6,7,8} According to the latest Human Capital Index (HCI), a child born in Indonesia today will be

³ Vision for Indonesia 2045 *Bappenas*.

⁴ Lange, G.-M., Q. Wodon, and K. Carey. 2018. *The Changing Wealth of Nations 2018: Building a Sustainable Future*. Washington, DC: World Bank.

⁵ <https://www.worldbank.org/en/publication/human-capital>

⁶ World Bank. (2021).

⁷ Bappenas. 2017. *Visi Indonesia 2045 (Vision for Indonesia 2045)*. Bappenas, Jakarta. Available at: https://perpustakaan.bappenas.go.id/e-library/file_upload/koleksi/migrasi-data-publikasi/file/Policy_Paper/Dokumen%20lengkap%202045_final.pdf

⁸ World Bank. 2021. *Indonesia - Country Partnership Framework for the Period FY21 - FY25*. Report No. 157221. World Bank. Washington, DC. Available at: <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/306831620760881407/indonesia-country-partnership-framework-for-the-period-fy21-fy25>.

54 percent as productive as they could be with complete education, health and nutrition. Indonesia's HCI score is below the average of countries in East Asia and the Pacific and its aspirational peers in upper-middle income countries. Child (under-5) mortality currently stands at 22 deaths per 1000 births, one of the highest in the region,⁹ and almost 14.5 percent of deaths in infants and 5% of deaths in children under the age of five are caused by vaccine preventable diseases¹⁰. Malnutrition is at the core of Indonesia's human capital performance. In addition to directly influencing the HCI through the stunting indicator, child undernutrition underpins 45 percent of all deaths of children under age five and adult survival is influenced by rising overweight/obesity and diet-related non-communicable diseases. Significant variations in HCI scores across provinces and districts suggests that parts of Indonesia have HCI scores almost at par with Vietnam and China while HCI scores in other parts are comparable to Niger and Sierra Leone. A child born into a family with in the first quintile of the consumption distribution is expected to achieve an HCI that is 10 percentage points lower than a child born into the fifth quintile¹¹.

7. Climate change is expected to impact water availability, health and nutrition, disaster risk management, and urban development in Indonesia—particularly in coastal zones—with dire impacts on human capital, poverty, and inequality. Indonesia represents the third largest tropical rainforest in the world (94.1 million hectares) and is home to the world's largest tropical peatlands (14.9 million hectares) and mangrove forests (3.31 million hectares). These natural resources store vast amounts of carbon that mitigate climate change impacts, crucial to sustaining the livelihood of Indonesians and support the country's long-term development. However, as an archipelagic country, Indonesia experiences increased exposure and vulnerability to the impacts of climate change, including rising sea levels, flooding, strong winds and drought¹². The impact of climate change on agriculture can result in lower yields and nutritional quality due to drought or flood and food insecurity in Indonesia. Climate change is predicted to negatively impact the agricultural production, food safety and nutrition in Indonesia. Food supplies of subsistence-farming households are disrupted by climate-related effects such as flooding, extreme heat, or pestilence¹³. Conservative projections estimate that potential economic losses from climate change impacts in Indonesia will reach IDR 115 trillion in 2024 (USD 7.6 million), across the marine & costal sector, water, agriculture and health. The current climate disaster risk index is considered "high" in 221 out of the 514 districts of Indonesia (43 percent)¹⁴. Eighty percent of the disasters that occurred in Indonesia between 1998 and 2018 were attributable to climate change, among which 39% were flooding, 26% heavy wind/storm, 22% landslides and 8% drought¹⁵. In 2017 alone, extreme weather events caused by climate change affected over 300, 000 people and caused around 200 direct deaths¹⁶. Indonesia is particularly

⁹ Geographical Indicators, Indonesia. UNICEF. <https://data.unicef.org/country/idn/#/>

¹⁰ "The government guarantees PCV immunization for all Indonesian children to protect them from the dangers of pulmonary inflammation (pneumonia)". WHO, 2022. [https://www.who.int/indonesia/news/detail/12-09-2022-the-government-guarantees-pcv-immunization-for-all-indonesian-children-to-protect-them-from-the-dangers-of-pulmonary-inflammation-\(pneumonia\)](https://www.who.int/indonesia/news/detail/12-09-2022-the-government-guarantees-pcv-immunization-for-all-indonesian-children-to-protect-them-from-the-dangers-of-pulmonary-inflammation-(pneumonia))

¹¹ Sari and Tiwari (2021). Girls show a higher average human capital potential than boys (HCI score of 0.56 vs. 0.52). World Bank (2020b).

¹² National Adaptation Plan for Indonesia (2019). Ministry of National Development Planning/ National Development Planning Agency (Bappenas)

¹³ Le Bars, D., Drijhout, S., de Vries, H. (2017). A high-end sea level rise probabilistic projection including rapid Antarctic ice sheet mass

¹⁴ Disaster Risk Index by Districts in Indonesia (2021)

¹⁵ Haryanto, Budi & Lestari, Fatma & Nurlambang, Triarko. (2020). Extreme Events, Disasters, and Health Impacts in Indonesia. 10.1007/978-3-030-23773-8_16.

¹⁶ Haryanto, Budi & Lestari, Fatma & Nurlambang, Triarko. (2020). Extreme Events, Disasters, and Health Impacts in Indonesia. 10.1007/978-3-030-23773-8_16.

vulnerable to sea-level rise. Without adaptation, the total population will likely be exposed to permanent flooding by the year 2070–2100 could reach over 4.2 million people¹⁷.

8. Climate change risks, associated natural disasters, and impacts on food security are not only a driver of undernutrition in Indonesia, but are also a constitute a ‘threat multiplier’ for hungry and undernourished people, especially young children, lowering decreasing human resilience and adaptability to climate change.¹⁸ The effects of climate change could affect the stability of food supplies and prices creating a gradual decline in consumption of calories and micronutrients of low-income households.¹⁹ A modelling study showed that a 100% increase in food prices would result in at least a 25% increase in the number of Indonesians living in extreme poverty.²⁰ It is estimated that without substantial investment in climate change adaptation, 2.33 million children will be malnourished in Indonesia by 2045.²¹ A study conducted on data from the Indonesian Family Life Survey between 1993 and 2015 showed that delays in the monsoon onset are associated with stunting among children aged 2-4 years.²² The study shows that a 48-day delay in monsoon onset would translate into a 0.114-point decline in height-for-age. This will particularly affect the provinces of Bali and Java where estimates project an increase in the probability of 30-day delay in the wet season from 9%–18% today to 30%–40% by mid-century.^{23,24} Climate change-induced events thus have the most detrimental impacts on adolescent girls, pregnant and lactating women, and young children. Even transient food insecurity, when experienced in these life stages, can have lifelong impacts. Urgent climate-sensitive nutrition interventions are therefore needed, particularly at the primary care level close to households, for early intervention to ensure resilient nutrition practices in the face of the significant challenges climate change poses in Indonesia. In addition, climate change is also predicted to disrupt distribution patterns of communicable and vector-borne diseases such as rotavirus diarrhea²⁵ and malaria²⁶, which are both climate-sensitive.

¹⁷ Le Bars, D., Drijhout, S., de Vries, H. (2017). A high-end sea level rise probabilistic projection including rapid Antarctic ice sheet mass

¹⁸ How climate change increases hunger—And why we’re all at risk. (s. d.). Concern Worldwide. Consulté 3 février 2023, à l’adresse <https://www.concernusa.org/story/climate-change-and-hunger/>

¹⁹ Fanzo, J., Davis, C., McLaren, R., & Choufani, J. (2018). The effect of climate change across food systems : Implications for nutrition outcomes. *Global Food Security*, 18, 12-19. <https://doi.org/10.1016/j.gfs.2018.06.001>

²⁰ Ivanic, M. and Martin, W. (2014). Short- and Long-Run Impacts of Food Price Changes on Poverty. The World Bank Group. URL: <http://documents.worldbank.org/curated/en/106581468325435880/pdf/WPS7011.pdf> [accessed 14/01/2019].

²¹ Asian Development Bank. (2019). Policies to Support Investment Requirements of Indonesia’s Food and Agriculture Development during 2020-2045. Asian Development Bank. Table 3.10b: Projected Impact of Baseline R&D Investment Scenarios on Food Security in Indonesia under No CC and Climate Change Scenarios, 2030 and 2045. <https://doi.org/10.22617/TCS190447-2>

²² Thiede, B. C., & Gray, C. (2020). Climate exposures and child undernutrition: Evidence from Indonesia. *Social Science & Medicine*, 265, 113298. <https://doi.org/10.1016/j.socscimed.2020.113298>

²³ Naylor, R., Battisti, D., Vimont, D., Falcon, W., Burke, M. (2007). Assessing Risks of Climate Variability and Climate Change for Indonesian Rice Agriculture. *Proceedings of the National Academy of Sciences of the United States of America*. 104. 7752–7. [10.1073/pnas.0701825104](https://doi.org/10.1073/pnas.0701825104).

²⁴ ADB (2019). Policies to Support Investment Requirements of Indonesia’s Food and Agriculture Development during 2020-2045.

²⁵ Prasetyo, D., Ermaya, Y., Martiza, I., & Yati, S. (2015). Correlation between climate variations and rotavirus diarrhea in under-five children in Bandung. *Asian Pacific Journal of Tropical Disease*, 5(11), 908-911. [https://doi.org/10.1016/S2222-1808\(15\)60955-0](https://doi.org/10.1016/S2222-1808(15)60955-0)

²⁶ Rahmani AA, Susanna D and Febrian T. The relationship between climate change and malaria in South-East Asia: A systematic review of the evidence [version 1; peer review: awaiting peer review]. *F1000Research* 2022, 11:1555

Nutrition landscape analysis in Indonesia

9. Good nutrition is the bedrock of building human capital as it contributes to child survival, health and development. Well-nourished children are better able to grow and learn, to participate in and contribute to their communities and to be resilient.

10. Child undernutrition is a lingering issue in Indonesia with persistently high rates of stunting, underweight and wasting affecting children under the age of five. Stunting reflects chronic undernutrition, which can have severe long-term consequences including stunted growth, diminished cognitive and mental ability, susceptibility to disease, low economic productivity, and poor reproductive outcomes. Wasting results from acute deprivation of nutrition and frequent illness, and significantly increases the risk of child mortality. Both conditions stem from inadequate and improper nutrition during all stages of a child's life and can have significant implications for children's long-term health and survival, and thus for the country's economic productivity and ability to achieve national and international development goals.²⁷

11. The 2022 estimated prevalence of stunting in Indonesia is 21.6 percent among children under the age of five with significant regional and socioeconomic disparities.²⁸ The prevalence of stunting among children under five years of age varies significantly across different regions of Indonesia. According to the Basic Health Research survey published by the Ministry of Health, the highest prevalence of stunting was found in Papua (45.4%), followed by Nusa Tenggara Timur (40.4%), and Maluku (38.9%). In contrast, Jakarta had the lowest prevalence of stunting at 19.8%.²⁹ These disparities can be attributed to differences in access to healthcare, sanitation, and nutrition education across regions. Stunting rates also vary significantly between urban and rural areas in Indonesia. According to the same report, the prevalence of stunting among children under five years of age was higher in rural areas (31.5%) compared to urban areas (23.9%). This disparity can be attributed to differences in access to healthcare, sanitation, and nutrition education, as well as variations in poverty rates between urban and rural areas.³⁰ Stunting rates are also closely linked to socioeconomic status in Indonesia. Children from poorer households are more likely to be stunted than those from higher income households. The prevalence of stunting among children under five years of age from the lowest income quintile was 35.3%, compared to 20.3% among those from the highest income quintile.³¹

²⁷ UNICEF. 2020. The state of children in Indonesia.

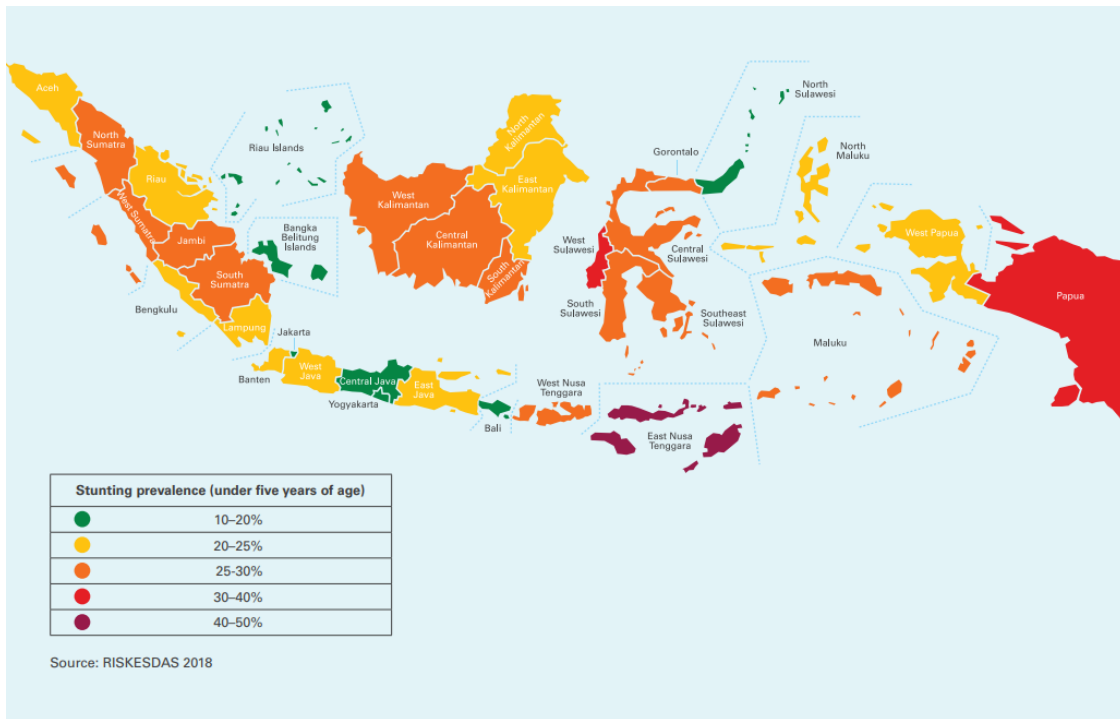
²⁸ Government of Indonesia. 2022.

²⁹ Ministry of Health. (2020). Basic Health Research survey 2018. Jakarta: Ministry of Health.

³⁰ Ministry of Health. (2020). Basic Health Research survey 2018. Jakarta: Ministry of Health.

³¹ World Bank. (2015). Indonesia - Nutrition at a Glance.

Figure 1: Map of disparities in stunting across provinces in Indonesia



Source: RISKEDAS, 2018

12. Indonesia further lags compared to peer countries with relatively elevated stunting rates according to the latest internationally comparable data.³² World Development Indicators (WDI) data shows that Indonesia’s stunting rates are higher than the average for East Asian and the Pacific and higher than peer comparable countries such as the Philippines, Malaysia, and Thailand. It remains the case when accounting for GDP per capita as well.

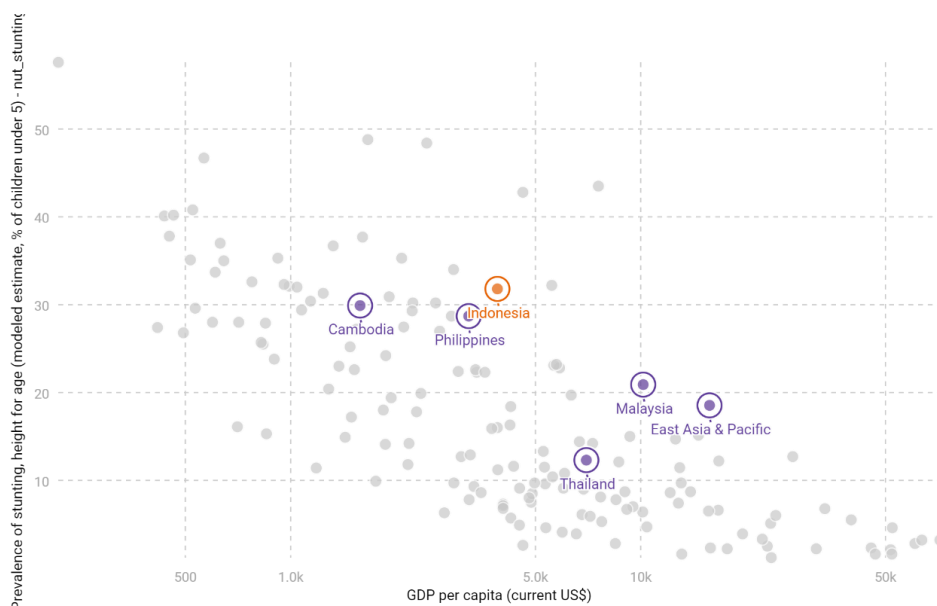
Figure 2: Prevalence of stunting, Indonesia vs. comparator countries, WDI 2020



Source: WDI, 2020

³² Data sourcing form the World Bank Development Indicators with standardized modelling measurements across countries. World Bank. 2020. World Development Indicators – Stunting prevalence (in %).

Figure 3: Prevalence of stunting and log GDP per capita, Indonesia vs. comparator countries, WDI 2020



Source: WDI, 2020

13. The causes of stunting are complex and multifactorial, with poor nutrition being a key contributor. This nutrition landscape analysis aims to provide a comprehensive overview of the current nutrition situation in Indonesia, with a particular focus on the determinants of stunting.

14. Determinants of elevated stunting rates in Indonesia are caused by a complex interplay of factors, including inadequate access to food and nutrition, poor maternal and child health practices, poor hygiene and sanitation, limited access to safe drinking water, and poverty. More specifically, determinants of child undernutrition include:

- **Food security:** Food security is a major issue in Indonesia, with many families struggling to access enough nutritious food. According to the Food and Agriculture Organization (FAO), around 22 million people in Indonesia are undernourished. The high prevalence of poverty in the country is a key driver of food insecurity, particularly in rural areas where many households rely on subsistence agriculture for their livelihoods. Inadequate access to safe water and sanitation facilities also exacerbates the problem of malnutrition, particularly among young children.³³
- **Dietary Diversity:** Dietary diversity is a critical factor in ensuring adequate nutrition and preventing stunting. However, in Indonesia, many families have limited access to a wide range of nutrient-rich foods. A study conducted by UNICEF found that only 39% of children under the age of five in Indonesia were consuming a minimum acceptable diet.³⁴ This suggests that many children are not receiving the variety of foods they need to support their growth and

³³ FAO. (2021). Food Security Indicators: Indonesia.

³⁴ UNICEF. (2021). Indonesia. Retrieved from <https://www.unicef.org/indonesia/nutrition>

development. The problem is particularly acute among poor families, who may rely on a limited range of staple foods.³⁵

- **Micronutrient Deficiencies:** Micronutrient deficiencies are a significant contributor to stunting in Indonesia. Iron-deficiency anemia, for example, affects around 45% of children under the age of five.³⁶ This can have a serious impact on a child's cognitive development, as well as their physical growth. Other micronutrient deficiencies, such as vitamin A and zinc, are also common in the country, particularly among poor families. Lack of access to fortified foods and supplements is a key factor contributing to micronutrient deficiencies in Indonesia.³⁷
- **Breastfeeding practices:** Breastfeeding is an important determinant of child nutrition and can help prevent stunting. However, in Indonesia, only around 35% of infants are exclusively breastfed for the first six months of life.³⁸ A range of factors contribute to this low rate of exclusive breastfeeding, including lack of knowledge about the benefits of breastfeeding, limited access to lactation support, and cultural barriers.³⁹
- **WASH:** Water, sanitation, and hygiene (WASH) are critical determinants of child nutrition and health. In Indonesia, many households lack access to safe water and sanitation facilities, particularly in rural areas. This can lead to the spread of waterborne illnesses and contribute to malnutrition and stunting. Poor hygiene practices, such as inadequate handwashing, can also increase the risk of illness and undermine child health.⁴⁰

Sectoral and Institutional Context

15. Throughout the 2000s, stunting (low height-for-age among children under age five) remained an invisible human capital crisis across Indonesia. The 2013 National Health Survey (*Riset Kesehatan Dasar* or RISKESDAS) showed that 37.2 percent of children (nearly nine million) were stunted. Young children across the country were growing up experiencing multiple deprivations, including poverty, nutritionally inadequate diets, exposure to frequent infection, and inadequate access to quality health services for healthy pregnancy, safe delivery, and decreased incidence and severity childhood illness. The political commitment and demand for action, multisectoral coordination, and implementation capacity needed to create an enabling environment for stunting prevention were absent. As such, children missed out on their golden window of opportunity—the first 1,000 days of life between the beginning of pregnancy and the child's second birthday—to lock in major benefits to their health, cognition, and

³⁵ Rah, J. H., Akhter, N., Semba, R. D., de Pee, S., Bloem, M. W., & Campbell, A. A. (2016). Low dietary diversity is a predictor of child stunting in rural Bangladesh. *European Journal of Clinical Nutrition*, 70(2), 226-231. doi: 10.1038/ejcn.2015.121

³⁶ UNICEF. (2021). Indonesia. Retrieved from <https://www.unicef.org/indonesia/nutrition>

³⁷ Kounnavong, S., Sunahara, T., Hashizume, M., Okumura, J., Moji, K., & Boupha, B. (2011). Anemia and Related Factors in Preschool Children in the Southern Rural Lao People's Democratic Republic. *Journal of Nutrition*, 141(7), 1373-1378. doi: 10.3945/jn.110.136358

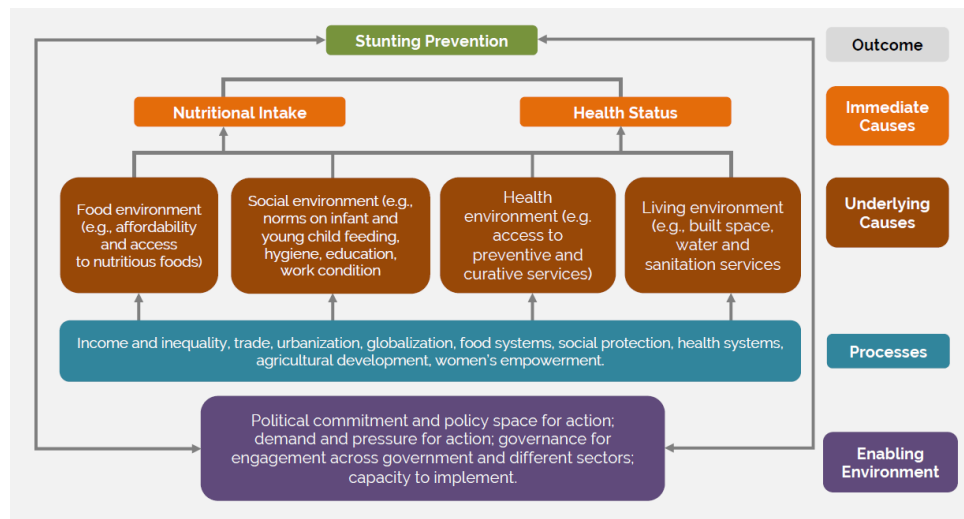
³⁸ UNICEF. (2021). Indonesia. Retrieved from <https://www.unicef.org/indonesia/nutrition>

³⁹ Titaley, C. R., Lumbiganon, P., Dibley, M. J., & Mihrshahi, S. (2017). Exclusive breastfeeding in Indonesia: prevalence, predictors, and beneficial effects. *Journal of Human Lactation*, 33(3), 537-545. doi: 10.1177/0890334417708761

⁴⁰ Spears, D., Ghosh, A., & Cumming, O. (2013). Open Defecation and Childhood Stunting in India: An Ecological Analysis of New Data from 112 Districts. *PLoS ONE*, 8(9), e73784.

lifelong well-being.

Figure 4: Causal Framework for Alleviating the Causes of Stunting



Source: GOI. Stranas Stunting.

16. Indonesia's prevalence of stunting was much higher than expected for a lower-middle income country, a structural bottleneck that weighed on the economy and was incompatible with its development ambitions. Stunting is a predictor of poor human capital outcomes, such as increased risk of impaired physical and cognitive development outcomes among young children, lower educational achievement, decreased earning potential and increased risk of chronic disease. Moreover, the consequences can be passed across generations: women who were stunted in childhood are more likely to have difficult birth, and their children to have poorer birth outcomes. These individual consequences have long-term economic impacts, and a World Bank study estimated that stunting costs the Indonesian economy approximately US\$3.7 billion per year (equivalent to 2.3% of GDP). As a result, improving the conditions which lead to stunting can yield positive impacts on child health and development and adult productivity and wellbeing, contributing to long-term economic growth.

17. With strong evidence, persistent advocacy, and opportune timing, stunting caught the attention of Indonesia's Vice President in 2017. A review of public spending in the same year found that GoI was already investing billions in programs which could contribute to stunting reduction: at US\$8.4 per capita, domestic investments well-exceeded the resources required to deliver a package of nutrition interventions costed at around US\$7 per capita. However, these analytics and application of global good practice revealed four structural implementation challenges driving the disconnect between sufficient investment with insufficient progress:

- (a) Limited advocacy, and awareness on stunting and its prevention efforts;
- (b) Inefficient budgeting and resource allocation;
- (c) Inadequate coordination of planning, budgeting, implementation, monitoring, and evaluation across levels of government and interventions to address immediate (nutrition-specific) and underlying (nutrition-sensitive) causes of stunting; and
- (d) Limited capacity and quality of program implementation.

18. Drawing on World Bank technical advice, GoI embarked on the implementation of the National

Strategy to Accelerate Stunting Prevention (*Stranas Stunting*) in 2018. The *Stranas Stunting* outlined a multi-sectoral approach across 23 ministries/agencies. The aim was to increase the impact of almost US\$4 billion of government spending each year on a package of nutrition-specific interventions—which address the immediate causes of undernutrition—and nutrition sensitive interventions—which address the underlying causes as well as shifts in the enabling environment based around five pillars of action (Table 2). In designing the *Stranas Stunting*, Indonesia drew in elements from the experience of Peru, Brazil, and Bangladesh, such as: (a) securing high level political commitment along with broad social participation; (b) leveraging results based financing mechanisms to drive progress; (c) targeting areas of greatest need and low-income populations; (d) addressing both supply and demand issues in the delivery of nutrition-specific and -sensitive services; and (e) introducing a convergence approach to coordinate and geographically target interventions across sectors to the same districts, villages, and households.

Table 2: Overview of the Pillars of the National Strategy for Acceleration of Stunting Reduction

Pillar	Scope and Rationale
<p>Pillar 1: Improving leadership commitments and visions in ministries/agencies, provincial governments, district/city governments, and village governments;</p>	<p>Under this pillar, the President and Vice President will hold limited cabinet meetings; convene national Stunting Summits and encourage subnational leaders to hold local stunting summits to build top-to-bottom leadership; and hold ministers, governors, district heads, and mayors to account for meeting service delivery and stunting reduction targets. The annual Stunting Summits will also recognize districts that successfully reduce stunting, share and promote innovation, and showcase best practices.</p>
<p>Pillar 2: Improving behavior change communication and community empowerment;</p>	<p>The President and Vice President will lead a sustained public awareness campaign targeting policymakers, regional governments, community leaders, parents, Prospective brides and grooms, and the general public. The campaign will use a variety of outreach strategies, from mass media to home visits, and will also scale up and strengthen BCC programming.</p>
<p>Pillar 3: Improving the convergence of specific and sensitive interventions in ministries/agencies, provincial governments, district/city regional governments and village governments.</p>	<p>Indonesia has a highly decentralized system of government under which most service delivery is the responsibility of sub-national governments. Most nutrition-specific and nutrition-sensitive interventions are the responsibility of local governments. National government has the authority to set priorities which local governments should follow, and programs which they should implement, but there are limited mechanisms to enforce compliance with national priorities. The role of districts is even more important since the introduction of the Village Law in 2014. Substantial resources are now channeled from the central government and to the district and on to the village, but the quality of village expenditure is highly dependent on the quality of support and supervision which districts provide to villages. This is particularly important for nutrition interventions, many of which are delivered at district level and below. Village-level institutions are involved in the frontline delivery of key nutrition-specific and nutrition sensitive interventions and have substantial financial revenues (including the village fund, or <i>Dana Desa</i>) for financing these services. The central government has now instructed villages to prioritize resources for human development including for the acceleration of stunting prevention and reduction.</p>
<p>Pillar 4: Improving food and nutrition security at</p>	<p>This pillar focuses on food policy reforms and investments to enable improved access to good-quality and affordable nutritious food. It identifies the following four areas:</p>

individual, family and community levels	food policy reforms, food fortification reforms, food contamination reforms, and food market investment policies.
Pillar 5: Strengthening and developing systems, data, information, research and innovations.	The President and Vice President will use a dashboard to monitor progress and identify, reward, and sanction the performance of line ministries, provinces, districts, and villages in accelerating stunting prevention. strengthening national, district, and village data systems on service delivery, intervention targeting, and stunting. These improvements will also allow for faster and more robust learning and feedback loops and will facilitate course corrections during implementation.

19. *Stranas Stunting* Pillar 3 to enhance convergence is core sectoral planning, budgeting, and monitoring processes to ensure the availability and quality of services to target beneficiaries stunting reduction in Indonesia’s decentralized context. As Indonesia is highly decentralized, convergence requires not only horizontal coordination across sectors, but also vertical coordination across multiple levels of government: i.e., central, 38 provinces, 514 districts, and around 75,000 Villages. The *Stranas Stunting* introduced convergence instruments at all levels to drive progress:

- (a) **Central:** Stunting leadership summit convened political leaders of all levels to commit to stunting reduction and to secure public commitments of district leaders. The central level also committed to multisectoral coordination and debottlenecking, or convening the ministries/agencies and sub-national governments to
- (b) **District:** District heads made public commitments to (a) hold district stunting summits with relevant stakeholders; (b) carry out a geographically targeted situation analysis and implement relevant convergence actions for nutrition interventions; (c) collect and publish data on stunting and intervention delivery, and to utilize data to improve intervention delivery; (d) formulate a communications and behavior change communication (BCC) policy to accelerate stunting reduction; and (e) support village-level nutrition intervention convergence.
- (c) **Village:** Building on the experience of the *Generasi* project for increasing access to basic health and education services in the villages, Indonesia introduced a human development worker (HDW) cadre in each village as part of *Stranas Stunting*. HDWs work across sectors to: (a) carry out social mapping to identify target 1,000 day households; and (b) report on a village convergence scorecard to monitor the implementation of specific and sensitive interventions in priority districts.

20. The Investing in Nutrition and Early Years (INEY) Program⁴¹, a flagship initiative financed by the GoI, World Bank, and the Global Financing Facility for Women, Children and Adolescents (GFF), has supported the implementation of the *Stranas Stunting* since 2018 (Box 1). INEY was designed to complement the existing World Bank portfolio at the time of approval and aimed to The program aims to stabilize the foundations of an effective enabling environment, such as: (i) address the multisectoral management and system challenges that undermine convergence at each level of intervention delivery

⁴¹Indonesia - Investing in Nutrition and Early Years Project (English). Washington, D.C. : World Bank Group (PAD2796). <http://documents.worldbank.org/curated/en/303221529811053670/Indonesia-Investing-in-Nutrition-and-Early-Years-Project>

(central, district, and village); (ii) plug critical gaps in the Government’s mix of sector programming; and (iii) strengthen citizen engagement in the frontline delivery and oversight of nutrition interventions.

Box 1. Overview of the Investing in Nutrition and Early Years Program

The World Bank’s flagship instrument to support Indonesia in reducing stunting is the Investing in Nutrition and Early Years (INEY) PforR (P164686). INEY is a hybrid US\$400 million PforR loan + US\$24 million investment project financing (IPF) component financed through GFF grants. The development objective is to increase simultaneous utilization of priority nutrition-specific and nutrition-sensitive interventions by 1,000-day households in priority districts. INEY acts as the platform for a multi-sectoral, cross-government, community-based approach to tackle stunting, as well as to improve the quality of government spending by incentivizing ten ministries to implement *StraNas Stunting*. It aims to incentivize ten implementing agencies, hundreds of local governments, and tens of thousands of villages to collaborate to converge a multi-sectoral package of priority nutrition-specific and -sensitive interventions on priority households at the village level.

INEY fosters leadership, coordination/convergence, and community-based interventions for grassroots integrated solutions. The DLIs support achievement of results not only by sectoral line ministries, but by engaging leaders at the national, district, and village levels to plan for, implement, and monitor a package of multisectoral, evidence-based interventions targeting the same geographies and households (the convergence approach). It empowers families to use services and change behaviors and mobilizes Human Development Workers (HDWs) in all villages to coordinate and monitor the use of services across sectors, using digital technology (eHDW application) to enable real-time monitoring of nutrition interventions.

Table B1.1 Design of the Investing in Nutrition and Early Years PforR

Results Area	Disbursement-linked Indicators (DLI)	Lead agency(ies)
1. Strengthening national leadership	DLI 1: Public commitment of priority district leaders to accelerate stunting prevention	SoVP
	DLI 2: Tracking and performance evaluation of national spending on priority nutrition interventions	MoF & Bappenas
	DLI 3: Timely publication of annual national and district stunting rates	BPS
2. Strengthening delivery of national sector programs	DLI 4: Priority districts delivery of nutrition-sensitive professional development program for ECED teachers	MoECRT & MoV
	DLI 5: Nutrition-sensitivity of the food assistance program (BPNT)	MoSA
	DLI 6: Priority districts implementation of locally adapted IPC activities	MoH
3. Strengthening convergence of district activities	DLI 7: Predictability and results orientation of fiscal transfers that support convergence	Bappenas, MoF & MoHA
	DLI 8: Performance of districts in targeting priority nutrition interventions to 1,000-day households	SoVP & BPS
4. Converging village service delivery	DLI 9: Villages empowered to identify 1,000-day households and converge intervention delivery	MoV & MoF
	DLI 10: Village convergence of nutrition interventions on 1,000-day households	SoVP & MoF

21. Less than two years into the program’s implementation, Indonesia experienced major COVID-19 related disruptions; these are only recently alleviated. Although national level budget allocations to nutrition were protected, the COVID-19 pandemic adversely affected subnational attention to the delivery and convergence of essential health and nutrition interventions; service utilization plummeted during repeated lockdowns, threatening to reverse past gains. Financial and human resources for nutrition convergence were diverted to pandemic response, and frontline services experienced prolonged periods of disruption. At the peak of essential health and nutrition services disruptions, the number of third dose Diphtheria, Tetanus toxoid and Pertussis (DTP3) immunizations in May 2020 were 60% lower than in May 2019. Despite some recovery, in 2021 Indonesia’s DTP3 coverage rate was 80 percent - a decline from 83 percent in 2020. Moreover, drop-outs between the first and third dose of DTP-containing vaccines increased almost six-fold between 2019 and 2021. As of January 2021, there were approximately 300,000 toddlers that had not been vaccinated at all which makes them vulnerable to vaccine-preventable diseases and to preventable mortality and morbidity. Furthermore, National Population and Family Planning Board (*Badan Kependudukan dan Keluarga Berencana Nasional* or BKKBN) predicted that Indonesia will experience a baby boom due to unplanned pregnancies; it is estimated that 300,000 - 500,000 unplanned pregnancies have occurred in 2020 alone, due to reduced access to family planning facilities such as *Puskesmas*⁴² and independent midwives.

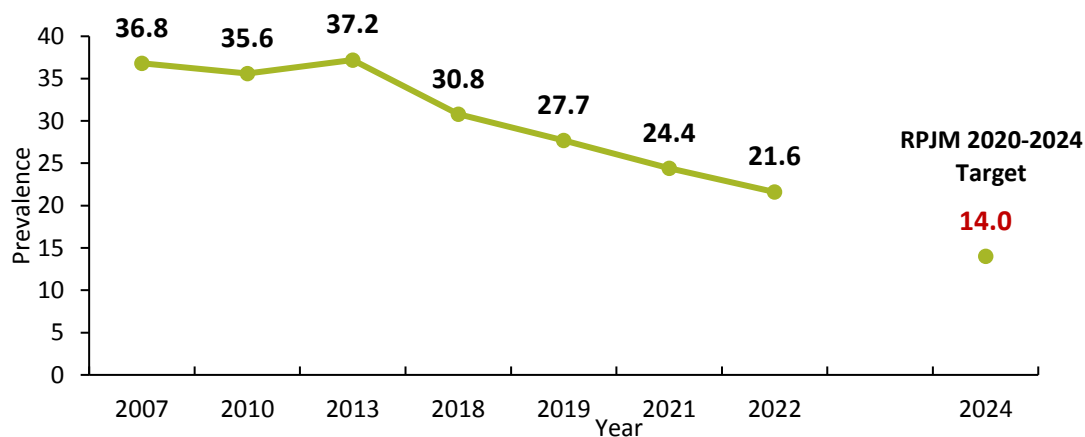
22. In 2021, the Gol adopted the Presidential Regulation Number 72 of 2021 (Peraturan Presiden, or Perpres 72) and solidified the general approach of Stranas Stunting and elevated its legal status. The *Perpres 72* enacted into law Indonesia’s whole-of-government approach to improve nutritional outcomes, reduce stunting, and accelerate human capital development. Furthermore, it revised and formalized Gol’s own implementation arrangements for the program (details Figure 6). The issuance of *Perpres 72* reinvigorated the engagement of high-level leadership on the agenda. The President of Indonesia, for example, led a high-level meeting on stunting reduction in January 2022, and the program maintains continued support and endorsement from the Vice President and other senior leaders.

23. Over the first four years of implementation, Gol sustained unprecedented progress implementing its national stunting program, with demonstrated resilience to the headwinds of the COVID-19 pandemic, political transition, and changing implementation arrangements. With the support of INEY, Gol rolled out the *Stranas Stunting* in 100 priority districts in 2018, expanded to an additional 60 districts in 2019, and added an additional 100 districts each year in 2020 and 2021, bringing the total to 360 districts in 2021 and achieved nationwide coverage of all 514 districts in 2022 (ahead of schedule).

24. These strategic investments contributed to unprecedented gains and have successfully bent the curve on stunting reduction: between 2013 and 2018, the National Health Survey (*Riset Kesehatan Dasar* or RISKESDAS) showed a decline in stunting among children under age five from 37.2 to 30.8 percent (or about 1.3 percentage points each year). The year of commencement of *Stranas Stunting* and INEY in 2018 also stands out as an inflexion point in Indonesia’s stunting trajectory (Figure 3). Between 2018 and 2022, the stunting prevalence fell from 30.8 to 21.6 percent, nearly doubling the average annual rate of stunting reduction. The country has, effectively, accelerated its reduction in childhood stunting.

⁴² *Pusat Kesehatan Masyarakat*, or primary health center at sub-district level

Figure 5: Prevalence of child (under age 5) stunting prevalence (height-for-age z-score <-2), Indonesia



25. With systematic improvements in key structural constraints systematically addressed, the GoI will need to begin to attend to second generation challenges to sustain progress and reach the target of 14 percent stunting by 2024 (Figure 3). The first years intentionally focused on firming up the program’s foundational elements: multisectoral governance, management, and coordination. Having established these, the next phase warrants attention on remedying the challenges with the capacity and quality of interventions. It is clear that the efforts that have yielded improvements to date will need to be enhanced and modified to sustain improvements in the future.

Figure 2. Achievements and Second-Generation Challenges Relative to Indonesia’s Binding Constraints to Stunting Reduction

BINDING CONSTRAINT	INEY 1 RESULTS	SECOND GENERATION REFORMS
Limited advocacy, and awareness on stunting and its prevention efforts.	<ul style="list-style-type: none"> Annual stunting summit convened 2018-22. All of Indonesia’s 514 district heads (Bupatis/Walikota) commit to accelerate stunting reduction. Annual national and district stunting prevalence. 	<ul style="list-style-type: none"> Enhance accountability of provinces, districts, and villages. Strengthen Stunting Acceleration Team at all levels of government.
Inefficient budgeting and resource allocation	<ul style="list-style-type: none"> Implementation of budget tagging, tracking, and performance evaluation for national level. National and sub-national budget allocations to stunting reduction protected during COVID-19. 	<ul style="list-style-type: none"> Synergize budget tagging and tracking with performance outcomes Tag and tracking of sub-national expenditures Implement performance-based financing with robust verification mechanism Strengthen the M&E system to better link spending with performance Update expenditure guidelines at all levels to align with high impact interventions.
Inadequate coordination of planning, budgeting, implementation, monitoring, and evaluation across levels of government and interventions to address immediate (nutrition-specific) and underlying (nutrition-sensitive) causes of stunting	<ul style="list-style-type: none"> 514 districts implement 8 convergence actions to carry out multisectoral planning, budgeting, implementation, and monitoring. Annual district performance evaluation carried out and performance improved. 75,000 Human Development Workers mobilized at village level to monitor convergence and report through eHDW. At least 50% of villages 150+ districts diagnose and converge key nutrition interventions by leveraging the village fund. 	<ul style="list-style-type: none"> Enhance village level coordination across family companion team, posyandu kader, HDW. Revise district convergence guidelines and village convergence scorecard to align with evidence. Monitor the quality of implementation of district and village convergence actions. Adopt adaptation plan linking climate change and nutrition.
Limited capacity and quality of program implementation.	<ul style="list-style-type: none"> Nutrition-sensitive training of trainers for PAUD. 12 million families across 360 districts receive food basket of improved nutritional value through a non-cash social assistance transfers. 150 districts formulate local BCC regulations. 74 districts implement village level interpersonal communication. 	<ul style="list-style-type: none"> Improve service readiness and quality for nutrition specific services. Increase the delivery, quality, and coverage of high impact nutrition interventions in puskesmas, posyandu prima, and posyandu. Build skills of all frontline village kaders to implement priority stunting reduction interventions. Provide minimum incentives to kaders to deliver village-level services. Scale up holistic, integrated PAUD services to address comprehensive child development.

26. This will include addressing emerging agendas identified in the INEY mid-term review (MTR):
- (a) **High impact essential health, nutrition, and immunization**
 - (b) **Adolescent health and nutrition**
 - (c) **Zero-dose immunization**
 - (d) **Strengthening the overall monitoring and evaluation (M&E) system**

27. **Gradual and variable progress has been made across other forms of malnutrition, and Indonesia now experiences the double burden of malnutrition: high levels of maternal and child undernutrition co-exist with increasing rates of child, adolescent, and adult overweight and obesity.** According to the most recent Indonesia Survey for Nutrition Status (*Survei Status Gizi Indonesia*, or SSGI) in 2022, among children under the age of five, 17.1 percent are underweight, 7.7 percent are wasted, 3.5 percent are overweight. The National Health Survey 2018 indicates that 6.2 percent of children are born with low birthweight and 38.5 percent of children under age five are anemic. Anemia in females is also high: 48.9 percent of pregnant women and 32 percent of adolescent women are anemic. When experienced during pregnancy, anemia can contribute to maternal mortality and low birthweight/small-for-gestational age births. At the same time, nearly 20 percent of primary school-aged children, about 15 percent of adolescents are overweight or obese. The co-existence of these conditions signals the need to focus on nutrient intake and dietary quality as a driver of all forms of malnutrition.

28. **Moreover, national progress masks great inequities across the country's diverse regions.** The 2021 SSGI identified five provinces with the greatest number of stunted children: West Java, East Java, Central Java, North Sumatra, and Banten. Together these provinces account for 51.5 percent of stunted children nationally. Additionally, seven provinces have the highest prevalence of stunting: East Nusa Tenggara (NTT), West Sulawesi, Aceh, West Nusa Tenggara (NTB), Southeast Sulawesi, South Kalimantan, and West Kalimantan.

29. **Coverage of the high impact, evidence-based nutrition specific services delivered through the health sector is a key priority for the second generation of stunting reduction interventions.** These services and their related indicators have not improved as markedly over the past four years, and are necessary to sustainably address the immediate and underlying drivers of stunting (Table below), while also addressing lagging human capital outcomes such as maternal and child mortality. Comprehensive, high quality antenatal care (ANC) is necessary to address maternal diet during pregnancy and minimize the risk of low birth weight/small for gestational age deliveries, representing the in-utero origins of growth faltering. However, only one in four women are receiving six visits according to new Ministry of Health (MOH) guideline. Iron-folic acid (IFA) supplementation is delivered during ANC to reduce iron-deficiency anemia and minimize the risk of poor birth outcomes for women and children, yet only 39.5 percent of pregnant women who receive at least 90 IFA tablets consume this minimum amount. Infant and young child feeding practices, including breastfeeding according to recommendations and the consumption of a nutritionally adequate diet is necessary to ensure sufficient nutrient intake. The adequacy of feeding is highest among children breastfed within one hour (58.3 percent) and for children below six months of age (52.2 percent) because of the extent of exclusive breastfeeding. However, as children begin to transition to complementary foods, feeding adequacy reduces to 41.7 percent between the ages of 0 and 11 months and 40.3 percent of children between the ages of 6-23 months fed a minimally acceptable diet. Increasing the coverage of exclusive and continued breastfeeding is a double duty action and will impact not only undernutrition, but also decrease the risk of overweight/obesity. Immunization is one of the most effective interventions to limit the incidence and severity of childhood illness, yet less than 60 percent of children receive the full package of basic immunization. Indonesia has, however, done remarkably well on achieving near universal coverage of the availability of improved water and sanitation.

Table 3: Coverage of Nutrition Specific and Sensitive Interventions, Indonesia, Most Recent Available

Nutrition specific and Sensitive Intervention	Coverage (%)	Data Source
Maternal, child, and adolescent health indicators		
Antenatal Care (at least six visits)	26.1	SSGI 2022
Antenatal care (at least four visits)	70.0	SSGI 2022
IFAS consumption in pregnant women (at least 90 tablets)	39.5	SSGI 2022
Low Birth Weight (under 6 months)	6.2	SSGI 2022
Low Birth Length (< 48cm, under 6 months)	16.4	SSGI 2022
Wasting (children under five)	7.7	SSGI 2022
Underweight (children under five)	17.1	SSGI 2022
Stunting (children under five)	21.6	SSGI 2022
Overweight (children under five)	3.5	SSGI 2022
Children receiving vitamin A (6-11 months)	62.1	SSGI 2022
Complete immunization (12-23 months)*	57.9	RISKESDAS 2018
Nutrition, hygiene, and stimulation counselling		
Breastfeeding initiation within 1 hour after birth (under 6 months)	58.3	SSGI 2022
Exclusive breastfeeding (under 6 months)	52.2	SSGI 2022
Children aged 6-11 months received complementary food	47.7	SSGI 2022
Children aged 6-23 months fed a minimum acceptable diet	40.3	IDHS 2017
Water and sanitation		
Access to improved drinking water	91.05	BPS 2022
Access to improved sanitation	80.92	BPS 2022
Open Defecation Free (ODF)	5.69	BPS 2021

Note: IFA=Iron-folic acid. *Full immunization includes a total of ten injections: Hepatitis B, Bacillus Calmette–Guérin (BCG), Diphtheria, Pertussis, and Tetanus - Haemophilus influenzae type B vaccine – Hepatitis B (DPT-Hib-HepB) 1-3, Oral Poliovirus Vaccine (OPV) 1-4, and Measles and Rubella (MR). Rotavirus vaccine has been introduced in 21 districts in 2022 but is not yet part of the nationwide program.

30. Similarly, a backsliding immunization coverage—exacerbated by the COVID-19 pandemic—poses a threat to continued downward trends in reduction of child mortality and stunting reduction. Indonesia’s stunting decomposition analysis demonstrates the importance of full immunization to better nutrition outcomes, and children with incomplete immunizations are more at risk of stunting and wasting. Despite significant improvements in immunization coverage in the last two decades, Indonesia is still among the top ten countries with the greatest number of unimmunized children in the world⁴³. This has resulted in a drastic increase in zero dose children⁴⁴ – where in 2021 the reported combined zero dose and under immunized children was at 1,525,936 children, increasing 65% from the previous year⁴⁵. These zero-dose children are concentrated in 10 priority provinces across Indonesia (Figure 4). Improving the

⁴³ World Health Organization. 2016. Immunization Coverage.

<http://www.who.int/mediacentre/factsheets/fs378/en/>

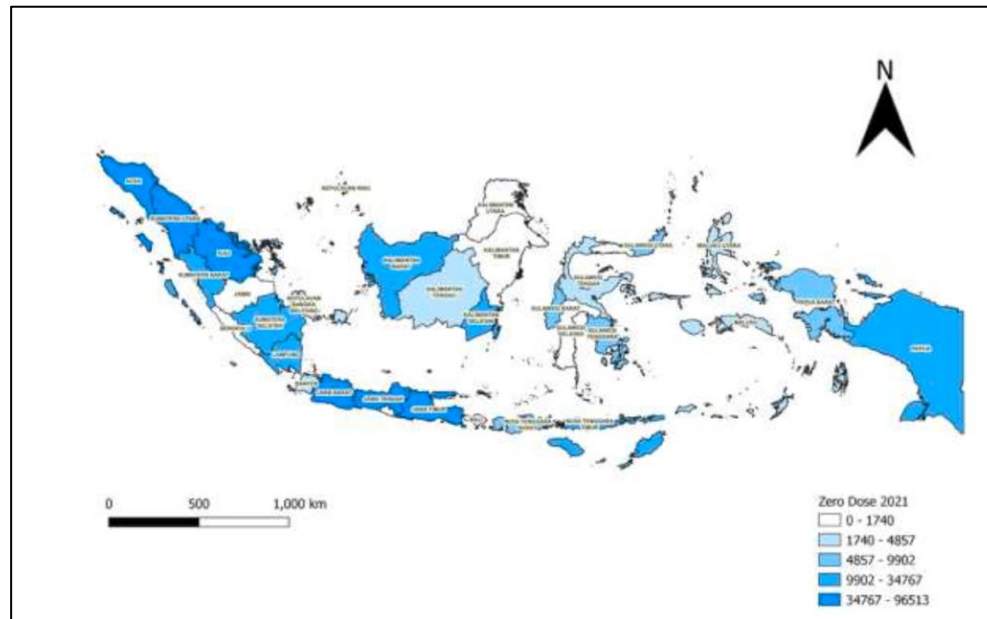
⁴⁴ **Zero-dose children** are those that have not received any routine vaccine. For operational purposes, Gavi defines zero-dose children as those who lack the first dose of diphtheria-tetanus-pertussis containing vaccine (DTP1).

<https://www.gavi.org/our-alliance/strategy/phase-5-2021-2025/equity-goal/zero-dose-children-missed-communities>

⁴⁵ MOH-MIC GAVI Proposal. 2021.

coverage of primary health care (PHC) services the district and village level, and ensuring the integration of immunization and nutrition services at health system contacts, is critical to improving child health, nutrition, and wellbeing in the first 1000 days of life.

Figure 6: Distribution of Zero-Dose Immunization Children in Indonesia, by Province, 2022



Source: MOH.

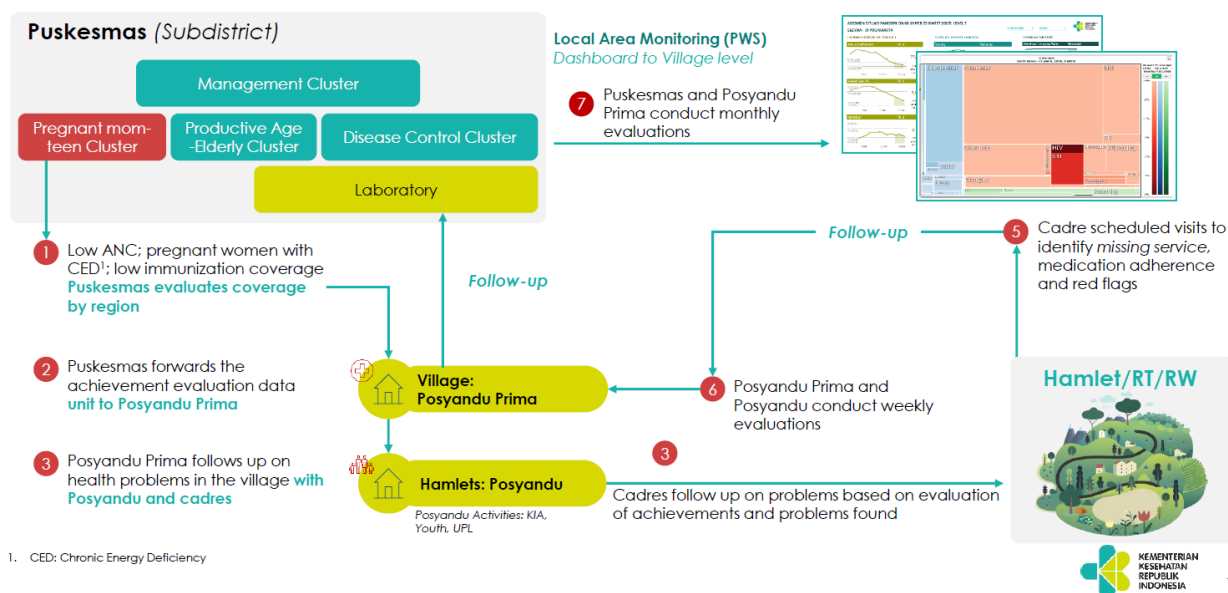
31. The MoH's flagship Health Transformation Agenda, initiated in late 2021, opens a window of opportunity to tackle the unfinished agenda for the delivery of nutrition specific services for stunting reduction through high quality primary health care (PHC). The health transformation objective is to strengthen the health system's capacity to deliver high-quality, affordable and accessible PHC services to all Indonesians, particularly those in remote and disadvantaged areas. The country's PHC network includes *Puskemas* and *Posyandu* in each district and village. The public primary care system also includes *Pustus* - auxiliary health centers for outreach activities in remote regions. Frontline service delivery in the villages, including provision of nutrition-specific interventions and immunization is also undertaken through *Posyandu*, delivered by village midwives and village cadres (*Posyandu kader*) who are not part of the formal health system and work on a voluntary basis⁴⁶.

32. MoH seeks to redesign PCH services to remedy key gaps in the system which were laid bare throughout the COVID-19 pandemic. These include (i) lack of standardization and integration of health services across the primary care facilities; (ii) unavailability of critical infrastructure, medical equipment

⁴⁶ *Puskemas* are sub-district level community health centers that provide primary care and population health management and cover a population of about 25,000-30,000, with almost a third having inpatient beds. *Posyandu*, or integrated village-level posts, are supported by a health worker and run by (volunteer) community health workers, or *kader*, that deliver essential health services, particularly related to child and maternal health. *Posyandu* is delivered a monthly event manned by at least five types of community health workers that cater to the five essential services: registration, weighing and monitoring children's growth, recording of child growth in health cards, counselling and education; immunization and ANC as part of outreach services of primary health care centers (*puskesmas*).

and consumables; (iii) inadequate numbers and qualifications of human resources at the *Puskesmas* and *Posyandu*, including village midwives and *Posyandu kaders*, capable of providing a broader set of essential health services in each of Indonesia's 85,000 villages with higher frequency than typically associated with *Posyandus*; and (iv) limited health surveillance capacity at *Puskesmas*-level of national health laboratory system (*Labkesmas*). MoH introduced the Integrated Primary Care (*Integrasi Layanan Primer* or ILP) concept (Figure 5). By integrating primary care services, patients can access a range of health services that are tailored to their specific needs in the life-cycle (rather than by vertical program), including prevention, diagnosis, treatment, and rehabilitation. ILP involves the coordination of various healthcare providers and stakeholders, including doctors, nurses, midwives, pharmacists, and other health professionals. It also involves the integration of different health programs and services, such as maternal and child health, immunization, family planning, and nutrition.

Figure 7: Illustration of the vision of integrated primary healthcare services



Source: Ministry of Health (2022)

33. One of the key components of the PHC transformation agenda is the development and scaling up of a service delivery model that utilizes the integrated health posts (*Posyandu prima*) as the frontline modality of care for patients across the life cycle. A pilot of the ILP model included: (i) shifting to life-cycle cluster-based services at *Puskesmas*; (ii) introducing a new service delivery unit, the upgraded and daily staffed and functional *Posyandu Prima*, at the village level; (iii) monthly preventive and promotive activities at *Posyandu*; and (iv) newly added home visits by the community health workers (*Posyandu kader*). Implemented across eight districts representing Indonesia's diversity, the pilot demonstrated great promise in increasing service utilization in *Puskesmas*, improving screening for chronic diseases, increasing health promotion contacts at home, among others. With these positive findings, MoH has ambitious targets for scaling up PHC standardization, supported by the ILP, by 2024.

34. The PHC pillar of the Health Transformation retains a thematic focus on stunting reduction and

immunization. The MoH has identified eleven specific nutrition interventions for scale up⁴⁷. Through the delivery of these nutrition interventions at the sub-national level, Indonesia aims to strengthen primary health care and combat childhood stunting. There are also five community-wide campaigns aimed at addressing stunting (Table below). In-school adolescents are being reached through the *Akski Bergizi* program, which delivers weekly IFA supplementation, anaemia screening, balanced diet (breakfast together), nutrition education, and other relevant topics through junior and senior high schools (grades 7-12). The recruitment of approximately 75,000 human development workers has provided frontline support in identifying gaps in services while simultaneously drawing household members to obtain better health and nutrition services at the *Posyandu* and *Puskesmas* level.

Table 4: Five campaigns of community movement for stunting reduction, MoH

	<i>Aksi Bergizi</i>	<i>Bumil Sehat</i>	<i>Posyandu Aktif</i>	<i>Jambore Kader</i>	<i>Cegah Stunting Itu Penting</i>
<i>Target</i>	Teenage students in junior and senior high school	Pregnant Women	Kaders, Toddlers, Mothers, and Toddler Families	Posyandu Kaders	All Population
<i>Activity</i>	<ul style="list-style-type: none"> • Morning exercise and anemia screening • Breakfast together • Consumption of IFA 	<ul style="list-style-type: none"> • Pregnancy test • Consumption of IFA • Pregnancy Class 	<ul style="list-style-type: none"> • Purchase of anthropometric equipment for <i>Posyandu</i> • <i>Kader</i> training • Provision of additional food rich in animal protein 	<ul style="list-style-type: none"> • <i>Kader</i> Jamboree • Skilled <i>kader</i> competition • <i>Posyandu</i> competition 	<ul style="list-style-type: none"> • Content production • Education on various platforms • Talkshows and seminars • Podcasts and movie storylines • Counselling

35. Indonesia’s vulnerability to the impacts of climate change threatens to jeopardize food security and nutrition and roll back the progress made to address stunting in Indonesia. The country is exposed to climate shocks through by both El Niño events - where drier conditions are experienced – and La Niña events – associated with wetter conditions⁴⁸. In the last 25 years, a strong correlation is observed between El Niño occurrence of manmade fire events in Indonesia, which is detrimental to agricultural land⁴⁹. In 2015 and 2016, extreme El Niño and La Niña events have also affected the production performance of major agricultural crops⁵⁰. In addition, while fisheries represent a key component of national food security

⁴⁷ These are: screening for anemia for adolescent, IFA consumption for adolescent, at least six ANC, IFA consumption for pregnant women, complementary food with high animal protein for malnourished pregnant women, exclusive breastfeeding for at least 6 months, complementary foods rich in animal protein for age of 6-23 months, monitoring children under five growth and development through *Posyandu* activities, proper treatment for wasting and undernourished children under five, improving immunization coverage and expansion, and health and nutrition education/promotion.

⁴⁸ Polade, S. D., Pierce, D. W., Cayan, D. R., Gershunov, A., & Dettinger, M. D. (2014). The key role of dry days in changing regional climate and precipitation regimes. *Scientific Reports*, 4(1), 4364. <https://doi.org/10.1038/srep04364>

⁴⁹ Nurdiati, S., Bukhari, F., Julianto, M. T., Sopaheluwakan, A., Aprilia, M., Fajar, I., Septiawan, P., & Najib, M. K. (2022). The impact of El Niño southern oscillation and Indian Ocean Dipole on the burned area in Indonesia. *Terrestrial, Atmospheric and Oceanic Sciences*, 33(1), 16. <https://doi.org/10.1007/s44195-022-00016-0>

⁵⁰ Asian Development Bank. (2019). Policies to Support Investment Requirements of Indonesia’s Food and Agriculture Development during 2020-2045 (0 éd.). Asian Development Bank. <https://doi.org/10.22617/TCS190447-2>

in Indonesia, they are considered to be among the most climate vulnerable in the world⁵¹. Rice, a central element of Indonesian diets, is particularly sensitive to temperature changes, with some estimates suggesting that an increase of 1°C could reduce national production by 10%–25%⁵². Under the most extreme projected scenario, it is projected that approximately 35.1 climate-related deaths per million population could occur because of scarce food availability in Indonesia by 2050⁵³.

36. The broad-based climate change risks, associated natural disasters, and impacts on food security constitute a ‘threat multiplier’ for hungry and undernourished people, especially young children⁵⁴. Climate change puts a strain on food availability and prices, hinder the consumption of calories and micronutrients of low-income households.⁵⁵ A modelling study showed that a 100% increase in food prices would result in at least a 25% increase in the number of Indonesians living in extreme poverty.⁵⁶ It is estimated that without substantial investment in climate change adaptation, 2.33 million children will be malnourished in Indonesia in 2045.⁵⁷ A study conducted on data from the Indonesian Family Life Survey between 1993 and 2015 showed that delays in the monsoon onset are associated with stunting among children aged 2-4 years.⁵⁸ This will particularly affect the provinces of Bali and Java where estimates project an increase in the probability of 30-day delay in the wet season from 9%–18% today to 30%–40% by mid-century.^{59,60}

Climate related risks

37. Indonesia is an archipelagic country, and its geography increases exposure and vulnerability to the impacts of climate change, including sea level rise, flooding, strong winds and drought. The climate disaster risk index is considered “high” in 221 out of the 514 districts of Indonesia (43%)⁶¹. Temperatures are expected to rise by 0.8°C–1.4°C by the 2050s increasing the risk of extreme heat events; although little

⁵¹ Blasiak, R., Spijkers, J., Tokunaga, K., Pittman, J., Yagi, N., & Österblom, H. (2017). Climate change and marine fisheries : Least developed countries top global index of vulnerability. PLOS ONE, 12(6), e0179632.

<https://doi.org/10.1371/journal.pone.0179632>

⁵² USAID (2015). Climate Risk Profile: Indonesia Fact Sheet.

⁵³ Springmann, M., Mason-D’Croz, D., Robinson, S., Garnett, T., Godfray, H. C. J., Gollin, D., Scarborough, P. (2016). Global and regional health effects of future food production under climate change: a modelling study. The Lancet: 387: 1937–1946. URL: <https://www.sciencedirect.com/science/article/pii/S0140673615011563?via%3Dihub>

⁵⁴ How climate change increases hunger—And why we’re all at risk. (s. d.). Concern Worldwide. Consulté 3 février 2023, à l’adresse <https://www.concernusa.org/story/climate-change-and-hunger/>

⁵⁵ Fanzo, J., Davis, C., McLaren, R., & Choufani, J. (2018). The effect of climate change across food systems : Implications for nutrition outcomes. Global Food Security, 18, 12-19. <https://doi.org/10.1016/j.gfs.2018.06.001>

⁵⁶ Ivanic, M. and Martin, W. (2014). Short- and Long-Run Impacts of Food Price Changes on Poverty. The World Bank Group. URL: <http://documents.worldbank.org/curated/en/106581468325435880/pdf/WPS7011.pdf> [accessed 14/01/2019].

⁵⁷ Asian Development Bank. (2019). Policies to Support Investment Requirements of Indonesia’s Food and Agriculture Development during 2020-2045. Asian Development Bank. Table 3.10b: Projected Impact of Baseline R&D Investment Scenarios on Food Security in Indonesia under No CC and Climate Change Scenarios, 2030 and 2045.

<https://doi.org/10.22617/TCS190447-2>

⁵⁸ Thiede, B. C., & Gray, C. (2020). Climate exposures and child undernutrition : Evidence from Indonesia. Social Science & Medicine, 265, 113298. <https://doi.org/10.1016/j.socscimed.2020.113298>

⁵⁹ Naylor, R., Battisti, D., Vimont, D., Falcon, W., Burke, M. (2007). Assessing Risks of Climate Variability and Climate Change for Indonesian Rice Agriculture. Proceedings of the National Academy of Sciences of the United States of America. 104. 7752–7. [10.1073/pnas.0701825104](https://doi.org/10.1073/pnas.0701825104).

⁶⁰ ADB (2019). Policies to Support Investment Requirements of Indonesia’s Food and Agriculture Development during 2020-2045.

⁶¹ Disaster Risk Index by Districts in Indonesia (2021)

is known about how different regions of the country will be specifically impacted⁶². Overall precipitation trends show a slight increase in levels under all emission pathways by the 2080s and 2090s⁶³, with the intensity of extreme rainfall events projected to increase across most Indonesian islands. Southern Indonesia is a notable exception, as extreme precipitation is projected to decline by up to 15 percent. Indonesia is particularly vulnerable to sea-level rise. Without adaptation, the total population likely to be exposed to permanent flooding by the period 2070–2100 could reach over 4.2 million people⁶⁴.

38. In Indonesia, climate change is predicted to negatively impact the agricultural production and food safety. Under current conditions, Indonesia faces annual median probability of severe drought of around 4%⁶⁵. Indonesia has increasingly experienced extreme weather phenomena such as La Niña and El Niño. While El Niño is associated with drier climatic conditions and increased risk of drought events, La Niña is associated with wetter conditions and increased risk of extreme precipitation or flooding. In the last 25 years, a strong correlation is observed between El Niño occurrence and wildfires in Indonesia⁶⁶. A study conducted on five waves of data from the Indonesian Family Life Survey between 1993 and 2015 showed that delays in the monsoon onset are associated with stunting among children aged 2-4 years⁶⁷. The weight of children under 2 was found to be affected by monsoon delays, especially in the Java province. Estimates project an increase in the probability of 30-day delay in the wet season from 9%–18% today to 30%–40% by mid-century for the main rice-producing areas of Java and Bali⁶⁸. Increasing temperatures and CO₂ may reduce the protein and nutrient content of some cereal crops. Rice is particularly sensitive to temperature changes, with some estimates suggesting that an increase of 1°C could reduce national production by 10%–25%⁶⁹. Indonesia also faces a strong risk of increased saltwater intrusion in the next century because of sea level rise. Sea level rise is detrimental to both crop and fish production, which are two pillars of the Indonesian food system. Also, food supplies of subsistence-farming households are disrupted by climate-related effects such as flooding, extreme heat, or pestilence. Under the most extreme projected scenario (RCP 8.5), it is projected that approximately 35.1 climate-related deaths per million population could occur as a result of scarce food availability in Indonesia by 2050⁷⁰.

39. Climate change is a ‘threat multiplier’ for hungry and undernourished people⁷¹. It can exacerbate the undernutrition crisis through three main pathways⁷². First, it affects household food

⁶² The World Bank Group and Asian Development Bank. 2021. Climate Risk Profile: Indonesia.

⁶³ WBG Climate Change Knowledge Portal (CCKP). 2021. Indonesia. Interactive Dashboard.

⁶⁴ Le Bars, D., Drijhout, S., de Vries, H. (2017). A high-end sea level rise probabilistic projection including rapid Antarctic ice sheet mass

⁶⁵ Standardized Precipitation Evaporation Index (SPEI). 2022.

⁶⁶ Nurdyati, S., Bukhari, F., Julianto, M. T., Sopaheluwakan, A., Aprilia, M., Fajar, I., Septiawan, P., & Najib, M. K. (2022). The impact of El Niño southern oscillation and Indian Ocean Dipole on the burned area in Indonesia. *Terrestrial, Atmospheric and Oceanic Sciences*, 33(1), 16. <https://doi.org/10.1007/s44195-022-00016-0>

⁶⁷ Thiede, B. C., & Gray, C. (2020). Climate exposures and child undernutrition : Evidence from Indonesia. *Social Science & Medicine*, 265, 113298. <https://doi.org/10.1016/j.socscimed.2020.113298>

⁶⁸ Naylor, R., Battisti, D., Vimont, D., Falcon, W., Burke, M. (2007). Assessing Risks of Climate Variability and Climate Change for Indonesian Rice Agriculture. *Proceedings of the National Academy of Sciences of the United States of America*. 104. 7752–7. [10.1073/pnas.0701825104](https://doi.org/10.1073/pnas.0701825104).

⁶⁹ USAID. 2015. Climate Risk Profile: Indonesia Fact Sheet.

⁷⁰ Springmann, M., Mason-D’Croz, D., Robinson, S., Garnett, T., Godfray, H. C. J., Gollin, D., . . . Scarborough, P. (2016). Global and regional health effects of future food production under climate change: a modelling study. *The Lancet*: 387: 1937–1946. URL: <https://www.sciencedirect.com/science/article/pii/S0140673615011563?via%3Dihub>

⁷¹ Concern Worldwide. 2023. How climate change increases hunger—And why we’re all at risk. (s. d.).

⁷² Fanzo, J., Davis, C., McLaren, R., & Choufani, J. (2018). The effect of climate change across food systems : Implications for nutrition outcomes. *Global Food Security*, 18, 12-19. <https://doi.org/10.1016/j.gfs.2018.06.001>

security by putting a strain on food availability and prices, which can hinder the consumption of calories and micronutrients. Next, climate change can affect child nutrition through its implications for women's labor allocation as it can reduce their time availability for child feeding and caring practices⁷³. Finally, it can deteriorate environmental health and access to health and nutrition services. Climate change is not only associated with increased sanitation and waterborne diseases such as diarrheal diseases but can also lead to potential disruption in access to health facilities following climate shocks⁷⁴. In Indonesia, that could translate to a reduced access to *posyandu* health and nutrition services, which have been associated with significant improvements of the nutritional status of children under five⁷⁵. All those pathways have the potential to affect nutrient need and utilization and hence lead to undernutrition.

40. Climate change is expected to negatively affect the health of Indonesians through direct and indirect pathways. Under a median scenario (RCP 6.0), heat-related deaths in the South Asian region are expected to increase by 295% by the 2030s and 691% by the 2050s⁷⁶. Variations in climatic factors such as increased temperature, humidity, and precipitation will impact the distribution of vitamin D^{77,78}, ultraviolet radiation,⁷⁹ among other risk factors that weaken the host immune response to various pathogens, including tuberculosis.⁸⁰ Deteriorated health conditions are underlying causes of exacerbated malnutrition.

41. Low-income rural populations, especially young children, are predicted to be disproportionately affected by the negative effects of climate change on health and nutrition. The price-sensitivity of low-income populations is particularly high. A modelling study showed that a 100% increase in food prices would result in at least a 25% increase in the number of Indonesians living in extreme poverty⁸¹. In addition, most child deaths expected to occur globally as a result of climate change will be driven by undernutrition⁸². In Indonesia, the Hadley Centre Global Environmental Model (HadGEM) estimates that without substantial investment in climate change adaptation 2.33 million children will be malnourished and 19 million people will be at risk of hunger in 2045. People living in areas prone to environmental risks such as coastal area of East Java, Yogyakarta, West Nusa Tenggara, and East Nusa Tenggara are particularly exposed to food insecurity, vulnerability, and malnutrition⁸³.

42. Indonesia already put in place several regulations to reduce its greenhouse gas emissions as

⁷³ Komatsu, H. (2015). How Does Women's Time in Reproductive Work and Agriculture Affect Maternal and Child Nutrition? Evidence from Bangladesh, Cambodia, Ghana, Mozambique, and Nepal. International Food Policy Research Institute (IFPRI)

⁷⁴ International Food Policy Research Institute. 2015. Global Nutrition Report 2015: Actions and Accountability to Advance Nutrition and Sustainable Development. Washington, DC

⁷⁵ Sukandar, D., Khomsan, A., Anwar, F., Riyadi, H., & Mudjajanto, E. S. (2010). Health and nutritional status of children under five years in *posyandu* nutrition program. *Jurnal Gizi Dan Pangan*, 5(3), 171. <https://doi.org/10.25182/jgp.2010.5.3.171-177>

⁷⁶ Honda, Y., Kondo, M., McGregor, G., Kim, H., Guo, Y-L, Hijioka, Y., Yoshikawa, M., Oka, K., Takano, S., Hales, S., Sari Kovats, R. (2014). Heat-related mortality risk model for climate change impact projection. *Environmental Health and Preventive Medicine* 19: 56–63. URL: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3890078/>

⁷⁷ Kraus, F. B., Medenwald, D., & Ludwig-Kraus, B. (2020). Do extreme summers increase blood vitamin D (25-hydroxyvitamin D) levels? *PLOS ONE*, 15(11), e0242230. <https://doi.org/10.1371/journal.pone.0242230>

⁷⁸ Fares, A. (2011). Seasonality of tuberculosis. *Journal of Global Infectious Diseases*, 3(1), 46.

⁷⁹ McKenzie, R. L., Aucamp, P. J., Bais, A. F., Björn, L. O., Ilyas, M., & Madronich, S. (2011). Ozone depletion and climate change : Impacts on UV radiation. *Photochemical & Photobiological Sciences*, 10(2), 182-198. <https://doi.org/10.1039/c0pp90034f>

⁸⁰ Kharwadkar, S., Attanayake, V., Duncan, J., Navaratne, N., & Benson, J. (2022). The impact of climate change on the risk factors for tuberculosis : A systematic review. *Environmental Research*, 212, 113436.

⁸¹ Ivanic, M. and Martin, W. (2014). Short- and Long-Run Impacts of Food Price Changes on Poverty. The World Bank Group.

⁸² World Food Programme (2021). Climate Crisis and Malnutrition - A case for acting now

⁸³ ADB (2019). Policies to Support Investment Requirements of Indonesia's Food and Agriculture Development during 2020-2045.

well as limit the impact of climate change on the country. Indonesia's first national strategy on climate change was developed by its Ministry of Environment in 2007. 'Law 32/2009 Environmental Protection and Management' passed in 2009 recognizing that environmental quality is degrading in Indonesia, and that climate change presents further systemic threats⁸⁴. It seeks to ensure that environmental sustainability is at the core of the country's development principles. In 2015, the country committed to reduce its greenhouse gas emissions from 2020-2030 by 29% compared to 2030 business-as-usual (unconditional), and up to 41% with international support (conditional). A National Adaptation plan was developed in 2019, a specific health adaptation strategy is under development with the World Health Organization. In 2021, Indonesia updated its Nationally Determined Contribution. The new strategic approach is based on the following principles: i) employing a landscape approach; ii) highlighting existing best practices; iii) mainstreaming climate agenda into development planning; and iv) promotion climate resilience in food, water, and energy. However, at this point, Indonesia does not a specific national adaptation plan for health and nutrition.

The Government program

43. Perpres 72 enshrines in law the Gol program for the acceleration of stunting reduction. The *Perpres* outlines the nutrition-specific and nutrition-sensitive interventions to be taken in a convergent, holistic, integrative and manner through multi-sectoral collaboration at the national, regional and village levels to accelerate stunting reduction. Importantly, the *Perpres* objectives are broader than stunting reduction and include: (a) reduce stunting prevalence; (b) improve the quality of preparations for family life; (c) ensure the fulfillment of nutrient intake; (d) improve parenting; (e) improve access to and quality of health services; and (f) improve access to water and sanitation.

44. The stunting reduction program is organized around five pillars of the *Stranas Stunting* referenced above. *Perpres 72* is nationwide and directs National Development Planning Agency (*Badan Perencanaan Pembangunan Nasional*, or Bappenas) to designate priority locations for the program. Bappenas recently launched the *Minister of National Development Planning Decree No. 101/M.PPN/HK/06/2022 on Determining Districts/Cities of Focus Locations of Integrated Intervention to Accelerate Stunting Reduction in 2023*, selecting twelve provinces—which together account for approximately 69 percent of the stunting prevalence—as priority provinces (see para 18).

45. Perpres 72 extends the stunting reduction program in duration to reach the Sustainable Development Goals (SDGs) by 2030, with an intermediate target of 14% stunting set for 2024. Additional input, output, and outcome indicators and targets for 2024 are included in the *Perpres 72* results framework. Targets for 2025-30 will be set based on achievement by 2024.

46. Target beneficiaries of the stunting reduction are extended beyond the 1,000 days and include: (a) adolescents; (b) prospective brides and grooms; (c) pregnant women; (d) breastfeeding mothers; and (e) children aged 0 to 59 months. Adolescents are a critical addition to the program. Ensuring the health and nutritional status of both teenage boys and girls is important in preventing stunting.

47. The 2023 budget tagging and tracking exercise for stunting indicates approximately IDR 35.3

⁸⁴ Vizzuality. (s. d.). Law 32/2009 Environmental Protection and Management—Indonesia—Climate Change Laws of the World. Consulté 17 février 2023, à l'adresse <https://climate-laws.org/geographies/indonesia/laws/law-32-2009-environmental-protection-and-management>

trillion in annual central level expenditure for the stunting reduction program, independent of subnational transfers or revenues mobilized by local governments for supporting the program's activities and objectives.

48. Indonesia has been an exemplar in high-level ownership since adopting stunting as a national priority in 2017. The country has established home-grown implementation arrangements that have progressively matured and proven highly effective in the division of responsibilities and coordination across sectors and levels of government. These arrangements have managed to overcome the usual bureaucratic bottlenecks and procedural rigidities that have deterred past progress.

49. Under the new implementation arrangements for the stunting reduction program, Stunting Reduction Acceleration Teams (TPPS) were introduced at central, provincial, district, and village levels, tasked with coordinating, synergizing and evaluating the effective, convergent and integrated implementation of the program across sectors at the national and subnational levels. At the central level, the TPPS consists of a Steering Sub-Team and an Implementation Sub-Team. Due to the success and innovation in mobilizing Indonesia's frontline family planning initiatives, as well as the ability to leverage its own cadres at the subnational level, BKKBN was appointed as the lead of the implementation team for stunting reduction. Among its other roles, BKKBN is entrusted with developing the national action plan which is known as National Action Plan for the Acceleration of Stunting Reduction (*RAN-PASTI*). A summary of the RAN- PASTI is provided in the box below. BKKBN was also entrusted with facilitating the introduction of TPPS at the provincial, district, and village levels. At the village level, key frontline actors include the village midwife, HDW, *Posyandu Kader*, Family Companion Team, and Mobilizing Team-Family Welfare Team (TP-PKK). Detailed responsibilities are outlined in Annex 4.

Box 2. Summary of RAN PASTI

In accordance with Presidential Decree 72/2021, the government through the Regulation of the Head of the BKKBN has issued a National Action Plan to Accelerate the Reduction of Stunting 2021-2024 (hereinafter referred to as the RAN Pasti). RAN Pasti is supposed to serve as a reference for all stakeholders at the center, in the regions and in the villages regarding priority steps and activities that must be implemented in accelerating the reduction of stunting, strengthening the convergence of planning and budgeting at the central level at various levels, strengthening the necessary strategic regulations/policies to accelerate the reduction of stunting; as well as strengthening data systems, recording, reporting and monitoring and evaluation. RAN Pasti fully adopts the goals and strategies outlined in Perpres 72/2021. However, RAN Pasti has given strong emphasis on the implementation of convergence intervention at the local level, especially at the village and households level. There are groups of priority under the RAN Pasti, namely data precision strengthening, field operational and managerial strengthening. It is supported with 6 prioritized actions including; 1) provision of data on families at risk of stunting; 2) assisting families at risk of stunting; 3) accompaniment of all prospective brides/potential couples of childbearing ages; 5) surveillance of families at risk of stunting; and 6) Stunting case audit.

Strengthening data precision is expected to provide target data for accelerating stunting reduction that is accurate (reliable), valid (valid), and always updated (updated), so that it can serve as a reference source for setting targets for programs from various sectors. The provision of target data for accelerating stunting reduction is carried out by the Family Assistance Team, and is an automation of new target data as well as data that is no longer a target. Activities to provide target data: 1) Data collection for families at risk of stunting; 2) Data Collection of Catin/Prospective PUS 3 (three) months before marriage and Screening of Catin/Prospective PUS with a health examination; 3) Data collection

on pregnant women; 4) Data collection and screening of PUS; 5) Data collection and screening of children under five; 6) Youth data collection; 7) data collection on sanitation and clean water facilities/infrastructure and 8) social security membership status.

Strengthening field operations is aimed at strengthening the implementation of service convergence at the village and family levels. It is hoped that all interventions, both specific and sensitive intervention, can be delivered on target, on time and with the right type of intervention. To strengthen cross-sector cooperation in the field, TPPS was formed at the sub-district level and at the village level, which are specifically tasked with increasing the convergence of services at the village level and family level. Recent data reported that until now the target of forming TPPS at various levels has reached 99.9%. To improve convergence at the family level, a Family Assistance Team (TPK) was formed, whose task is to ensure that every family, especially those at risk of stunting, gets what they need. These TPKs were formed in all villages, consisting of health workers, family planning cadres and village PKK elements. At this time, 578,563 TPKs (96.4%) had been formed consisting of health workers, family planning cadres and PKK cadres. One of the stated targets is that by 2024 about 90 % of households especially at risk visited and supervised by TPK.

Strengthening managerial capacity. Strengthening managerial capacity focusing on the convergence and integrate programs and activities at all level requires changes of procedural and institutional perspective. Managerial strengthening includes setting up an administrative strategy which specifically includes 1) Coordinating implementing institutions to accelerate stunting reduction; 2) Integrating planning and budgeting; 3) Integrate and update data and information; 4) Supervise and foster accountability for the implementation of integrated activities; 5) Perform integrated monitoring, evaluation, and reporting. To support managerial strengthening, several activities will be included in the RAN PASTI, including the development of meta data, the development of SOPs for data sharing mechanisms, the operational management of the National Stunting Data Control Center, the one data PASTI forum.

50. Perpres 72 and RAN Pasti are further complemented by existing and on-going Government Program that contribute to the acceleration of stunting reduction. In addition to Perpres 72 and RAN PASTI, other national programs contribute to the targeted national stunting acceleration program. For example, MoH carried out specific nutrition programs and interventions which include monitoring growth and development through Posyandu, provision of complementary food for children under five and pregnant women, provision of IFAS for pregnant women and adolescent girls, and immunization. Furthermore, in 2018, MoH developed the National Communication Strategy (Strakom) and technical guidelines which include the development of stunting key messages and campaign strategy. The communication strategy for stunting prevention has been adopted by all districts. Similarly, the Ministry of Public Works implements the Community-based Water and Sanitation Program (Pamsimas) and the Water Supply System (SPAM) program to improve access on water drinking through Program Padat Karya. MoSA implements PKH, BPNT and e-warong targeted to low-income families across the country. The Ministry of Agriculture developed food security program through Group Empowered Community Food Stock (Lumbung Pangan Masyarakat) and KRPL (Homestead healthy farms). Further, MOEC supports the development of basic curriculum related to nutrition to improve ECED teacher's knowledge on stunting. MOHA developed the Convergence Action guideline and implemented in all provinces and conduct regular district performance evaluation to reward the achievement. Bappenas developed budget tracking and tagging nation spending on nutrition. BKKBN has also been supporting nutrition issues through BKB program. MoV facilitate stunting acceleration in village through increasing the use of Dana Desa, support technical assistance through Human Development Workers (HDW), establishing eHDW on monitoring

village convergence implementation and improve the effectiveness of community forum on stunting and nutrition (RDS). All relevant line ministries also committed to strengthen the capacity of national and sub national actor in particular through intensive capacity building program support by national budget/Rupiah Murni and also from other donor.

51. The Government Program also prioritizes the convergence of 10 nutrition-specific and 10 nutrition-sensitive interventions as detailed in the table below (see Table below).

Table 5: Priority Nutrition-specific and Nutrition-sensitive Interventions

Nutrition-specific interventions	Nutrition-sensitive interventions
<ul style="list-style-type: none"> • Pregnant women: <ul style="list-style-type: none"> ○ Complementary food supplementation with high animal protein for malnourished pregnant women ○ Iron Folic Acid Tablets (TTD) during pregnancy • Adolescent girls: <ul style="list-style-type: none"> ○ Iron Folic Acid Tablets (TTD) ○ Screening for anemia for adolescent • Infants under 6 months: <ul style="list-style-type: none"> ○ Exclusive breastfeeding • Children aged 6-23 <ul style="list-style-type: none"> ○ Complementary foods (MP-ASI) with high animal protein • Under-five children <ul style="list-style-type: none"> ○ Malnutrition management services. ○ Monitoring for growth and development ○ Complementary food ○ Complete basic immunization 	<ul style="list-style-type: none"> • Postnatal Family Planning (KB) services • Reduction of unintended pregnancies • Healthcare for prospective Childbearing-Age Couples (PUS) • Improved drinking water in priority districts/cities • Improved sanitation (domestic sewage) in priority districts/cities • National Health Security Premium Subsidy Recipients (PBIs) • Assistance for families at risk of stunting • Conditional cash transfers for poor and vulnerable families • Good knowledge about stunting in priority locations • Food social assistance for poor and vulnerable families • Open Defecation Free (ODF)

52. The strategic pillars for stunting reduction under Perpres 72 are:

- **Pillar 1: Improving leadership commitments and visions in ministries/agencies, provincial Regional Governments, district/city Regional Governments and Village Governments.** Under this pillar, the President and Vice President will hold limited cabinet meetings; convene national Stunting Summits and encourage subnational leaders to hold local stunting summits to build top-to-bottom leadership; and hold ministers, governors, district heads, and mayors to account for meeting service delivery and stunting reduction targets. The annual Stunting Summits will also recognize districts that successfully reduce stunting, share and promote innovation, and showcase best practices.
- **Pillar 2: Improving behavior change communication and community empowerment.** The President and Vice President will lead a sustained public awareness campaign targeting policymakers, regional governments, community leaders, parents, Prospective brides and grooms, and the general public. The campaign will use a variety of outreach strategies, from mass media to home visits, and will also scale up and strengthen BCC programming.
- **Pillar 3: Improving the convergence of Specific and Sensitive Interventions in ministries/agencies, provincial Regional Governments, District/City Regional Governments and Village Governments.** This pillar establishes and strengthens results-based budgeting, inter-governmental fiscal transfers, and social accountability tools to align supply- and demand-side incentives for districts, villages, and

households to increase 1,000-day households' access to and utilization of priority nutrition interventions.

- **Pillar 4: Improving food and nutrition security at individual, family and community levels.** This pillar focuses on food policy reforms and investments to enable improved access to good-quality and affordable nutritious food. It identifies the following four areas: food policy reforms, food fortification reforms, food contamination reforms, and food market investment policies.
- **Pillar 5: Strengthening and developing systems, data, information, research and innovations.** The President and Vice President will use a dashboard to monitor progress and identify, reward, and sanction the performance of line ministries, provinces, districts, and villages in accelerating stunting prevention. Perpres 72 calls for strengthening national, district, and village data systems on service delivery, intervention targeting, and stunting. These improvements will also allow for faster and more robust learning and feedback loops and will facilitate course corrections during implementation.

Table 6: Overview of the Pillars of Perpres 72

Pillar	Scope and Rationale
<p>Pillar 1: Improving leadership commitments and visions in ministries/agencies, provincial governments, district/city governments, and village governments.</p>	<p>Under this pillar, the President and Vice President will hold limited cabinet meetings; convene national Stunting Summits and encourage subnational leaders to hold local stunting summits to build top-to-bottom leadership; and hold ministers, governors, district heads, and mayors to account for meeting service delivery and stunting reduction targets. The annual Stunting Summits will also recognize districts that successfully reduce stunting, share and promote innovation, and showcase best practices.</p>
<p>Pillar 2: Improving behavior change communication and community empowerment.</p>	<p>The President and Vice President will lead a sustained public awareness campaign targeting policymakers, regional governments, community leaders, parents, Prospective brides and grooms, and the general public. The campaign will use a variety of outreach strategies, from mass media to home visits, and will also scale up and strengthen BCC programming.</p>
<p>Pillar 3: Improving the convergence of specific and sensitive interventions in ministries/agencies, provincial governments, district/city regional governments and village governments.</p>	<p>Indonesia has a highly decentralized system of government under which most service delivery is the responsibility of sub-national governments. Most nutrition-specific and nutrition-sensitive interventions are the responsibility of local governments. National government has the authority to set priorities which local governments should follow, and programs which they should implement, but there are limited mechanisms to enforce compliance with national priorities. The role of districts is even more important since the introduction of the Village Law in 2014. Substantial resources are now channeled from the central government and to the district and on to the village, but the quality of village expenditure is highly dependent on the quality of support and supervision which districts provide to villages. This is particularly important for nutrition interventions, many of which are delivered at the village level.</p>
<p>Pillar 4: Improving food and nutrition security at</p>	<p>This pillar focuses on food policy reforms and investments to enable improved access to good-quality and affordable nutritious food. It identifies the following</p>

individual, family and community levels	four areas: food policy reforms, food fortification reforms, food contamination reforms, and food market investment policies.
Pillar 5: Strengthening and developing systems, data, information, research, and innovations.	The President and Vice President will use a dashboard to monitor progress and identify, reward, and sanction the performance of line ministries, provinces, districts, and villages in accelerating stunting prevention. <i>Perpres 72</i> calls for strengthening national, district, and village data systems on service delivery, intervention targeting, and stunting. These improvements will also allow for faster and more robust learning and feedback loops and will facilitate course corrections during implementation.

The PforR Program

Program Development Objective

53. The Program Development Objective is to enhance the delivery of services to accelerate the reduction of stunting in Indonesia.

54. The interventions and approaches supported through the Program will not only contribute to the development objective of accelerating stunting reduction in Indonesia but will also contribute to a range of improvements in health, nutrition, and human capital outcomes for women and children, aligned with the broader set of objectives in *Perpres 72*. With the relative increase in the Program size from INEY's first phase, the Program is expected to make a substantial contribution to the delivery of essential health and nutrition services through support to the Primary Health Care pillar of the MoH Health Transformation agenda.

55. The PDO will be measured by the indicators in the table below. Multisectoral coordination and convergence has been mainstreamed within the Gol strategy for stunting reduction and will continue to be monitored at district and village levels, though not explicit in the PDO. INEY 2 has deepened the Program's focus on quality, which will be captured in the PDO indicator 1 (whereby the "agreed standards" incorporate measures to improve quality) as well as across the intermediate results indicators.

Table 7: Investing in Nutrition and Early Years 2 Program Development Objective Indicators





PDO Dimension	Indicators
To enhance delivery of services	Number of active Posyandu delivering essential health and nutrition services according to agreed standards ¹
	Number of identified under-performing districts increasing coverage of complete immunization in under-five children
To accelerate the reduction of stunting	Number of villages achieving good performance ² in the acceleration of stunting reduction
	Percentage of under-five children monitored for growth and development

Note: ¹These standards will be aligned to the MOH definition of 'active *posyandu*' and the number of *posyandus* that are meeting minimum service readiness standards and reporting regularly on these through the agreed reporting system. ² The criteria for 'villages achieving good performance' is defined by MOV, as outlined in verification protocol for DLI 9.4 and will be updated on a regular basis as required under *Perpres 72*.

56. The PforR comprises ten DLIs structured around four RAs. The RAs are a continuation of those identified for INEY, with selected updates to align to the current context. These RAs are aligned with the *Stranas Stunting* and *Perpres 72* and capture the Program’s theory that impact on stunting is not only the responsibility of the health sector, but requires national leadership, interventions across sectors, and strong service delivery and convergence of interventions at district, village, and household levels.

57. The DLIs prioritize strengthening the adaptation capacity of health and community service providers, households, and vulnerable groups including pregnant women and young mothers as well as infants and children, to shocks and long-term changes induced by climate change. Moreover, they strengthen Gol’s policy focus on addressing the links between climate change and nutrition and increase the resilience of Indonesia’s primary care system by strengthening human resource capacity as well as climate-sensitive nutrition and health service delivery, in particular in times of natural hazards and extreme events.

Table 8: Summary of INEY 2 DLIs

Results Area	Disbursement-linked Indicators		
 <p>Leadership, commitment and accountability for stunting reduction</p>	<p>1 Commitment, performance, and accountability of District & Provincial leaders to accelerate stunting reduction SoVP, Bappenas, BKKBN & MoHA, MOH, MOV</p>	<p>2 Results-based and climate-responsive nutrition planning and budgeting systems MoF & Bappenas</p>	<p>3 Integrated and climate-responsive M&E systems for the acceleration of stunting reduction BKKBN, Bappenas, & MoH</p>
 <p>Delivery and quality of specific and sensitive interventions</p>	<p>4 Delivery of nutrition interventions through the education sector MoECRT & MoV / MoH</p>	<p>5 Evidence-based and climate-responsive nutrition-specific interventions MoH, Bappenas</p>	
 <p>Service delivery and convergence at district/city level for stunting reduction</p>	<p>6 Improving the quality of essential health and nutrition services at Puskesmas MoH & MoHA</p>	<p>7 Improving the coverage of essential health and nutrition services at the District level MoH</p>	<p>8 Districts and Cities achieve good performance in the acceleration of stunting reduction MoHA, MoF, Bappenas</p>
 <p>Service delivery and convergence at village & household levels for stunting reduction</p>	<p>9 Village Kaders are skilled and support their Villages to achieve good performance in the acceleration of stunting reduction BKKBN, MoV, MoH & MoF</p>	<p>10 Strengthening the provision of quality essential health and nutrition services at the Village level BKKBN, MoV, MoH</p>	

Program Scope

58. The INEY 2 PforR is financed by an IBRD loan in the amount of US\$600 million, accompanied by grants totaling US\$29 million from GFF (US\$16 million) and Gavi (US\$13 million, through the Indonesia Human Capital Acceleration multi-donor trust fund⁸⁵) that will finance the IPF component. The second

⁸⁵ The proposed Gavi grant co-financing for the INEY 2 program will be channeled through the Indonesia Human Capital Acceleration (IHCA) multi-donor trust fund managed by the World Bank at the country level.

phase Program is in full alignment with the *Perpres 72* national program for acceleration of stunting reduction and the primary health care transformation agenda. The design of the second phase is based on recommendations stemming from the midterm review of INEY whereby new financing is proposed to achieve the objectives for converged community level service delivery and sustain support to the GOI ambitious targets of achieving 14% stunting by 2024 and continue until 2030. The PforR will cover all program beneficiaries as outlined in *Perpres 72*. The IBRD financing for INEY 2 will support: (a) Program scale up over four additional years (2023-27); (b) modification of results areas (RAs), DLIs, and targets to emphasize high impact interventions and learn from phase 1 Program implementation; and (c) add new DLIs to target high impact, attainable aspects of the stunting reduction program, prioritized in the MTR. With many of the governance, coordination, and management concerns being substantially addressed in INEY's first phase, bandwidth is available from a Program management perspective to prioritize critical sectoral intervention support under the phase 2 financing.

59. Key lessons learned have been derived from INEY 1's mid-term review (MTR) held in February-April 2021 and subsequent implementation support missions to inform the government's program and the PforR moving forward. The INEY 2 PforR increases the attention to several activities within the GOI program relative to INEY's first phase. These activities include high impact essential health and nutrition services (and, specifically, adolescent health and nutrition and zero-dose immunization), primary healthcare systems strengthening, and monitoring and evaluation. Areas identified for additional focus include: (a) Update guidelines and approaches to accommodate new implementation arrangements under the *Perpres*; (b) emphasize essential maternal and child health and nutrition interventions through *Puskesmas* and *Posyandu*, such as strengthening the quality and monitoring of antenatal care, postnatal care, growth monitoring and promotion, and immunization services; (c) strengthen the delivery of the village convergence services, including revised governance, financing, accountability, health workforce, and equipment/supplies; (d) increase attention to adolescent health and nutrition; (e) integrate BKKBN community level activities outlined in the RAN-PASTI, including parenting interventions; (f) strengthen the *Perpres* MonEv system; and (g) generate evidence for the scale up of fortified rice.

- **High impact essential health, nutrition, and immunization services:** The findings of a review of high impact essential health and nutrition services during INEY's MTR found that although the *Stranas Stunting* interventions remain highly relevant and evidence-based, the Program's support for these interventions was largely limited to behavior change communication (BCC). Despite the strength of evidence linking the nutrition specific interventions with improved nutritional outcomes, many were not included due to other priorities and the availability of alternative portfolio entry points. With many of the governance, coordination, and management concerns being substantially addressed in INEY's first phase, bandwidth is available from a management perspective to prioritize updating guidelines and tools for nutrition-specific interventions, as well as the availability and quality of high impact essential health, nutrition, and immunization services for which minimum service standards remain lacking.
- **Adolescent health and nutrition:** The MTR review of high impact nutrition interventions also found that addressing some of the key challenges of maternal undernutrition, sexual and reproductive health and rights, and delaying age at marriage/first childbirth will require intervention in the adolescent period. As the *Perpres 72* moves beyond 1,000-day households and introduces adolescents, and bride-/groom-to-be as target populations, it is an opportune time to introduce Program elements which can support these interventions.
- **Zero-dose immunization:** While the GOI recognizes immunization as a core intervention for the stunting reduction program, dedicated support to these interventions has—as yet—been relatively limited within the multisectoral program and have instead been supported through vertical

programming. As overall prevalence of stunting continues to fall, there is even greater urgency to target the hardest to reach—those with zero doses of immunization and low utilization of community health and nutrition interventions—to continue to accelerate progress. The modalities for high level leadership and coordination, as well as engaging district and village leadership to monitor and improve service coverage for stunting reduction make the INEY 2 Program an important vehicle for addressing immunization coverage barriers that are not easily tackled through the vertical immunization program.

- **Primary healthcare systems strengthening:** The MoH has identified several key strategies, including expanding the coverage of PHC services, enhancing the quality of care, improving health workforce training and deployment, strengthening health information systems, and increasing financial sustainability. MoH's primary health care reforms complement stunting reduction interventions under the stunting reduction program (particularly PHC integration/*Posyandu*, and health movement pillars). *Posyandus* play a pivotal role in the delivery of essential health and nutrition services in Indonesia. The Ministry of Health aims to increase the number of active *Posyandu* from approximately 140,000 to around 300,000. However, there are several gaps in the primary healthcare network that need to be addressed, including the need for more structured and clear guidelines for primary care integration, availability of funding, lack of continuity of care due to manual patient data recording, and insufficient human resource capacity, equipment, and infrastructure in many districts. Strengthening the systems for delivery of high impact essential health and nutrition services for adolescents, women, and children (through *Puskemas*, *Pustu* or to-be-constructed *Posyandu Prima*, and *Posyandu*) will be critical to sustain acceleration of stunting reduction.
- **Monitoring and evaluation (MonEv):** INEY's first phase made strong contributions to the MonEv agenda and incentivized GoI to collect and publish national and subnational stunting rates on an annual basis. This has helped maintain the political salience of the stunting reduction agenda but has had less impact on the ability to link program implementation with these outcomes. Nearing the close of INEY's first phase, MonEv challenges were observed, such as: (i) overlapping/duplicative data collection efforts across line ministries and across levels of government (e.g. electronic Human Development Worker data platform/eHDW, Electronic-Community-Based Nutrition Recording and Reporting/e-PPGBM, Electronics Ready to Marry and Pregnant/el-SIMIL, etc.); (ii) lack of interoperability of data systems and inability to consolidate data, which limits ability to link inputs, outputs and outcomes (districts have to develop own applications/dashboards to integrate for their planning purposes); (iii) limited alignment of reporting timelines with budget cycles to enable data-driven approach to planning; (iv) variable data quality/completeness leading to underestimation of the extent and scope of actual outputs/activities implemented. Taken together, these challenges imply that the extensive amounts of monitoring data collected routinely are unfortunately unable to be used to improve quality of services in a timely manner, or support convergence actions.

60. INEY 2 deepens the engagement on high impact essential health and nutrition services and village level implementation while sustaining select central and district level actions targeting leadership and accountability. With many of the multisectoral governance, coordination, and management bottlenecks at central and district levels addressed in INEY's first phase, bandwidth is available from a Program management perspective to fill gaps in support for sectoral interventions, namely the essential health, nutrition, and immunization services. This focus aligns with the lagging coverage of these high impact interventions and the PHC systems strengthening initiatives under the Health Transformation Agenda. Village level implementation is prioritized in the second phase due to: (a)

the centrality of village service delivery platforms for specific and sensitive interventions; and (b) the need to remediate the capacity gaps and coordination challenges that have emerged in the transition to *Perpres 72* implementation arrangements.

Table 9: Overall Relationship between the GoI Stunting Reduction Program and INEY 2 PforR

	Government program - Defined in <i>Perpres 72</i>	INEY 2 PforR	Reasons for non-alignment
Objectives	(a) reduce stunting prevalence; (b) improve the quality of preparations for family life; (c) ensure the fulfillment of nutrient intake; (d) improve parenting; (e) improve access to and quality of health services; and (f) improve access to water and sanitation.	To enhance the delivery of services to accelerate the reduction of stunting in Indonesia.	Simplicity and focus on a sub-set of activities targeting stunting reduction and the Health Transformation Agenda.
Duration	2018-2030	2023-2028	Support from INEY2 is focused on the next four-year phase of implementation
Geographic coverage	Nationwide with 12 priority provinces	Nationwide, with 12 priority provinces	--
Results areas	Five pillars of National Strategy for Stunting Reduction	Select activities under four pillars	Prioritized and selective focus on leadership, frontline services, convergence, and monitoring and evaluation. Significant exclusions of the INEY2 program include cash and food-based social assistance; improved water, sanitation, and promotion of open-defecation free villages; support for social health insurance beneficiaries.
Overall Financing (Annual, US\$ million)	US\$ 2,356.9 million per year	US\$ 233.6 million per year	Focus on sub-set of high impact activities and DLIs.

61. The PforR Program boundary is based upon the 2023 stunting budget tagging and tracking exercise as aligned with the ministries/agencies in charge of INEY 2 DLIs. The financing within the Program boundary includes the proximal central level financing of key ministries/agencies (namely SoVP, Bappenas, MoF, MoH, MoHA, MoV, BKKBN, MoEC) which enable the achievement of DLI results at national and sub-national levels.

62. The PforR Program boundary is based upon the 2023 stunting budget tagging and tracking exercise as aligned with the ministries/agencies in charge of INEY 2 DLIs. The financing within the Program boundary includes the proximal central level financing of key ministries/agencies (namely SoVP, Bappenas, MoF, MoH, MoHA, MoV, BKKBN, MoEC) which enable the achievement of DLI results at national and sub-national levels.

Table 10: Program Financing – for 5 years

Source	Amount (Million IDR)	Amount (US\$ Million equivalent)	% of Government program	% of PforR Program
Government program	176,764	11,784	100%	--
PforR Program Boundary	17,521	1,168	9.91%	100
World Bank IBRD Financing		600	5.09%	51.37%
External Financing - GFF	--	17.5	0.15%	1.5%
External Financing – Gavi (CY 2023-25)	--	13	0.11%	1.11%

63. With the increase in average annual financing from US\$100 million in INEY to US\$150 million in INEY 2, the incremental allocation will be directed toward the delivery of essential health and nutrition services in support of the PHC pillar of the Health Transformation agenda. This financing supports a higher-order aim of improving health, nutrition, and human capital outcomes for adolescents, women, and children under five and is aligned with the broader set of objectives in *Perpres 72*. MoH will receive higher allocation of grant support through the IPF component to enable achievement of the DLIs.

64. Over the five years of implementation, IBRD financing for INEY phase 2 represents 51.4 percent of the PforR Program. The PforR Program boundary includes relevant line items from the national budgets of eight key stakeholders: the Vice President Office, MoHA, MoF, MoEC, MoH, Bappenas, MoV and BKKBN. The P4R Program is estimated at US\$1.2 billion over 5 years. The US\$600 million World Bank financing represents 5.09 percent of the GOI stunting reduction program and 51.4 percent of the PforR.

65. The Program boundary comprises discrete budget lines that have been detailed in the expenditure framework section of the technical assessment. The items included in the Program boundary are summarized below:

- **MoH.** Accounting for almost 63 percent of the Program boundary, the budget lines for the MoH includes Program for Community Health, Program for Health Services and JKN, Program for Development Health Policy and Program for Management Supporting. The budget from this Program level will support the achievement of DLI 3, 4, 5, 6, 7, 9, 10 and 11.

- **MoF.** The Program boundary includes relevant line items from the MoF's Fiscal Policy Agency, Directorate of General Budget, and Directorate of General Financing and Risk. This line ministry primarily will support the implementation DLI 2.
- **MoEC.** The Program boundary includes MoEC's budget lines which accounting for 24% which will support activities primarily related to Early Child Development (PAUD) (DLI 4).
- **State Secretary (Vice President Office).** Accounting for 2 percent of the Program boundary, the budget lines for the State Secretary includes Program for President and Vice President office. The budget from this Program level will support the overall coordination and support of INEY Phase-2 implementation.
- **MoHA.** The Program boundary includes relevant line items from Program of Population Management and Program of Local Government and Village Capacity (DLI 1, 6, 8, 11).
- **Bappenas.** Accounting for 3.6 percent of program boundary, the budget line of Bappenas include Program National Development Plan. This line ministry primarily will support the implementation DLI 1, 2, 3, 5, and 8.
- **MoV.** The budget line under Ministry of Village includes line budget for Program for Development of Disadvantage Region, and Transmigration, and it account for 2.1 percent of program boundary. This line ministry primarily will support the implementation DLI 4, 9, 10, and 11.
- **BKKBN.** Accounting for 4.9 percent of program boundary, the budget line of BKKBN include Family Development, Population and Family Planning Programs. This program will support the implementation of DLI 1, 9, and 10).

Alignment of Program with Perpres 72

66. INEY phase 2 supports a subset of activities under Perpres 72. Tables detailing inclusions and exclusions of the Program are presented below.

	Component	INEY 2 PforR	Notes
Pillar 1: Improving leadership commitments and visions in ministries/agencies, provincial governments, district/city governments, and village governments.			
A. Improve commitment to accelerating stunting reduction			
	Organize annual coordination meetings attended by high-ranking officials at national, provincial and district/city levels.	✓	RA 1
	Organize Coordination meetings at district/ city level	✓	RA 3
	Deliver Stunting Rembuk (boot-camp) events at subdistrict level.	✓	RA 4
	District head/mayor policies/regulations in place concerning villages'/kelurahans' jurisdiction over stunting reduction.	✓	RA 3
	Ensure availability of village/kelurahan midwives as necessary	✓	RA4
	Monitor stunting-free villages/kelurahans.	✓	RA 4
	Monitor Provincial Regional Governments budget allocations to Acceleration of Stunting Reduction.	✓	RA 3
	Monitor district/city Regional Governments budget allocations to Acceleration of Stunting Reduction.	✓	RA 1, 3
B. Improve capacity of Village Governments.			
	Provide capacity building to villages to handle Stunting Reduction Acceleration	✓	RA 4
	Train Family Hope Program (PKH) facilitators trained with health and nutrition modules	X	

	Component	INEY 2 PforR	Notes
	Train human development workers (from district/city Regional Governments)	✓	RA 4
Pillar 2: Improvement of behavior change communication and community empowerment			
A. conduct sustainable change behavior communication and campaigns			
	Implement National Campaigns for stunting prevention	X	
	Promote Open Defecation Free (ODF) families.	X	
	Promote practicing a Clean and Healthy Lifestyle (PHBS) among families	X	
	Deliver full set of basic immunization to under-five children	✓	RA 2, 4
B. Strengthen institutional capacity in behavior change communication for stunting reduction.			
	Ensure that districts/cities have a minimum of 20 basic-level trainers and education and training in stimulation parenting to manage stunting for Early Childhood Education (ECE) teachers.	X	
	Train Early Childhood Education (ECE) teachers in villages/ <i>kelurahans</i> on stimulation parenting to manage stunting	X	
	Develop Holistic-Integrative Early Childhood Education for Early Childhood Education (ECE) institutions	✓	RA 2
	Ensure compliance with standards for growth and development monitoring services at Posyandu	✓	RA 4
	Organize under-five Family (BKB) classes on parenting in the First 1000-days of Life (HPK) in villages/ <i>kelurahans</i>	X	
	Promote Family Capacity Building Sessions (P2K2) using health and nutrition modules for beneficiary Families (KPM) of the Family Hope Program (PKH)	X	
	Provide reproductive health and nutrition education for adolescents at Information and Counseling Centers (PIK) for Adolescents and Adolescent Family Guidance (BKR)	X	
C. Strengthen the role of religious organizations in behavior change communication on stunting reduction.			
	Create and implement forums for behavior change communication on stunting reduction across religions.	X	
	Deliver marriage guidance with material on stunting prevention to brides and grooms	✓	RA 4
Pillar 3: Improvement of convergence of Specific Interventions and Sensitive Interventions in ministries/agencies, provincial Regional Governments, district/city Regional Governments and Village Governments.			
A. Converge planning and budgeting, and carry out activities to improve types, coverage and quality of nutrition interventions at national and subnational levels.			
	Integrate Stunting Reduction Acceleration programs and activities in regional planning and budgeting documents (Regional Long-Term Development Plans, Regional Mid-Term Development Plans, Food and Nutrition Regional Action Plans, Regional Government Work Plan, and Regional Budgets, and Work and Budget Plans) at the level of provinces and districts/cities	✓	RA 3
	Implement convergence of Stunting Reduction Acceleration at the districts/cities levels	✓	RA 3
	Integrate Stunting Reduction Acceleration programs and activities in village/ <i>kelurahan</i> planning and budgeting documents (Village Mid-term Development Plans, Village Government Work Plans, and Village Budgets, and Village Work and Budget Plans).	✓	RA 4
	Increase village/ <i>kelurahan</i> fund allocations to Specific Interventions and Sensitive Interventions for Stunting Reduction.	✓	RA 4
	Converge the Acceleration of Stunting Reduction at the level of villages/ <i>kelurahans</i>	✓	RA 4
	Implementing Community-Led Total Sanitation (CLTS) in villages/ <i>kelurahans</i>	X	
	Provide Iron Folic Acid Tablets (TTD) to prospective brides and grooms/prospective mothers	✓	RA 2, 3, 4
	Provide supplementary nutrient intake to pregnant women with Chronic Energy Deficiency (KEK)	✓	RA 2, 3
	Ensure pregnant women consume a minimum of 90 Iron Folic Acid Tablets (TTD) during pregnancy	✓	RA 2, 3

	Component	INEY 2 PforR	Notes
	Promote exclusively breastfeeding for infants under 6 months old	✓	RA 2, 3
	Provide complementary foods (MP-ASI) to children aged 6-23 months	✓	RA 2, 3
	Deliver malnutrition management services to malnourished children under five years old (under-five)	✓	RA 2, 3
	Provide supplementary nutrient intake to malnourished under-five children	✓	RA 2, 3
	Provide food security interventions to support the Acceleration of Stunting Reduction in districts/cities	X	
	Provide facilitation as women-friendly and child-friendly regions in the Acceleration of Stunting Reduction.	✓	RA 4
B. Converge efforts to prepare for family life			
	Ensure coverage of assistance for families at risk of stunting.	✓	RA 4
	Deliver reproductive health counseling and nutrition education for 3 months before marriage to prospective Childbearing Age Couples (PUS) receiving	✓	RA 4
	Provide anemia status checks (hemoglobin test) to adolescent girls	✓	RA 2, 4
	Strengthen surveillance data on families at risk of stunting.	✓	RA 4
	Promote an Age-Specific Fertility Rate/ASFR (15-19) of at least 18 per 1,000 in districts/cities	N	
	Provide postpartum birth control services	N	
	Address unmet needs for birth control services	N	
Pillar 4: Improvement of food and nutrition security at the individual, family and community levels.			
A. Meet needs for food and nutrition at the individual, family and community levels, including needs during a disaster.			
	Provide home garden benefits to improve nutrient intake to families at risk of stunting	N	
	Promote increased domestic fish consumption for families at risk of stunting	N	
	Provide diverse food assistance in addition to rice and egg (carbohydrate, animal protein, vegetable protein, vitamins and minerals, and/or Complementary Foods (MP-ASI) to beneficiary Families (KPMs) with pregnant women, breastfeeding mothers and children under two years old (under-two)	N	
	Provide conditional cash transfers for childbearing Age Couples (PUS) with status as poor and people with social welfare problems	N	
	Provide non-cash food assistance to childbearing Age Couples (PUS) with status as poor and people with social welfare problems receiving	N	
	Provide Health Security Premium Subsidy (PBI) to poor and financially weak Childbearing Age Couples (PUS)	N	
B. Improve food fortification quality			
	Promote control over fortified food products followed up by business actors.	N	
Pillar 5: Strengthening and development of systems, data, information, research and innovation			
A. Strengthen integrated Monitoring and Evaluation systems for the Acceleration of Stunting Reduction			
	Promote good performance in converging the Acceleration of Stunting Reduction for provincial and district/city Regional Governments	✓	RA 1, RA 3
	Promote good performance in converging the Acceleration of Stunting Reduction for Village Governments	✓	RA 4
	Ensure the publication of data on stunting at district/city level.	✓	RA 1
	Strengthen Monitoring and Evaluation of the implementation of the National Strategy for Acceleration of Stunting Reduction.	✓	RA 1
	Strengthen Monitoring and Evaluation of the Acceleration of Stunting Reduction in provincial Regional Governments.	✓	RA 1
	Strengthen Monitoring and Evaluation of the Acceleration of Stunting Reduction in district/city Regional Governments.	✓	RA 1

	Component	INEY 2 PforR	Notes
	Strengthen monitoring and Evaluation of the Acceleration of Stunting Reduction in Village Governments	✓	RA 1
	Conduct audits of stunted children under two years old	X	
B. Develop an integrated data and information system			
	Support an integrated regional and village/ <i>kelurahan</i> fund transfer system to support the Acceleration of Stunting Reduction	✓	RA 3, 4
	Support an integrated data and information system to support the Acceleration of Stunting Reduction.	✓	RA 1
	Ensure the availability of data on families at risk of stunting updated on the Family Information System (SIGA).	X	
	Ensure the availability of a system for screening and counseling for prospective Childbearing-Age Couples (PUS) ready for marriage.	X	
	Monitor nutrition interventions for stunting reduction in districts/cities through electronic nutritional surveillance data systems	✓	RA 1, 2, 3, 4
C. Strengthen research and innovation and promote the use of research and innovation results			
	Provide assistance in the Acceleration of Stunting Reduction through the Three Pillars of Higher Education (Tri Dharma) to districts/cities	X	
D. Develop a knowledge management system			
	Support a platform for knowledge sharing on the Acceleration of Stunting Reduction	X	
	Institute a system of awards to regions for the Acceleration of Stunting Reduction.	✓	RA 1
	Develop an integrated system of financial incentives for regions rated as well-performing districts for the Acceleration of Stunting Reduction.	✓	RA 3
	Conduct an assessment of government budget for the Acceleration of Stunting Reduction.	✓	RA 1, RA3

Alignment of Program with RAN-PASTI

67. INEY phase 2 is also aligned with activities under RAN PASTI. A table detailing area of alignment is presented below.

68. A key technical vulnerability to note is RAN PASTI's limited alignment to Perpres 72 in some areas. As INEY 2 is implemented, it is important to ensure a common vision, strategy, and objective across Government document.

Table 11: Alignment of the Activities of the RAN PASTI INEY 2 Program

	Cluster/components/Priority Activities	INEY 2 PforR	Notes
•	Precision data enhancement cluster		
	A. Provision of Stunting Risk Family Data		
	Data collection on families at risk of stunting	✓	RA 1
	Data Collection for Catin/Prospective PUS 3 (three) months before marriage and Screening for Catin/Prospective PUS with a health check.	X	
	Registration of pregnant women.	✓	RA 1, RA 2
	Postpartum PUS data collection and updated intervals	X	
	PUS data collection wants the child to be postponed and does not want any more children who have not had family planning.	X	

		Cluster/components/Priority Activities	INEY 2 PforR	Notes
		Data collection and screening of children aged 0-23 months	✓	RA 1, RA2
		Data collection and screening of children aged 24-59 months.	✓	RA 1. RA2
		Data collection and screening of households receiving social protection	X	RA 1, 3
		Data collection has adolescents, and/or pregnant women, and/or breastfeeding mothers, and/or children aged 0-23 months to access proper drinking water.	✓	RA1, RA2, RA3, RA4
		The data collection includes adolescents, and/or pregnant women, and/or breastfeeding mothers, and/or children aged 0-23 months regarding ownership of healthy housing facilities.	X	
		The data collection includes adolescents, and/or pregnant women, and/or breastfeeding mothers, and/or children aged 0-23 months regarding ownership of sanitation facilities.	X	
		Stunting priority village data collection.	✓	RA3, RA4
		B. Family surveillance at risk of stunting		
•	•	• Implementation of family surveillance at risk of stunting	✓	RA4
•	II	• Strengthening Operational Cluster		
		A. Assistance for Families at Risk of Stunting		
		Formation of Family Assistance Teams (TPK) in all villages/kelurahans.	✓	RA2, RA4
		Orientation for stunting management for TPK.	✓	RA4
		Conduct KIE session to at risk of stunting family group.	✓	RA4
		Interpersonal KIE for families at risk of stunting.	✓	RA4
		Assistance for Pregnant Women and post-partum mothers	✓	RA3, RA4
		Assistance for families with children aged 0-23 months.	✓	RA3, RA4
		Monitoring of weight and length/height of children 0-23 months	✓	RA3, RA4
		Monitoring the development of children 0-23 months	✓	RA3, RA4
		Assistance for children aged 24-59 months with chronic infections	X	
		Assistance for children aged 24-59 months with malnutrition.	✓	RA3, RA4
		Monitoring of weight and length/height of toddlers 0-59 months	✓	RA3, RA4
		Monitoring the development of children 24-59 months	X	
		Facilitation of underprivileged families who are at risk of stunting as recipients of social assistance	X	
		Facilitation of access to proper drinking water for at risk stunting families	X	
		Facilitation of owning a livable home for families at risk of stunting	X	
		Facilitate healthy latrines for families at risk of stunting.	X	
		Establishment of "dapur sehat" in Stunting priority village based on local food.	X	
	•	B. Assistance for All Prospective Brides and Couples of Reproductive Age (PUS)		
		Assistance for Catin/CaPUS 3 (three) months before marriage	X	

		Cluster/components/Priority Activities	INEY 2 PforR	Notes
		<ul style="list-style-type: none"> C. Stunting Case Audit 		
		Stunting case audit team was formed in districts/cities.	✓	RA3, RA4
		Implementation of audit cases of stunting and management of family assistance.	✓	RA3, RA4
		Dissemination of audit results of stunting cases and management of family assistance.	✓	RA3, RA4
		Follow up on the results of the audit of stunting cases and management of family assistance.	✓	RA3, RA4
III		Strengthening managerial cluster		
		<ul style="list-style-type: none"> A. Planning and budgeting. 		
		Coordination and synchronization of district/city level planning and budgeting.	✓	RA3, RA4
		Coordination and synchronization of village level planning and budgeting.	✓	RA3, RA4
		B. Supervision and Development of Accountability for the Implementation of Activities to Accelerate the Reduction of Stunting		
		Implementation of Supervision and fostering accountability in planning and implementing activities for the Acceleration of Stunting Reduction.	✓	RA3, RA4
		<ul style="list-style-type: none"> C. Monitoring, Evaluation, and Reporting 		
		Development of metadata.	✓	RA1, RA2, RA3, RA4
		Development of SOP for data sharing mechanism.	✓	RA1, RA2, RA3, RA4
		Operational management of the National Stunting Data Control Center.	✓	RA1, RA2, RA3, RA4
		One data forum for RAN PAsTi	✓	RA1, RA2, RA3, RA4
		Monitoring and evaluating the performance of provincial and district/city regional governments in the convergence of accelerated reduction of stunting.	✓	RA1, RA2, RA3, RA4

DESCRIPTION AND ASSESSMENT OF PROGRAM STRATEGIC RELEVANCE AND TECHNICAL SOUNDNESS

Strategic relevance

Program rationale

69. Investing in nutrition and stunting reduction is critical for ensuring healthy early childhood development and long-term human capital formation. Stunting refers to a condition where a child's height-for-age is significantly below the median height-for-age of a reference population, indicating chronic undernutrition. This condition can have long-lasting effects on a child's physical, cognitive, and social development, leading to poor health outcomes, reduced cognitive function, and lower educational and economic attainment in adulthood. Research has shown that stunting in early childhood is associated with a range of negative outcomes, including reduced cognitive development, poor educational performance, lower income in adulthood, and increased risk of chronic diseases such as diabetes, hypertension, and cardiovascular disease.⁸⁶ A study conducted by the World Bank found that stunting was associated with a 7% reduction in lifetime earnings, equivalent to a loss of approximately \$40 billion per year globally. Investing in nutrition and stunting reduction programs can have significant positive impacts on child development and long-term outcomes.⁸⁷ A study by the World Health Organization estimated that every \$1 invested in nutrition interventions can yield up to \$16 in economic returns, through improved health outcomes, increased productivity, and reduced healthcare costs.⁸⁸ Additionally, investing in stunting reduction can help to break the cycle of intergenerational poverty, as children who receive adequate nutrition and support in early childhood are more likely to succeed in school and achieve better economic outcomes in adulthood.⁸⁹

70. Stunting reduction is a critical priority issue for economic development and poverty reduction in Indonesia. By improving human capital development, reducing social and economic costs, and promoting poverty reduction, the government can achieve sustainable development goals and improve the well-being of its citizens. Stunting has a significant impact on human capital development, which is critical for economic growth. Children who suffer from stunting are more likely to have poor health, lower cognitive function, and lower educational achievement, which can limit their future earning potential and reduce their ability to contribute to the economy. As a result, addressing stunting can have a positive impact on human capital development and contribute to long-term economic growth. Furthermore, stunting can have significant social and economic costs. A study by the World Bank estimated that stunting costs the Indonesian economy approximately \$3.7 billion per year, equivalent to 2.3% of Indonesia's GDP. The costs are attributed to reduced productivity, increased healthcare costs, and lower educational achievement. Finally, reducing stunting is crucial for poverty reduction in Indonesia because stunting is

⁸⁶ Black, R. E., et al. (2008). Maternal and child undernutrition: global and regional exposures and health consequences. *The Lancet*, 371(9608), 243-260.

⁸⁷ Hoddinott, J., Maluccio, J. A., Behrman, J. R., Flores, R., & Martorell, R. (2008). Effect of a nutrition intervention during early childhood on economic productivity in Guatemalan adults. *The Lancet*, 371(9610), 411-416.

⁸⁸ World Health Organization. (2013). *Essential Nutrition Actions: Improving maternal, newborn, infant and young child health and nutrition*. WHO.

⁸⁹ Victora, C. G., Adair, L., Fall, C., Hallal, P. C., Martorell, R., Richter, L., & Sachdev, H. S. (2008). Maternal and child undernutrition: consequences for adult health and human capital. *The Lancet*, 371(9609), 340-357.

more prevalent among children from poorer households, as they have limited access to nutritious food and healthcare.⁹⁰

71. There is a clear case for government intervention for stunting reduction in Indonesia due to the severity of the problem and the potential impact on human capital and economic development. Stunting is a widespread issue in Indonesia, affecting an estimated 22% of children under the age of five.⁹¹ The prevalence of stunting is much higher in rural areas and among disadvantaged populations, highlighting the need for targeted interventions to address the problem. Stunting is a complex issue that requires a coordinated and multi-sectoral response, which only the Government has the capacity and resources to provide. Further, the Government has a responsibility to protect the well-being of its citizens and ensure that they have access to basic health services. As part of its commitments to the Sustainable Development Goals, the Indonesian government has issued *Perpres 72*, which outlines the government's plans to address the issue through a multi-sectoral approach. The government has also established a multi-stakeholder working group to coordinate efforts and monitor progress towards the goals. Finally, the Government has a legal obligation to protect the rights of children and ensure that they have access to basic health services. The Indonesian Constitution and various international agreements, including the United Nations Convention on the Rights of the Child, provide a legal framework for the government's responsibilities in this area.⁹²

72. Stunting is a top priority for the Government of Indonesia, with strong leadership from the President and the Vice President. As mentioned in the previous paragraph, the high-level commitment to reduce stunting was reaffirmed with a recent Presidential Regulation (*PerPres 72*). The GOI aims to reduce stunting prevalence to 14% by 2024. Leadership of the national stunting reduction program by the Office of the Vice President (Setwapres) is indicative of the high priority accorded to this agenda. *Perpres 72* further formalizes and updates the interventions commenced under the National Strategy to Accelerate Stunting Prevention (StraNas Stunting) and extends the program through 2030.

73. President Joko Widodo has reemphasized the importance of further accelerating stunting reduction including through enhanced investments. He stressed the GOI's commitment to go beyond the 2024 target and eradicate malnutrition by 2023, as per the SDGs.

74. The Program will support the government's current National Medium Term Development Plan (RPJMN 2019-2024) and Perpres 72 to reinforce and ratify the acceleration of stunting reduction as a GOI priority. Indonesia's commitment to reducing stunting is evidenced by the inclusion of ambitious targets in the current RPJMN and the listing of stunting reduction as one of the Strategic Priority Projects. By 2024, the GOI is targeting reduction of stunting nationwide by 14 percentage points. RPJMN recognizes that the acceleration of the progress towards reducing stunting in Indonesia require enlisting more sectors, in addition to the health sector, such as agriculture, education, social protection, and water, sanitation, and hygiene in the effort to improve nutrition. Large scale "nutrition-sensitive" interventions in these sectors must not only address the key underlying determinants of nutrition effectively, but also intensify the impact of "nutrition-specific" interventions.

⁹⁰ World Bank. (2019). Indonesia: Stunting and Economic Losses; World Bank. (2021). Indonesia: Reducing Stunting through Results-Based Financing; Ministry of National Development Planning. (2021). The National Strategy to Accelerate Stunting Reduction 2020-2024.

⁹¹ BPS - Statistics Indonesia. 2023. Stunting figures.

⁹² United Nations Children's Fund. (2018). Stunting in Indonesia; World Bank. (2019). Indonesia: Stunting and Economic Losses; United Nations. (1989). Convention on the Rights of the Child.

75. The Program supports the Country Partnership Framework (CPF) for Indonesia 2021-2025 (Report No. 157221-ID). Specifically, it supports Engagement Area III on Nurturing Human Capital, including its Objective 3.2 on Strengthen quality and equity in nutrition and health. The program will contribute to achievement of CPF objective indicators on: (i) Objective 8 Indicator 2: National Stunting Reduction Coordination mechanism launched and operational; (ii) Objective 8 Indicator 3: Number of districts implementing district based, community focused training system for early childhood education (ECED) teachers; (iii) Objective 8 Indicator 4: Number of people having access to improved water services in targeted areas, disaggregated by gender, and (iv) Objective 8 Indicator 5: Number of people having access to improved sanitation services in targeted areas, disaggregated by gender. Indonesia has been an early and strong champion of the World Bank’s Human Capital Project (HCP), launched at the 2018 Annual Meetings, and is committed to accelerating multisectoral efforts to enhance human capital outcomes. The proposed loan and grant are fully aligned with the World Bank’s Twin Goals of eradicating extreme poverty and promoting shared prosperity. In addition, the program also emphasizes rigorous monitoring and evaluation. This ensures that available resources are more efficiently allocated to where they are most needed and can make optimal impact, hence making stunting interventions more impactful in addressing poverty and promoting shared prosperity.

Technical Soundness

Overall Program Technical Soundness

76. The program support evidence-based interventions that reduce stunting. The Lancet maternal and child nutrition series recommends a range of interventions for reducing stunting in children. These interventions fall typically into four categories: (a) improving maternal nutrition and health, (b) promoting optimal infant and young child feeding practices, (c) providing targeted nutritional interventions, and (d) improving WASH conditions.⁹³ (See 3.1 for further information.)

- **Improving maternal nutrition and health.** Maternal nutrition and health have a direct impact on fetal growth and development and thus play a critical role in reducing stunting. Interventions in this category include providing balanced energy and protein supplementation during pregnancy, improving maternal diet quality, and addressing maternal anemia.
- **Promoting optimal infant and young child feeding practices.** Early initiation of breastfeeding, exclusive breastfeeding for the first six months of life, and continued breastfeeding with appropriate complementary feeding up to two years of age or beyond are essential for optimal infant and young child feeding. Interventions in this category also include promoting appropriate complementary feeding practices, such as the timely introduction of nutrient-rich foods and the use of feeding practices that encourage children to eat more.

⁹³ Bhutta, Z. A., et al. 2013. “Evidence-Based Interventions for Improvement of Maternal and Child Nutrition: What Can Be Done and at What Cost?” *The Lancet* 382 (9890): 452–477.

Dewey, K. G., and S. Adu-Afarwuah. 2008. “Systematic Review of the Efficacy and Effectiveness of Complementary Feeding Interventions in Developing Countries.” *Maternal & Child Nutrition* 4: 24–85.

Victora, C. G., L. Adair, C. Fall, P. C. Hallal, R. Martorell, L. Richter, and H. S. Sachdev. 2008. “Maternal and Child Undernutrition: Consequences for Adult Health and Human Capital.” *The Lancet* 371 (9609): 340–357.

WHO. 2013. “Essential Nutrition Actions: Improving Maternal, Newborn, Infant and Young Child Health and Nutrition.” Geneva: World Health Organization.

- **Providing targeted nutritional interventions.** This category includes interventions such as providing micronutrient supplements (for example vitamin A, iron, and zinc), fortifying staple foods with key nutrients (such as rice kernels), and providing therapeutic feeding for children with severe acute malnutrition.
- **Improving WASH conditions.** Poor WASH conditions, such as inadequate sanitation and hygiene practices, can contribute to the spread of disease and poor nutritional outcomes. Interventions in this category include improving access to clean water, promoting proper sanitation and hygiene practices, and ensuring safe disposal of feces.

Box 3. Summary of High-Impact Nutrition Interventions to Support Optimal Child Growth, *Lancet* 2021

- Large-scale food fortification for the prevention of micronutrient deficiencies
- Maternal calcium supplements in low-intake populations
- Maternal balanced energy protein (BEP) supplementation in undernourished populations
- Maternal multiple micronutrient supplementation (MMS)
- Vitamin A supplementation in deficient contexts
- Breastfeeding promotion and counseling
- Complementary feeding education and food provision (food insecure); complementary feeding education (food secure)
- Preventive zinc supplementation
- Ready to Use Supplementary Food (RUSF) for the management of acute malnutrition
- Therapeutic zinc supplementation for diarrhea
- Preventative small-quantity lipid-based nutrient supplements (SQ-LNS) for optimizing health and growth in children

Source: *Lancet*, [Maternal and child undernutrition progress](#), March 8, 2021

77. The Program also recognizes that immunization leads to better nutrition and stunting outcomes by preventing infectious diseases, which are major causes of malnutrition in children. Immunization can reduce the incidence of infections such as diarrhea, pneumonia, and measles, which can cause appetite loss, nutrient malabsorption, and contribute to weight loss and stunting. One of the ways immunizations can improve nutrition and stunting outcomes is by preventing diarrhea, a common and often deadly infection in children, especially in low-income countries. Diarrhea can cause dehydration, electrolyte imbalances, and nutrient malabsorption leading to severe malnutrition and growth faltering. Immunization against rotavirus, the leading cause of severe diarrhea in children, has been shown to reduce diarrheal morbidity and mortality in young children, thus leading to improved nutrition outcomes.⁹⁴ Immunization can also prevent respiratory infections such as pneumonia, which can impair lung function, reduce oxygen uptake, and increase energy expenditure, leading to weight loss and stunting. Immunization against pneumococcal infections and Haemophilus influenzae type B, two leading causes of pneumonia, has been associated with reduced morbidity and mortality and improved nutritional

⁹⁴ Patel, M., Pedreira, C., De Oliveira, L.H., Tate, J.E., and Parashar, U.D. (2013). Association between pentavalent rotavirus vaccine and severe rotavirus diarrhea among children in Nicaragua. *JAMA*, 309(10), 977-984. doi: 10.1001/jama.2013.1639

outcomes in children.⁹⁵ Immunization against measles can prevent a highly contagious viral disease that can lead to severe complications and death in children. Measles infection can lead to appetite loss, malabsorption, and impaired immune function leading to increased susceptibility to other infections. Measles immunization has been shown to prevent malnutrition and reduce the incidence of stunting in children, leading to better overall nutritional outcomes.⁹⁶ A study in Bangladesh found that children who received measles vaccination had higher weight-for-age and height-for-age scores compared to those who were not vaccinated.⁹⁷ Another study in Kenya found that immunization reduced the incidence of diarrhea, leading to improved growth among children.⁹⁸ Lastly, immunization can indirectly improve nutrition by reducing the economic burden of illness on families. This can allow families to allocate more resources to food and other necessities, improving overall nutrition outcomes.

78. The Program builds on the experience of INEY Phase I and continues the flagship partnership of the GOI and the World Bank on stunting reduction under INEY Phase 1. The World Bank is exceptionally well positioned to support the government's national convergence strategy to address stunting and improve early learning. The first years of Program implementation of Phase 1 successfully tackled critical governance and management challenges, introduced results-based financing and monitoring instruments at district and convergence actions, and supported technical advice and analytical work in multiple sectors (health, education, social protection, WASH, social development and governance). This experience provides useful lessons learned on the technical aspects, implementation modalities and enabling environment to effectively address the nutrition and early years agenda. With these concerns being substantially addressed, bandwidth is available from a Program management perspective to prioritize critical sectoral intervention support under the Phase 2 financing.

79. The theory of change underlying the INEY Phase 2 Program (Figure 7) highlights that removing systems level constraints to supply, demand, delivery, and coordination of nutrition specific and sensitive services is necessary to create an enabling environment that can alleviate the immediate and underlying causes of stunting. Four primary bottlenecks underpin these system constraints: (a) limited advocacy, and awareness on stunting and its prevention efforts; (b) inefficient budgeting and resource allocation; (c) inadequate coordination of planning, budgeting, implementation, monitoring, and evaluation across levels of government and interventions to address immediate (nutrition-specific) and underlying (nutrition-sensitive) causes of stunting; and (d) limited capacity and quality of program implementation. Four results areas (RAs) were designed under INEY to address these bottlenecks. Progress across the RAs is expected to increase adherence to national and sub-national commitments, improve the coordination and results orientation of planning, budgeting and delivery of stunting reduction interventions, improve the availability, quality, and utilization of essential health, nutrition, nutrition-sensitive interventions to address stunting and intermediary outcomes. The progress across the RAs is foundational to accelerate stunting reduction, enhance the delivery of services, and enhance the

⁹⁵ O'Brien, K.L., Wolfson, L.J., Watt, J.P., Henkle, E., Deloria-Knoll, M., McCall, N., Lee, E., Mulholland, K., Levine, O.S., and Cherian, T. (2009). Burden of disease caused by *Streptococcus pneumoniae* in children younger than 5 years: global estimates. *The Lancet*, 374(9693), 893-902. doi: 10.1016/S0140-6736(09)61204-6

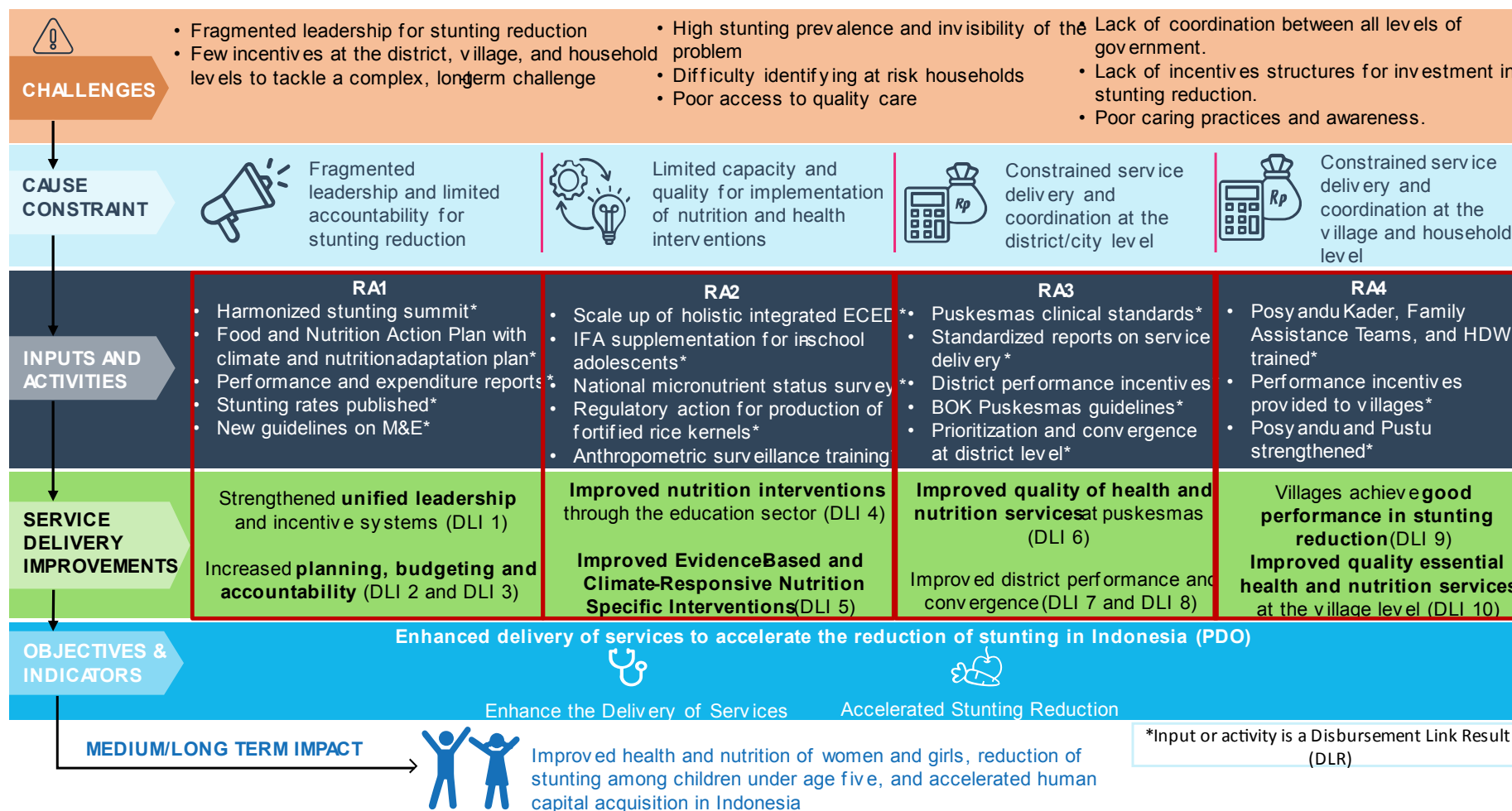
⁹⁶ Wolfson, L.J., Gasse, F.L., Lee-Martin, S.P., Lydon, P., Maganu, E.M., Tibouti, A., Johns, B., Hutubessy, R., and Salama, P. (2008). Estimating the costs of achieving the WHO-UNICEF Global Immunization Vision and Strategy, 2006-2015. *Bulletin of the World Health Organization*, 86(1), 27-39. doi: 10.2471/BLT.07.042069

⁹⁷ Zaman, K., Roy, E., Arifeen, S.E., Rahman, M., Raqib, R., Wilson, E., Omer, S.B., Shahid, N.S., Breiman, R.F., and Steinhoff, M.C. (2010). Effectiveness of maternal influenza immunization in mothers and infants. *New England Journal of Medicine*, 359(15), 1555-1564. doi: 10.1056/NEJMoa0900444

⁹⁸ Oluoch, T., Santner, B., and Onyango-Ouma, W. (2012). Impact of immunization on the burden of diarrheal disease among children under five years old in Kenya. *International Journal of Public Health Research*, 2(2), 39-46.

convergence of services, ultimately leading to a reduction in stunting prevalence and accelerated human capital acquisition in Indonesia.

Figure 8: Theory of Change for stunting reduction under INEY Phase 2



International Experience

80. The Program's technical soundness is also founded in relevant international experience that has proven to be effective in reducing stunting. This includes the experiences of:

- **Peru:** In 2005, the Peruvian government launched the National Strategy for Food and Nutrition Security, which aimed to reduce malnutrition and stunting through convergence actions and a range of interventions, including improved access to healthcare and nutrition education. According to a study published in *The American Journal of Clinical Nutrition*, the prevalence of stunting among children under five in Peru decreased from 28.5% in 2005 to 13.6% in 2015.⁹⁹
- **Brazil:** In the early 2000s, the Brazilian government implemented a range of convergence policies to address malnutrition, including the Bolsa Familia program, which provides cash transfers to poor families on the condition that their children attend school and receive regular health check-ups. These policies have been credited with contributing to a significant reduction in stunting rates in Brazil. According to a study published in *The Lancet Global Health*, the prevalence of stunting among children under five in Brazil decreased from 19.6% in 2006 to 7.7% in 2016.¹⁰⁰
- **Rwanda:** In 2010, the Rwandan government launched the National Multisectoral Plan of Action for Nutrition, which aimed to reduce the prevalence of stunting from 44% in 2010 to 22% in 2015. The plan included a range of interventions, such as the provision of nutrient-rich foods, the promotion of exclusive breastfeeding, and the implementation of hygiene and sanitation programs. According to a study published in *PLOS ONE*, the prevalence of stunting among children under five in Rwanda decreased from 44% in 2010 to 38% in 2015.¹⁰¹
- **Ethiopia:** The Ethiopian government's Health Extension Program, launched in 2003, aimed to improve access to healthcare and nutrition services, particularly in rural areas. The program included a focus on maternal and child nutrition and has been credited with contributing to a significant reduction in stunting rates in Ethiopia. According to a study published in *The Lancet Global Health*, the prevalence of stunting among children under five in Ethiopia decreased from 57.6% in 2000 to 38.4% in 2016.¹⁰²

81. The next chapter of the technical assessment examines the soundness of each results area proposed under the PforR Program.

⁹⁹ Penny, M. E., Creed-Kanashiro, H. M., Robert, R. C., Narro, M. R., Caulfield, L. E., Black, R. E., & the Child Undernutrition Study Group. (2015). Effectiveness of an educational intervention delivered through the health services to improve nutrition in young children: a cluster-randomized controlled trial. *The American Journal of Clinical Nutrition*, 101(2), 308-317.

¹⁰⁰ Victora, C. G., Aquino, E. M. L., Carmo Leal, M., Monteiro, C. A., Barros, F. C., & Szwarzwald, C. L. (2018). Maternal and child health in Brazil: progress and challenges. *The Lancet Global Health*, 6(2), e169-e181.

¹⁰¹ Ministry of Health Rwanda. (2010). National Multisectoral Plan of Action for Nutrition 2010-2015

¹⁰² Hoddinott, J., Malapit, H., Behrman, J. R., Flores, R., Martorell, R., & Stein, A. D. (2018). The consequences of early childhood growth failure over the life course. *The Lancet Global Health*, 6(12), e1262-e1264.

STRATEGIC RELEVANCE AND TECHNICAL SOUNDNESS BY RESULTS AREA

Results Area 1: Strengthening Leadership, commitment, and accountability for stunting reduction

Situation

82. Unified center of government leadership is critical to ensure (i) stunting remains politically salient, (ii) ensure efficient management of resources for program delivery, and (iii) maintenance of a consistent focus on outcomes, accountability, and performance-recognition. Pillar 1 of *Perpres 72* focuses on “improving leadership commitments and visions in ministries/agencies, provincial Regional Governments, district/city Regional Governments and Village Governments”. There are several core elements of an effective center of government approach: (a) cascading political commitment at all levels of government to implement *Perpres 72* within their area of responsibility, (b) planning and budgeting systems that link resources to *Perpres 72* components to planned targets, evaluation of program performance across different ministries, and monitoring of implementation progress that identifies bottlenecks so that they can be followed up and resolved, and (c) robust monitoring of stunting reduction performance, disseminated publicly, to ensure high level accountability for program achievement.

83. There is already considerable political commitment to strengthen national leadership and establish convergence instruments – the key issue will be to buttress this commitment with robust institutional arrangements. *Perpres 72* provides high level political authorization for the core center of government components envisaged in the program. Leadership of the national stunting reduction program at the central level by *Setwapres and Bappenas* is indicative of the high priority accorded to this agenda as they utilize their convening power to coordinate stunting reduction actions across other line ministries including BKKBN, MoH, MoHA, MoECRT, and MoV.

84. Currently, multiple national stunting summit are organized by different entities creating fragmented leadership and accountability for stunting reduction. While *Perpres 72* lays out clear requirements for unified leadership, including through the planning of one (1) single harmonized national coordination meeting, recent years have seen the organization of multiple national stunting summits by different entities. A key area for strengthening stunting reduction leadership therefore will involve providing incentives for the unification of coordination efforts across ministries, departments, and partners for a single harmonized national Stunting Summit.

85. Sub-national leadership, including at the provincial and district levels, is also a key driver of stunting reduction in Indonesia. Sub-national leaders have a better understanding of local needs and challenges, which is essential in developing effective strategies to reduce stunting. They have knowledge of local customs, traditions, and practices, and can leverage this understanding to develop culturally appropriate interventions to reduce stunting. Additionally sub-national leaders are responsible for the allocation of resources and can direct resources towards stunting reduction efforts. They can ensure that funding is allocated to critical areas such as nutrition education, access to clean water and sanitation, and health services, and that policies are implemented effectively at the local level. Sub-national leaders are also well-positioned to engage with communities to promote behavior change and encourage the adoption of healthy practices. They can work with community leaders and organizations to educate

parents and caregivers on the importance of proper nutrition, hygiene, and health services for children.

86. At present, there are limited district level incentives rewarding good and climate-sensitive performance on stunting reduction. Financial incentives can play a crucial role in reducing stunting at the district level in Indonesia. Incentives are likely to (i) Encourage the prioritization of stunting reduction: Districts may have competing priorities and limited resources, making it difficult to allocate funds to stunting reduction. Financial incentives can motivate districts to prioritize stunting reduction by offering additional funding for programs and initiatives focused on reducing stunting. (ii) promoting accountability: Financial incentives can be tied to specific targets and outcomes, such as reducing stunting rates by a certain percentage. This can encourage districts to be more accountable and transparent in their efforts to reduce stunting and ensure that they are making progress toward their goals, (iii) Encourage innovation: Financial incentives can also encourage districts to come up with innovative solutions to address stunting, such as developing new approaches to nutrition education or partnering with local businesses to improve access to healthy food, and (iv) increase community engagement: Financial incentives can also be used to encourage community engagement in stunting reduction efforts. For example, districts could offer incentives to community organizations that promote healthy eating habits or provide support to families affected by stunting.

87. Budget planning systems for stunting reduction in Indonesia involve a complex process of budget allocation, monitoring, and evaluation. These systems involve collaboration between different government agencies, as well as engagement with local communities and stakeholders to ensure that programs are responsive to local needs and priorities. One of the key components of budget planning is the allocation of funds to various initiatives such as nutrition programs, health services, and education programs.

88. While new stunting reduction objectives have been put in place through Perpres 72, budget planning for stunting reduction at the national level has not yet been fully adjusted to align with target results. Results orientation is an important aspect of budget planning as it helps ensure that public resources are used effectively and efficiently to achieve desired outcomes. By incorporating a results-oriented approach into budget planning, the GoI can prioritize and allocate resources to programs and initiatives that are most likely to produce the desired outcomes. This approach can help ensure that resources are not wasted on programs or projects that are unlikely to achieve their intended goals or produce measurable results.

89. The government has further made substantial progress and innovations on budget tagging, tracking and evaluation, however Bappenas and the MoF still face several challenges in driving better nutrition results through national-level planning and budgeting. Indonesia's highly engineered and orderly planning and budgeting system has not historically functioned as effectively as it could to drive the achievement of national priorities, however progress through the first phase of INEY serves as strong proof that strengthened planning and budgeting is effectiveness in motivating stunting reduction. Bappenas and the MoF have made good progress to track and evaluate national spending on priority nutrition interventions in a thematic multisectoral program, further demonstrating that budget tagging can be implemented in a highly complex and fragmented public financial management system. However, Bappenas and MoF still face a number of challenges to continue strengthening value-for-money and driving results in national-level planning and budgeting. Effective management of medium-term and annual planning and budgeting processes is the second core element of strengthened national leadership for stunting reduction and should be prioritized.

Soundness of INEY Phase 2 Results Area 1

90. RA1 aims to sustain and deepen elements of the whole-of-government approach for stunting reduction. RA1 focuses (a) cascading political commitment, backed by accountability mechanisms, at all levels of government to implement *Perpres 72* according to respective responsibilities; (b) planning and budgeting systems that link resources to targets and outcomes while increasing the links between climate change and nutrition; and (c) monitoring of implementation progress, evaluation of program performance, and dissemination of annual stunting data.

91. RA1 utilizes a center-of-government approach that ensures that stunting remains politically salient, resources are managed to ensure program delivery, and there remains a consistent focus on performance and outcomes. The results area is founded in the core elements of an effective center of government approach which include (i) cascading political commitment at all levels of government to implement the *Perpres 72* within their area of responsibility; (ii) planning and budgeting systems that link resources for *Perpres 72* components to planned targets, evaluation of program performance across different ministries, and monitoring of implementation progress that identifies bottlenecks so that they can be followed up and resolved; and (iii) robust monitoring of stunting reduction performance, disseminated publicly, to ensure high level accountability for program achievement.

92. Reductions in stunting require commitment of political leaders at all levels and across sectors to implement key nutrition specific and nutrition sensitive interventions and converge these at the household level. Despite strong leadership, the central level has limited ability to secure political commitments, support debottlenecking, systematic centralized monitoring, while districts are not committed to reduce stunting. Driving results from center in “top to bottom” political leadership, supported by high level monitoring and support for debottlenecking across sectors, will be most effective in accelerating stunting reduction. The objectives of DLIs under RA1 are to: (i) secure the commitment of local government leaders to accelerate stunting reduction and reward good performance; (ii) create an enabling environment for districts to achieve good performance, (iii) help establish the enabling environment for villages to prioritize spending on nutrition interventions. The RA also encourages SoVP, in collaboration with Bappenas, MOHA, MOV, BKKBN, Kemenko PMK, and MOH, to prepare and convene national stunting summits.

93. Driving results through unified “top to bottom” political leadership and accountability is a key lesson learned from countries that have successfully tackled nutrition. *Perpres 72* proposes to achieve this through its first Pilar which focuses on improving leadership commitments and visions in ministries/agencies, provincial governments, district/city governments, and village governments. At the national level, the key convergence instrument that stimulates this commitment is an Annual National Stunting Summit hosted by the President or Vice President, which will bring together district and national leaders to (i) jointly commit to achieve annual stunting reduction targets, and to align district plans and budgets to the priority nutrition interventions and priority geographic locations; (ii) publicize performance information and reward high-performing districts and (iii) disseminate good practices.

94. This first DLI under this RA (DLI 1) promotes commitment, performance, and accountability of district & provincial leaders to accelerate stunting prevention. The DLI will be oriented toward unifying the efforts across ministries, departments, and partners for a single harmonized moving away from multiple national coordination meetings (Rakornas, Rakortek, Stunting Summit) to a harmonized meeting

demonstrating stronger high-level coordination in the Perpres 72 context and the sustained commitment and leadership of national, provincial, and district leaders. Secondly, this DLI will now move its focus and attention from advocacy and visibility for the stunting agenda to an accountability and performance-recognition objective. This DLI is closely related to DLIs 8 and DLI 10 and will incentivize the national government to create the enabling environment for provinces and districts to achieve good performance in accelerating stunting reduction. DLI 1 will continue to create demand and peer-benchmarking among districts for increasing budget allocations and incentivize districts for implementing nutrition-specific and sensitive interventions and the convergence actions. Following the provisions of PerPres 72/ 2021, all key stakeholders jointly organize a single harmonized national coordination meeting (Rakornas, Rakortek, Stunting Summit) demonstrating strong high-level coordination and the sustained commitment and leadership of national, provincial, and district leaders. This DLR will also help focus attention on accountability and performance-recognition through the activities included in the national meeting that acknowledges district and provincial performance on budget allocations and implementation of nutrition-specific and sensitive interventions and the convergence actions.

95. Further, RA1 recognizes that efficient and results-oriented budget planning can have a significant impact on improving nutrition and reducing stunting outcomes in communities. By allocating resources effectively and efficiently, budget planning can address specific needs and priorities to maximize impact on stunting reduction. For example, prioritizing nutrition interventions can be an effective way to improve nutrition outcomes and prevent malnutrition. Adequate funding for nutrition-specific interventions such as food supplementation, micronutrient fortification, and breastfeeding promotion can help reduce stunting and prevent malnutrition.¹⁰³

96. The second DLI in RA1 (DLI 2) focuses on incentivizing results-based and climate-responsive nutrition planning and budgeting systems. This DLI will support the GOI to introduce the climate change improve the results orientation of national spending on priority nutrition interventions enhancing the utilization of expenditure evaluations in nutrition planning and budgeting towards medium-term strategic objectives (Perpres 72/2021, RPJMN, etc.). Following Indonesia's PFM principle of "Money Follow Program" and leveraging progress from budget tagging implementation, DLI 2 will update the 2018 budget tagging guidelines, including detailed procedures to utilize evaluations in regular planning and budgeting; employ an evidence-based rating instrument to enhance performance review recommendations; pilot location tagging as a regular budget tagging activity; and link to integrated monitoring and evaluation to inform planning and budgeting of the stunting reduction program. This DLI, which pays particular attention to the strong linkage between climate change and health and nutrition outcomes including stunting, will build upon the work of MoF and Bappenas under INEY to incentivize the government to strengthen the results-orientation of national level nutrition planning and budgeting processes. Further, the DLI will support Bappenas, as the lead for nutrition-related policy and planning, to integrate the GOI objectives related to climate change adaptation and mitigation and stunting reduction/nutrition in a meaningful and actionable manner. The DLI will support two main elements: (a) given the link between climate and stunting in Indonesia, the development of a Climate and Nutrition national Adaptation Plan

¹⁰³ Hossain, M. I., & Islam, A. (2018). Impact of increased investment in nutrition interventions on children's nutritional status in Bangladesh. *Journal of health, population, and nutrition*, 37(1), 9.

Ngure, F. M., Reid, B. M., Humphrey, J. H., Mbuya, M. N., Pelto, G., & Stoltzfus, R. J. (2014). Water, sanitation, and hygiene (WASH), environmental enteropathy, nutrition, and early child development: making the links. *Annals of the New York Academy of Sciences*, 1308(1), 118-128.

Ramani, K. V., Sarkar, S., & Balasubramanian, K. (2017). Government policies and child undernutrition in India: analysis of national family health survey 2005–06 and 2015–16. *BMC public health*, 17(1), 914.

(CNAP); and (b) publication of annual budget performance evaluations and use of the evaluation in the planning cycle. The DLI will be led by Bappenas Directorate of Health and Community Nutrition and MoF Directorate General of Budget (Direktorat Jenderal Anggaran, or DJA).

97. RA1 further recognized the importance of integrated M&E systems to achieve better stunting outcomes. To accelerate stunting reduction efforts in the country, an integrated monitoring and evaluation (M&E) system is crucial because it (i) allows for the systematic collection and analysis of data on stunting prevalence, interventions, and outcomes. This helps to track progress, identify gaps in implementation, and adjust strategies as needed. For example, if data shows that a certain region or population group has a high prevalence of stunting, interventions can be targeted to address their specific needs, (ii) ensure accountability and transparency in stunting reduction efforts. By tracking progress and outcomes, it becomes easier to hold stakeholders accountable for their actions and results, (iii) provides the data and evidence needed to make informed decisions about policies, programs, and interventions. This helps to ensure that resources are allocated to interventions that are most effective in reducing stunting, and (iv) provides a mechanism for continuous improvement. By regularly monitoring and evaluating interventions, stakeholders can identify areas for improvement and make necessary adjustments.¹⁰⁴

98. The third DLI in RA1 (DLI 3) supports integrated and climate-responsive monitoring and evaluation (M&E) systems for the acceleration of stunting reduction. DLI 3 supports Pillar 5 of the National Strategy for Acceleration of Stunting Reduction to build an effective stunting monitoring and evaluation system as mandated by *Perpres 72*. The DLI incentivizes key M&E functions, such as: (a) assessing progress and effectiveness of implementation of activities for stunting reduction; (b) generating data for feedback to improve quality of services; (c) informing planning and budgeting processes; and (d) improving accountability of national and subnational stakeholders for use of inputs for impact on stunting outcomes. Results center on three areas: (i) continuing the annual stunting survey at national and district levels with increased attention to design and analytical methods; (ii) issuing new M&E guidelines and technical guidance on use of indicators and data sources, along with a pilot of the same; (iii) ensuring the M&E system delivers semi-annual and annual reports for program monitoring, debottlenecking, and learning, for which all data are available on the integrated dashboard. In enhancing climate sensitivity of the stunting program, the M&E system will aim to link stunting data with meteorological data in order to further document the links between climate change and malnutrition in Indonesia and inform the CNAP and its implementation. DLI 3 will be closely related to DLI 2 (which will support the monitoring and evaluation of financing data as well as climate-responsive nutrition planning and budgeting); DLI 5 (which will strengthen the use of the administrative data systems used for anthropometric surveillance); DLI 8 (which will integrate the district role in MonEv into the district convergence guidelines); and DLI 9 (which will build the capacity of frontline village actors to improve quality of data collection and reporting).

Results area 2: Delivery and quality of specific and sensitive interventions

Situation

¹⁰⁴ National Institute of Health Research and Development. (2020). Basic Health Research 2018.

World Bank. (2019). Indonesia - Accelerating Stunting Reduction Program.

World Health Organization. (2016). Monitoring and Evaluating Progress towards Universal Health Coverage in Indonesia.

99. Indonesia has made significant progress in the delivery of nutrition-specific and sensitive interventions to reduce stunting among children. The government of Indonesia has implemented various programs and policies to address the problem of stunting, with a focus on improving maternal and child health, nutrition, and sanitation. One of the key initiatives implemented in Indonesia is the National Nutrition Communication Strategy, which aims to improve nutrition knowledge, attitudes, and practices among the general population, including mothers and caregivers. This strategy includes the dissemination of nutrition education materials and the use of mass media to raise awareness about the importance of proper nutrition for children's growth and development.¹⁰⁵ Another important initiative is the Integrated Health Post (Posyandu) program, which provides basic health services, including nutrition education and growth monitoring, to children under five years old and pregnant women in the community. This program has been successful in improving the nutritional status of children and reducing the prevalence of stunting in Indonesia.¹⁰⁶ The government of Indonesia has also implemented the National Food Fortification Program, which aims to improve the nutritional quality of staple foods, such as rice and flour, by adding essential vitamins and minerals. This program has been successful in reducing micronutrient deficiencies and improving the health and nutrition outcomes of the population.¹⁰⁷ In addition, the government has invested in improving access to clean water and sanitation facilities in rural areas, where the prevalence of stunting is higher. This has been done through the National Drinking Water Supply Program and the Community-Based Total Sanitation Program, which aim to increase access to clean water and improve hygiene and sanitation practices in communities.¹⁰⁸ Progress has also been achieved in (i) establishing enabling environment to implement enhanced nutrition-sensitive materials to ECED educators at the village level; (ii) successful nutritional enhancement of Program Sembako food assistance program that reached 18 million beneficiaries in 2020, with ongoing work to improve monitoring and implementation quality; and (iii) established enabling environment to improve capacity of districts to design and implement locally-adapted IPC strategies. These achievements have been augmented through support of the IPF components of Phase 1 whereby SoVP and Bappenas have engaged the implementing ministries to facilitate cross-ministerial coordination, conduct analysis to debottleneck the interventions, provide technical assistance to improve the design of interventions, and review performance/operationalize the synchronization of sectoral planning and budgeting.

100. Guidelines were also developed to improve the quality of frontline nutrition services. In 2020 and 2021, WB conducted a review to improve the quality of frontline nutrition services with inputs from Setwapres, MOH, and UNICEF. In 2021, MOH followed up with developing the guideline and supervision guidance on management of nutrition specific interventions at Puskesmas (Supported by INEY Phase 1 via Setwapres). In 2022, MOH launched the guideline on management of nutrition specific interventions at Puskesmas level in National Nutrition Day in January 2022. The socialization and dissemination of the guideline and supervision guidance on management of nutrition specific interventions at Puskesmas to 34 Provinces and all District/Cities also was implemented in August 2022. Later in the year, Setwapres and MOH supported by INEY Phase 1 conducted a cascade orientation of the two guidelines to 34 Provinces and 6 priority districts in November 2022.

101. Despite the progress made in addressing stunting through specific and sensitive interventions, there are still gaps in nutrition-sensitive education and nutrition-specific interventions that hinder the reduction of stunting in the country. One major gap is the limited coverage and quality of nutrition-

¹⁰⁵ UNICEF. (2021). Stunting in Indonesia.

¹⁰⁶ World Bank. (2016). Reducing Stunting in Indonesia: Investment Case.

¹⁰⁷ World Bank. (2016). Reducing Stunting in Indonesia: Investment Case.

¹⁰⁸ UNICEF. (2021). Stunting in Indonesia.

sensitive education for mothers, caregivers, and adolescents. While programs such as the Integrated Health Post (Posyandu) program provide nutrition education to communities, there is still a need for targeted and culturally sensitive education on infant and young child feeding practices, dietary diversity, and hygiene and sanitation practices.¹⁰⁹ Similarly, there are several gaps in nutrition-specific interventions that are hindering stunting reduction in Indonesia. These gaps are related to the delivery and quality of nutrition-specific interventions aimed at addressing malnutrition in children. One of the key gaps is the limited coverage and quality of nutrition-specific interventions. While there are several programs and interventions in place to address malnutrition, such as the provision of nutrient supplements and treatment for malnourished children, these interventions often fail to reach the most vulnerable populations, such as those living in rural areas or in poverty. Additionally, the quality of these interventions is sometimes inadequate, with suboptimal dosages or poor adherence to treatment guidelines and protocols. Another gap is the limited access to specialized healthcare services for malnourished children. While community health centers and health posts provide basic healthcare services, including nutrition education and growth monitoring, they often lack the specialized services and equipment needed to treat severe malnutrition, such as inpatient care and specialized nutrient supplements.¹¹⁰

Soundness of INEY Phase 2 Results Area 2

102. RA 2 is designed to incentivize progress and improve the delivery of health, nutrition-specific and nutrition-sensitive interventions in *Perpres 72* that are high-impact and lacked support by existing operations and development partners.

103. RA2 recognizes that Holistic Integrative Early Childhood Development (PAUD HI) is essential for stunting reduction in Indonesia. PAUD HI is an approach that aims to promote the optimal development of young children by addressing their physical, cognitive, and social-emotional needs in an integrated and comprehensive manner. This essential is important for stunting reduction in Indonesia because it (i) promotes the development of healthy and well-nourished children by providing children with nutritious food, clean water, and sanitation facilities, and promoting healthy behaviors such as handwashing, PAUD HI can help prevent malnutrition and stunting, (ii) addresses the underlying causes of stunting including poor nutrition, inadequate healthcare, and a lack of early childhood stimulation. PAUD HI addresses these underlying factors by providing comprehensive early childhood development services that address children's physical, cognitive, and social-emotional needs, (iii) promotes early identification and intervention for children at risk of stunting. By providing regular growth monitoring and screening for developmental delays, PAUD HI can help identify children who are at risk of stunting and provide early interventions to prevent or mitigate its effects, and (iv) involves parents and caregivers in the care and education of young children. By providing parents and caregivers with education and support on how to provide optimal care for their children, PAUD HI can help ensure that children receive the nurturing and stimulating environment they need to thrive.

104. The significance of PAUD HI is highlighted in Presidential Regulation Number 72 of 2021, which calls for a National Action Plan to increase the number of ECCE units that provide quality learning and integrative holistic services. The goal is to prevent and reduce stunting rates, with a target of 70% of ECCE units offering Holistic Integrative services by 2024. Presidential Regulation of the Republic of Indonesia

¹⁰⁹ Kartasurya, M. I., et al. (2020). Contextualizing Nutrition and Early Childhood Development Interventions in Indonesia: A Scoping Review. *International Journal of Environmental Research and Public Health*, 17(16), 5914.

¹¹⁰ Kartasurya, M. I., et al. (2020). Contextualizing Nutrition and Early Childhood Development Interventions in Indonesia: A Scoping Review. *International Journal of Environmental Research and Public Health*, 17(16), 5914.

Number 60 of 2013 regulates Regulations related to PAUD HI. Its goal is to facilitate cross-sectoral cooperation. The 2020-2024 RAN PAUD HI serves as a roadmap for coordinating between the national government and district/city governments in complying with the mandate of the 2020-2024 RPJMN. This plan will provide a reference for regions preparing their Regional Action Plan (RAD) for PAUD HI. The 2020-2024 RAN PAUD HI was prepared by representatives from key Ministries and Institutions that form the PAUD HI National Task Force. They include Coordinating Ministry of PMK, Ministry of National Development Planning/Bappenas, Ministry of Home Affairs, Ministry of Health, Ministry of Education and Culture, Ministry of PPPA, Ministry of Village, Ministry of Social Affairs, Ministry of Religion, Cabinet Secretariat (Setkab), BPS, and BKKBN. Ministry Decree of Kemenko PMK no 1 in 2019 describes the formation of a Task Force at the National, Province, and District level, comprising the above multi-stakeholders. PAUD HI is run by various individuals, such as PAUD teachers, Posyandu Kader, PKK, BKB kader, KPM, PKH facilitators, PD/PLD, Bunda PAUD, and more. Funding for these activities may come from various sources, including APBN, APBD, Village Fund, Grant and Loan from abroad/PHLN, Assistance, CSR, Grants, and the community. Kemenko PMK and MoECRT are responsible for achieving this DLI. As of April 2023, it seems that around 15,450 (7% of the total) out of around 208,500 PAUD centers have joined the PAUD HI program. PAUD HI participant PAUD centers are located in 150 (29% of the total) of the 514 Indonesian districts.

105. RA 2 also recognizes that in-school adolescents are a key target group for nutrition action programs as they are in a critical stage of growth and development. Adolescent nutrition is closely linked to stunting reduction, as proper nutrition during this critical period can prevent the long-term effects of malnutrition, including stunting. Several studies have demonstrated the importance of adolescent nutrition in stunting reduction. For example, a study published in *The Lancet* found that improving adolescent nutrition could reduce stunting by up to 20% and could have a significant impact on reducing the global burden of stunting.¹¹¹ Another study published in the *Journal of Nutrition Education and Behavior* found that nutrition education programs targeted at adolescents can lead to improvements in their dietary habits and nutritional status.¹¹² Adolescents have high nutrient requirements, yet their diets are often inadequate, leading to malnutrition. In Indonesia, the prevalence of anemia among adolescents is high, affecting around 35% of girls and 22% of boys, according to a study published in the *Journal of Nutrition and Metabolism*. Anemia can impair cognitive function and reduce school performance, ultimately hindering adolescents' prospects.¹¹³ Nutrition action programs for in-school adolescents can help improve their diets and reduce the prevalence of stunting in Indonesia. These programs may include school-based feeding programs, nutrition education, and behavior change communication campaigns. For example, a study published in the *Journal of Nutrition Education and Behavior* found that a school-based nutrition education program improved adolescents' knowledge of healthy eating and increased their consumption of fruits and vegetables.¹¹⁴

¹¹¹ Bhutta, Z. A., Das, J. K., Rizvi, A., Gaffey, M. F., Walker, N., Horton, S., Webb, P., Lartey, A., Black, R. E. (2013). Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost? *The Lancet*, 382(9890), 452-477.

¹¹² Hossain, M., Choudhury, N., Islam, N., Islam, S., Hossain, A., Mahfuz, M., Haque, R., Guerrant, R. L., Petri, W. A., Jr., Mamun, A. A. (2017). Adolescent Nutrition and Health in Bangladesh: Trends and Determinants. *Journal of Nutrition Education and Behavior*, 49(10), 818-826.

¹¹³ Wibowo, N., Harijanti, N., Riyadi, H., & Sulastri, E. (2019). Prevalence and determinants of anemia among adolescents in Indonesia. *Journal of Nutrition and Metabolism*, 2019, 3096794.

¹¹⁴ Sekarsari, O., Shankar, A. V., & Zulaika, G. (2017). School-based nutrition education intervention to improve adolescents' knowledge and practice of healthy eating: A randomized controlled trial in Indonesia. *Journal of Nutrition Education and Behavior*, 49(5), 412-418.

106. The first DLI under RA2 (DLI 4) incentivizes the delivery of nutrition interventions through the education sector. DLI will be focused on the role of the Ministry of Education, Culture, Research and Technology (MoECRT) to implement the stunting reduction agenda in early childhood and for adolescents in coordination with MOH, MoV and other key stakeholders. INEY's current DLI 4 incentivizes the cascade training of nutrition-sensitive training of ECED teachers, whereby the first DLI element promotes national level training of district master trainers, while the second element monitors the training of PAUD (ECED center) teachers at the village level. While good progress was made in implementation of the first element under INEY phase 1, there was very limited progress on ensuring village level PAUD teachers were trained. Moreover, the MoECRT has not carried out an assessment to determine the impact of the teacher training on the interaction with parents and students and ultimate outcomes. Discussions are therefore ongoing to monitor the scale up of holistic, integrated ECED (*PAUD-HI*) which incorporates six elements of child development and monitor the certification of *PAUD* as *PAUD-HI*. Additionally, this DLI will expand its scope with the second DLI to include support to in-school adolescents with health and nutrition services through the *Aksi Bergizi* program. The DLI would incentivize the local government to support the financing and implementation of *Aksi Bergizi* in line with national guidance issued by MoECRT, Ministry of Religious Affairs (to ensure the program is delivered in religious schools), MoH, and MoHA, focused on junior and secondary high schools in the 12 priority provinces with the highest burden of stunting.

107. Further RA 2 recognizes that to achieve stunting reduction, nutrition-specific interventions must be implemented at sufficient scale (90%). However, coverage for many nutrition specific interventions remains low; further, stunting reduction will require improving access, but more importantly the uptake of the practices by caregivers, families and communities that these interventions entail. Assessment of MOH found insufficient focus on Behavioral Change Communication (BCC) including interpersonal communication (IPC), with unclear BCC strategies and weak IPC implementation between midwives, cadres and first 1,000-days households and limited focus on height measurement. Strengthening Behavior Change Communication (BCC), which includes interpersonal communication (IPC), mass communications, advocacy, community mobilization coupled with strategic use of data, can help Indonesia motivate behavioral change and achieve better nutrition outcomes.

108. There is a need for MoH to develop the necessary evidence, guidelines, and tools to provide technical leadership for the stunting reduction agenda along with efforts to improve maternal and child nutrition more broadly. Therefore, a micronutrient status survey is needed to generate the evidence base for public health nutrition policy and nutrition priority programs in the country (the last national micronutrient survey was conducted in 1992). MoH need to update key technical guidelines for maternal micronutrient supplementation in the shifting from IFA to multiple micronutrient supplementation, and supplementary food for women and children which is commonly financed at the *Puskesmas* and village level but is of increasingly poor dietary habits. Moreover, MoH needs to develop and implement a robust training package for anthropometric data collection at the village level, which is currently of poor consistency and low quality, though increasingly used for program decision making by local governments. Finally, MoH has developed the guideline for nutrition specific management at *Puskesmas* but still needs to roll out a package of training and supervision tools.

109. The second DLI under RA2 (DLI 5) promotes strengthening evidence-based and climate responsive nutrition specific interventions. In the Indonesian context where undernutrition is climate-sensitive, this DLI will support the Ministry of Health and Bappenas to establish the evidence base, guidelines, standards, and frontline capacity for the delivery of the high impact, nutrition-specific interventions to reduce climate vulnerability and enhance adaptation. It will support the Directorate of Nutrition and MCH to update technical guidelines for Multiple Micronutrient Supplementation (MMS) in

pregnancy (to support the shift from IFA to MMS) and for local complementary food (MP-ASI). MMS is the practice of providing pregnant women with a daily supplement containing 15 essential vitamins and minerals. These supplements are designed to help fill the gaps in a woman's diet and to improve her overall health and well-being. MMS is a safe and effective way to improve the diets and nutritional status of pregnant women.^{115,116,117} Taken daily in pregnancy, MMS can improve anemia and are 13 percent more effective at reducing low birthweight than iron and folic acid supplements (IFA) alone. Among women who are suffering from underweight and anemia, the benefits of MMS are even greater – a 19 percent reduction in the prevalence of low birthweight.¹¹⁸ At a unit cost of US\$0.01-0.02 per tablet, MMS are also good value for money.¹¹⁹ Cost benefit analyses across different settings consistently show a high return on investment; in Bangladesh, India and Pakistan, MMS can avert 2–3 times more disability-adjusted life years (DALYs) than IFA and have a higher return on investment, ranging from a few hundred to a few thousand dollars.¹²⁰ The DLI will also support the MoH to develop and implement a training package for anthropometric data collection at the village level in related with data quality nutrition surveillance system (e-PPGBM or other as endorsed by MOH). Finally, the DLI will support MOH to take regulatory action on production of fortified rice kernels in Indonesia and Bappenas design and issue a climate sensitive action plan to scale up rice fortification in Indonesia. The promotion of local complementary food supplementation for infants and young children under DLR5.1 will enable support for a climate-resilient food system in Indonesia by supporting short supply chains which are recommended for both climate adaptation – by promoting more locally available nutritious foods and ensuring a transport process that is less vulnerable to climate shocks – and climate mitigation purposes – by ensuring less transport, cooling, and storage-related greenhouse gas emissions. In addition, multiple micronutrient supplementation is an enhancement over the standard of Iron-Folic Acid supplementation and will increase maternal micronutrient sufficiency and decrease vulnerability to impacts of climate related food and nutrition insecurity, since that population group is particularly vulnerable to climate risks.

Results area 3: Service delivery and convergence at district/city level for stunting reduction

Situation

¹¹⁵ Bourassa et al. 2019. Review of the evidence regarding the use of antenatal multiple micronutrient supplementation in low- and middle-income countries. *Annals of the New York Academy of Science*, May 2019;1444(1):6–21.

¹¹⁶ Keats EC, Haider BA, Tam E, Bhutta ZA. Multiple-micronutrient supplementation for women during pregnancy. *Cochrane Database Syst Rev*. 2019 Mar 14;3(3):CD004905. doi: 10.1002/14651858.CD004905.pub6. PMID: 30873598; PMCID: PMC6418471.

¹¹⁷ UNICEF. 2022. Multiple-micronutrient supplementation: An approach to improving the quality of nutrition care for mothers and preventing low birthweight. <https://www.unicef.org/media/123271/file>

¹¹⁸ Bourassa et al. 2019. Review of the evidence regarding the use of antenatal multiple micronutrient supplementation in low- and middle-income countries. *Annals of the New York Academy of Science*, May 2019;1444(1):6–21.

¹¹⁹ Kashi et al. 2019. Multiple Micronutrient Supplements Are More Cost-Effective than Iron and Folic Acid: Modeling Results from 3 High-Burden Asian Countries. *J. Nutr.*, 2019, 149 (7), 1222–1229. (4)

¹²⁰ Engle-Stone et al. 2019. Replacing Iron-Folic Acid with Multiple Micronutrient Supplements among Pregnant Women in Bangladesh and Burkina Faso: Single-Year Assessment of Costs, Impacts, and Cost-Effectiveness. *Ann. N. Y. Acad. Sci.*, 2019, 1444 (1), 35–51.

110. High quality service delivery and convergence of interventions at the district and city level is critical for the successful implementation of stunting programs in Indonesia. Indonesia has a highly decentralized system of government under which most service delivery is the responsibility of local governments. Generally, nutrition-specific and nutrition-sensitive interventions are the responsibility of local governments. The government has established a system of community health centers (Puskesmas) at the district level, which provides essential health services, including nutrition counseling, growth monitoring, and immunization. These centers also play a vital role in identifying and referring children with stunting to higher-level health facilities.

111. Pillar 3 of Perpres 72 stunting focuses on improvement of convergence of health as well as nutrition specific and nutrition sensitive interventions at the national and sub-national levels. Particularly, Perpres 72 promotes (i) the convergence of planning and budgeting to carry out activities that improve the types, coverage, and quality of nutrition interventions at national and subnational levels and (ii) the convergence of efforts to prepare for family life. In INEY's first phase, all 514 district/city leaders signed memoranda of understanding to address stunting and implement eight Convergence Actions. Perpres 72 proposes to continue the mobilization and accountability of district leaders by: engaging Bappeda, the local planning agency, to undertake analysis of key drivers of stunting in the local area and convene sector ministries to integrate stunting reduction in district plans, targets and budgets; implementing systems of results-based transfers to encourage continued progress; and to monitor and evaluate district performance.

112. PHC services in Indonesia, which include health and nutrition services, are delivered through a network of health posts and community health centers in networks with significant community participation, namely Puskemas² in each district and Posyandu³ in each village. The public primary care system also includes Pustus - auxiliary health centers for outreach activities in remote regions, Polindes - village-level delivery posts (often the home of the village midwife) and Poskesdes - village health posts. Frontline service delivery in Posyandu is mostly carried out by volunteer female village *kaders* who are not part of the formal health system.

113. Confronted with significant PHC service limitations and deepened spatial and socioeconomic inequalities during the COVID-19 pandemic, MoH carried out a gap assessment with the ambition to improve the quality of PHC across the whole of Indonesia. The assessment identified the following key weaknesses:

- (i) lack of standardization and integration of health services across the primary care facilities;
- (ii) unavailability of critical infrastructure, medical equipment, and consumables;
- (iii) lack of suitably qualified and trained staff at the Puskesmas and Posyandu level capable of providing a broader set of essential health services in each of Indonesia's 85,000 villages with higher frequency than typically associated with Posyandus; and
- (iv) limited health surveillance capacity at the very lowest tier (Puskesmas-level) of national health laboratory system (Tier 1 of Indonesia's "Labkesmas").

As such, PHC strengthening is the first of the six pillars of the Health System Transformation Agenda set forth by the Government of Indonesia. PHC strengthening is focused on improving the quality of primary health care services through various initiatives. The figure below describes the four key components of this pillar, which focuses on population education across seven campaigns which include: immunization, nutrition, sports, non-smoking, sanitation, medical compliance, and disease screening, alongside prevention efforts and improving the capacity and capability of primary care. This capacity and capability improvement focuses both on primary care facilities as well as the equipment, medical goods, and the human resource capacity of the health workers needed to operate them.

Figure 9: Pillar 1 of the Indonesian Health System Transformation Agenda – PHC

Population education	Primary prevention	Secondary prevention	Improving capacity and capability of primary care
<ul style="list-style-type: none"> • seven main campaign including immunization, balanced nutrition, spots, non-smoking movement, sanitation, disease screening, and medical compliance 	<ul style="list-style-type: none"> • Adding the scope of 14 routine immunization to all regions of Indonesia 	<ul style="list-style-type: none"> • Health screening for 14 leading diseases causing deaths in each age target • stunting screening and improving ANC maternal and child health 	<ul style="list-style-type: none"> • Developing Puskesmas in 171 sub-districts • Provision of 40 essential medicines • adding health workers in primary care

114. A paradigm shift is expected to take place within the functions of the Puskesmas, where services will no longer focus on disease management but will focus on delivering a package of health services catered to patient needs across the lifecycle. Previously, Puskesmas functioned as a center of community health development fostering community participation in addition to providing comprehensive health services such as basic healthcare, maternal and child health, track infectious diseases such as COVID-19 and provide immunization. MoH regulates health services at the Puskesmas level through a Ministerial Decree, known as Permenkes. Permenkes 43 (2019) outlines the establishment and operation requirements of Puskesmas, including guidelines for management, staffing, equipment, services, accreditation, and certification. The regulation highlights the significance of collaboration between Puskesmas and other stakeholders to improve primary health care delivery. Currently, Permenkes is undergoing a revision process to incorporate the PHC transformation agenda and ensure its implementation. Clusters will be created integrating all programs with focus on the life cycle approach, so that services at the Puskesmas will be more comprehensive. The four clusters at the Puskesmas will be categorized by:

- a) Cluster 1: Puskesmas Management,
- b) Cluster 2: Pregnant Women, Toddlers, Adolescents,
- c) Cluster 3: Productive age and the elderly, and
- d) Cluster 4: Disease Transmission Management/Surveillance including the Puskesmas laboratory

115. Ministry of Health Regulation No.99/2015 specifies the accreditation criteria that the National Health Insurance Agency (BPJS Kesehatan) should consider in contracting with primary health care providers, including Puskesmas. In addition, Presidential Regulation Number 19/2016 reiterates that all Government health facilities must meet the standard requirements to participate in the National Health Insurance Scheme (JKN). Ministry of Health Regulation Number 71/2013 further specifies that all hospitals that have a contract with BPJS-K must have a certificate of accreditation. The main credentialing criteria listed in the above regulations relate to a) human resources; b) the completeness of facilities and infrastructures; c) the scope of services; and d) service commitment (e.g., opening hours, no balance billing for JKN members, etc.). Accreditation of PHC facilities governed with the enactment of MOH regulation no. 46/2015, and the establishment of an Accreditation Commission for Primary Health Care Facilities (KAFKTP). While KAFKTP's current capacity is limited, the vision is to expand its capacity, attain independence (even though it is currently set up within MoH), cover both the public and private sectors, and eventually get accredited by the International Society for Quality in Health Care.

116. There are four levels of accreditation for primary health care facilities – dasar, madya, utama, and paripurna – based on the scores achieved across nine standard areas. Facilities must be re-accredited every three years and accreditation will become a prerequisite for empanelment by BPJS-K starting 2021. Currently, resources to support *Puskesmas* accreditation include financing from *DAK Fisik* to meet infrastructure standards per Minister of Health regulation No. 75/2014. Funding for implementing *Puskesmas* accreditation itself comes from *DAK non-fisik (DAK Akreditasi)* and *APBN*. The local government manages *DAK Akreditasi* and spends the money for facilitator training, workshops, *puskesmas* facilitation, pre-accreditation assessment, and accreditation survey. While public facilities have access to funds to cover the cost of accreditation, private facilities are required to cover all costs (e.g., facilitator, assessments) themselves. One important indicator for a credible accreditation system is to have an independent accreditation body implementing the system. Among the potential conflicts of interest is that MoH's aspiration to achieve their *Renstra* targets may potentially put pressure on the Accreditation Commission to help MoH in achieving the target by compromising their decision on the facility's accreditation status. This may seem to be the case judging from the large number of accredited facilities. Obtaining International Society for Quality in Health Care (ISQua) accreditation is another possible indicator of a credible accreditation system. The ISQua international accreditation program assures that accreditation standards, surveyor training programs and the external evaluator organization (in this case the Accreditation Commission), meet international best practice requirements.

117. Recent surveys show that healthcare provider's knowledge of basic health conditions is low and decreasing stressing the need to support capacity building at the Puskesmas level. Existing facility surveys show a breakdown in service delivery which happens early in the continuum of care. Maternal health, tuberculosis, and diabetes can be used as illustrative conditions to describe the shortcomings in a provider's ability to diagnose and treat conditions accurately. For maternal health, findings from the 2017 Indonesia Demographic and Health Survey and other facility health surveys done every 5-10 years show that quality is more of an issue than access. For example, while 77 percent of pregnant women received at least four antenatal care (ANC) visits, they did not receive all intended interventions during visits. Blood and urine tests – essential for diagnosing high-risk pregnancies – were carried out in only 47.6 and 38.7 percent of ANC visits, respectively, in 2017 (BPS, 2017). The state of tuberculosis care in Indonesia remains of concern. More than a quarter of the over 700,000 active TB cases went undiagnosed, and only a third were successfully treated. In 2017, close to 40 percent of TB patients at first level and 75 percent of TB patients at referral level facilities were diagnosed using clinical symptoms, not via formal diagnostic tests (e.g., rapid molecular test, sputum smear, or culture-based method). As a result, 75 percent of multi-drug resistant TB (MDR-TB) are undiagnosed, with less than 7 percent of all cases successfully treated. In addition, of the more than 11 million adults thought to have diabetes, only 21 percent were diagnosed, and only 7 percent had their diabetes under control. Even more worrisome is that diabetes knowledge among primary healthcare providers in Indonesia decreased from an already low level between 2007 and 2014.^{121,122, 123} While the availability of tests may be a limiting factor, there are even more significant concerns about the pre-service and in-service training of health workers and their adherence to protocols, suggesting inadequate quality in providing services.¹²⁴

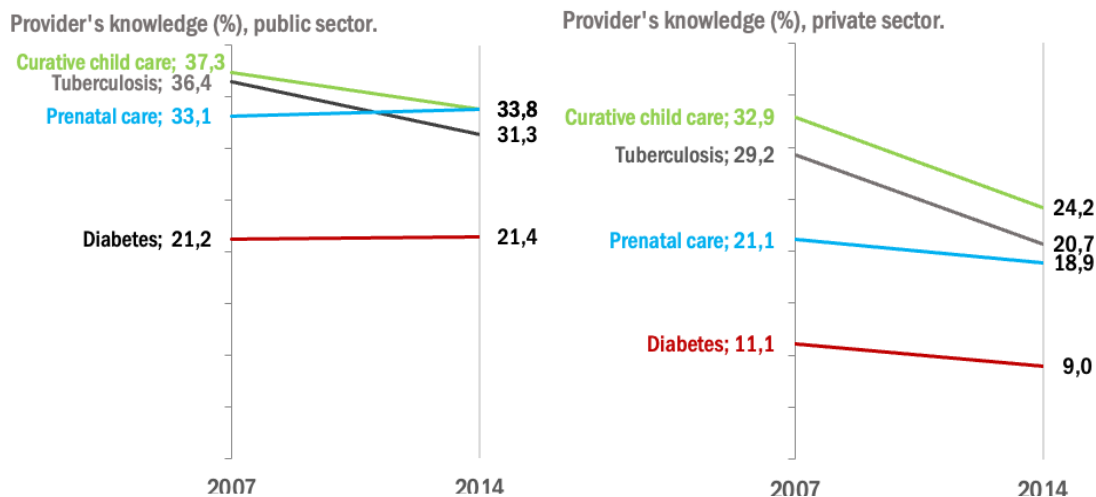
¹²¹ Stein, et al. (2020).

¹²² Indonesia Family Life Survey 2007 and 2014

¹²³ Note: Provider knowledge is measured as the percent of medical history questions asked, laboratory tests/exams recommended, and treatment suggested by the provider most likely to treat the tracer condition based on a list of items deemed essential for responding to each clinical vignette scenario.

¹²⁴ Indonesia Family Life Survey 2007 and 2014

Figure 10: Doctor's knowledge of basic health conditions is low and decreasing



Source: Indonesia Family Life Survey 2007 and 2014

118. The predominant strategy for improving the competence of health workers has been the provision of clinical guidance – however, the existing format has not been effective. MoH has consolidated the plethora of clinical guidelines into an overwhelming manual (~500 pages) for primary health care doctors (Panduan Praktik Klinis di Fasilitas kesehatan Tingkat Pertama). However, dissemination and knowledge of its existence at the front lines is lacking. The guideline is disease-based – assuming all doctors are already able to diagnose patients. It treats each condition in silos and does not account for patients with comorbidities. Finally, conditions do not have clear algorithms that provide an integrated approach to screening, diagnosing, and treating common symptoms. The effort to develop concise clinical decision support tools comprising standardized and user-friendly algorithms and checklists that provide a comprehensive and integrated approach to screening, diagnosing, and treatment of common symptoms and chronic conditions in PHC and its networks is expected to have positive effect on improving service quality, promoting patient safety, and preventing patients from falling through the cracks.

In order to achieve the ambitious stunting reduction goals set forth by INEY 2, service delivery at the district level for health and nutrition interventions need to be strengthened.

Soundness of INEY Phase 2 Results Area 3

119. RA 3 aims to strengthen service delivery and convergence at district/city level for stunting reduction through (i) improving the quality of essential health and nutrition services at Puskesmas and (ii) performance-based fiscal transfers incentivize districts to improve the coverage of essential health and nutrition services.

120. RA 3 recognizes that Puskesmas play a crucial role in reducing stunting through the delivery of various essential PHC services such as maternal and child health services, nutrition interventions, and immunization interventions. These services have been shown to lead to improved access and intake of nutritious foods and improved health-promoting behavior. The RA also recognizes that Puskesmas staff play a vital role in educating mothers on proper infant and young child feeding practices, which are critical for optimal growth and development. Puskesmas staff can also identify children who are at risk of stunting

through regular growth monitoring and provide appropriate interventions, such as referrals to specialized services and counseling on proper feeding practices. Evidence suggests that, in Indonesia, children who lived in areas with stronger primary care services were less likely to be stunted.¹²⁵ Based on these findings, efforts to address stunting in Indonesia should focus on improving maternal education, providing better sanitation, and strengthening PHC services at the community level. - and Puskesmas play a critical role in the delivery of these services. By strengthening PHC services and promoting healthy behaviors, Puskesmas can thus contribute to reducing stunting rates, improving the health and well-being of children and their families, and unlock the accumulation of considerable human capital among Indonesia's young population.

121. Ensuring high quality service delivery at Puskesmas and integrating maternal and child health services are critical steps towards reducing stunting in Indonesia. Puskesmas are often the primary point of contact for families seeking health care services, particularly in rural and remote areas. By integrating essential PHC services, patients can receive comprehensive care at one location, reducing the burden of seeking care from multiple providers or facilities. This approach ensures that mothers and children receive continuous care from pregnancy through childhood, promoting better health outcomes and reducing the likelihood of adverse health events, including early detection and prevention of stunting. This is because stunting is often a result of poor nutrition and health care practices during pregnancy and early childhood. The integration of maternal and child health services can improve access to preventive and curative interventions, such as micronutrient supplementation and growth monitoring, that can reduce the risk of stunting.

122. The first DLI of RA 3 (DLI 6) therefore focuses on incentivizing improvement in the quality of essential health and nutrition services at the district level through rewarding service readiness and promoting anthropometric surveillance. This DLI aims to enhance the accessibility, quality, and utilization of essential health and nutrition services at Puskesmas, with the overall objective of promoting better health outcomes for the community. The emphasis on 11 MOH nutrition specific interventions, including zero-dose and full immunization. The DLI promotes the service readiness of the Puskemas where essential climate-sensitive health and nutrition services will be delivered. This service readiness, which focuses on availability of equipment, resilient infrastructure, and adequately trained human resources for health, ensures the continuity of life-saving essential health and nutrition services to households and communities, and especially groups whose health and nutrition status is facing significant challenges caused by climate change, including infants and children, adolescents, and pregnant women and young mothers. This includes treatment for diarrheal diseases and climate-sensitive vector-borne diseases including dengue and malaria, particularly concerning during pregnancy. DLI 6 also promotes anthropometric surveillance and standardized reporting to District and National levels. Anthropometric surveillance is the systematic collection, analysis, interpretation, and dissemination of anthropometric data to monitor the nutritional status of a population. It can be used to identify areas with high rates of stunting, track changes in stunting rates over time, and target interventions to reduce stunting. Standardization of anthropometric surveillance is crucial for monitoring the growth and nutritional status of children and detecting any signs of malnutrition or faltering growth. This DLR aims to help increase the number of Puskesmas that record nutrition specific service delivery data on a standardized form, and subsequently reported to the existing system, thereby contributing to a more timely and effective communication of crucial public health data among key stakeholders, including government institutions,

¹²⁵ Titaley CR, Ariawan I, Hapsari D, Muasyaroh A, Dibley MJ. Determinants of the Stunting of Children Under Two Years Old in Indonesia: A Multilevel Analysis of the 2013 Indonesia Basic Health Survey. *Nutrients*. 2019 May 18;11(5):1106. doi: 10.3390/nu11051106. PMID: 31109058; PMCID: PMC6567198.

civil society, international development partners, and the general public. It highlights the commitment of Puskesmas in Priority Districts to monitor and report their nutrition service delivery, facilitating evidence-based decision-making and program planning at both the district and national levels.

123. RA3 also recognizes that improving the coverage of essential health and nutrition services, including immunization services, is also essential for stunting reduction. Stunting is not only caused by inadequate nutrition but is also influenced by factors such as poor sanitation, inadequate access to clean water, and inadequate healthcare services. By improving the coverage of essential health and nutrition services at the district level, these underlying causes can be addressed, leading to better overall health and reduced stunting rates. Malnutrition and infectious diseases, for example, are mutually negatively reinforcing. Acutely malnourished children are 2.5 to 15 times more likely to die from pneumonia,¹²⁶ and up to 8 times more likely to die of diarrhea – with repeated bouts of diarrhea associated with up to 43% of child stunting cases.¹²⁷ Immunization can play a vital role in preventing infectious diseases that have significant impacts on a child's growth and development. By ensuring high immunization coverage, the risk of infections that can contribute to stunting is reduced.

124. The second DLI of RA 3 (DLI 7) rewards increases in coverage of select essential health and nutrition services in Priority Districts. Recognizing the strong link between antenatal care visits and stunting,¹²⁸ DLI 7 firstly promotes increases in coverage of pregnant women in the Priority Districts receiving the sixth antenatal care visit. This is in line with the WHO published Recommendations on Antenatal Care for a Positive Pregnancy Experience which outline a set of evidence-based global guidelines on recommended content and scheduling for ANC.¹²⁹ The 2016 ANC guidelines include a recommendation that pregnant women have eight contacts with the health system during each pregnancy (an increase from the previously recommended four ANC visits).¹³⁰ The percentage of women receiving the sixth ANC visit is a key indicator of the quality and accessibility of prenatal care services. It reflects the extent to which pregnant women are following the recommended schedule and receiving the necessary care during their pregnancy. Monitoring this percentage helps healthcare providers and policymakers assess the effectiveness of healthcare systems in ensuring that pregnant women receive the appropriate level of antenatal care. Further, and in line with growing evidence demonstrating strong linkages between immunization and malnutrition,^{131, 132, 133} DLI 7 also rewards increases in the number of identified underperforming Districts that attain at least 10 percentage point increase in coverage for complete

¹²⁶ Chisti MJ, Tebruegge M, La Vincente S, Graham SM, Duke T. 2009. Pneumonia in severely malnourished children in developing countries – mortality risk, aetiology and validity of WHO clinical signs: a systematic review.

¹²⁷ Chisti MJ, Tebruegge M, La Vincente S, Graham SM, Duke T. 2009. Pneumonia in severely malnourished children in developing countries – mortality risk, aetiology and validity of WHO clinical signs: a systematic review.

¹²⁸ Amaha, N.D., Woldeamanuel, B.T. Maternal factors associated with moderate and severe stunting in Ethiopian children: analysis of some environmental factors based on 2016 demographic health survey. *Nutr J* 20, 18 (2021). <https://doi.org/10.1186/s12937-021-00677-6>

¹²⁹ WHO. 2016. WHO recommendations on antenatal care for a positive pregnancy experience.

¹³⁰ WHO. 2016. WHO recommendations on antenatal care for a positive pregnancy experience.

¹³¹ GAVI. 2021. Equity from birth – An integrated approach to immunization and nutrition policy brief.

¹³² Prendergast AJ. 2015 Malnutrition and vaccination in developing countries. *Phil. Trans. R. Soc. B* 370: 20140141. <http://dx.doi.org/10.1098/rstb.2014.0141>

¹³³ Shinsugi C, Mizumoto A. Associations of Nutritional Status with Full Immunization Coverage and Safe Hygiene Practices among Thai Children Aged 12-59 Months. *Nutrients*. 2021 Dec 23;14(1):34. doi: 10.3390/nu14010034. PMID: 35010909; PMCID: PMC8746758.

immunization¹³⁴ and increases in the number of Districts that attain at least 8 percentage point increase in coverage of the first dose of Pentavalent (DPT – HB – Hib) vaccine. Monitoring the number of districts with a substantial increase in coverage (10 percentage points or more) allows for the assessment of targeted efforts and interventions aimed at improving immunization services in those areas. This indicator provides valuable information to policymakers and healthcare providers, highlighting progress made in expanding immunization coverage and narrowing gaps in underperforming districts. The "Number of districts with ≥ 8 percentage point increase in coverage for the Pentavalent (DPT - HB - HIB)" refers to the count of districts nationwide where there has been a notable improvement in the coverage of the Pentavalent vaccine. This count represents the districts that have experienced an increase in coverage of at least 8 percentage points compared to the baseline. Only those districts with Pentavalent (DPT-HB-HIB) coverage below 92% percent in a given year will be eligible. The Pentavalent vaccine, also known as DPT-HB-HIB, is a combination vaccine that protects against multiple diseases, including diphtheria, pertussis (whooping cough), tetanus, hepatitis B, and Haemophilus influenzae type B. The Pentavalent vaccine is typically administered to infants as part of routine immunization schedules to provide early protection against these diseases. Monitoring the number of districts with a significant increase (8 percentage points or more) in coverage for the first dose of Pentavalent vaccine helps assess the progress in expanding immunization services. It indicates areas where efforts to improve vaccine uptake have been successful and highlights districts that are making significant strides in immunization coverage. This DLI will also be supported by MOHA.

125. Additionally, RA 3 builds on evidence showing that rewarding provinces and districts/cities for good performance in convergence of interventions for stunting reduction is essential for sustained progress and increased ownership around the issue. Rewarding districts incentivizes districts to prioritize stunting reduction and to allocate resources accordingly. Secondly, it recognizes and rewards districts that have successfully implemented the program, which can encourage other districts to follow suit. Thirdly, it creates a sense of healthy competition among districts, which can lead to innovation and best practices being shared. There are several studies that highlight the importance of rewarding districts for good performance in converging interventions for stunting reduction. A study published in the Journal of Nutrition Education and Behavior for example found that providing incentives to district officials improved program implementation and increased stakeholder engagement.¹³⁵ Additionally, a report by the International Food Policy Research Institute recommended the establishment of a performance-based funding mechanism to reward districts for good performance in stunting reduction.¹³⁶ A performance assessment approach focused specifically on *Perpres 72* will be more effective than generalized performance measurement of the district as a whole. A graduated approach to measuring performance in implementing *Perpres 72* is likely to be effective, with the focus initially on the catalytic district-level convergence actions that are aimed at producing more effective implementation of interventions. At present, data systems for measuring the coverage of service delivery are not sufficiently robust to form the basis for measuring year-on-year changes in performance. Accordingly, a key focus of the district-level convergence actions is to improve these systems, so that in subsequent years performance measurement can move progressively toward service delivery outputs (coverage) and ultimately to hold

¹³⁴ In this context, a complete immunization package is composed of the following vaccines: (i) hepatitis B; poliomyelitis; tuberculosis; diphtheria; pertussis; tetanus; pneumonia and meningitis caused by Hemophilus Influenza type B (HIB); and measles rubella; in identified under-performing districts.

¹³⁵ Sari, M., Khusun, H., & Firmansyah, A. (2019). The Effect of Incentive on District Stakeholders Engagement in the Convergence of Intervention for Acceleration of Stunting Reduction Program in Indonesia. *Journal of Nutrition Education and Behavior*, 51(9), S75.

¹³⁶ International Food Policy Research Institute. (2017). *Accelerating Stunting Reduction in Indonesia: Priorities for Action*. Retrieved from <http://www.ifpri.org/publication/accelerating-stunting-reduction-indonesia>

districts accountable for changes in stunting outcomes.

126. The third DLI of RA 3 (DLI 8) therefore rewards provinces, districts/cities that achieve good performance in the acceleration of stunting reduction. DLI 8 is in line with *Perpres 72's* indicator to monitor and reward district governments for acting on commitments to plan, budget, and implement activities across sectors (known as District Convergence Actions) to address immediate and underlying drivers of stunting. The DLI rewards districts that include stunting reduction as an indicator in their District Medium-Term Development Plan. The DLI also rewards the Directorate of Evaluation and System Information-DGFB MoF and Directorate of Local Government Affairs Synchronization (SUPD III)-DGRD MOHA for publishing an annual report of districts stunting budget tagging and expenditure tracking for stunting reduction. Lastly the DLI also rewards achieving good performance at the district/city level in converging interventions for the acceleration of stunting reduction. Minimum parameters to be included for defining district performance, include: (i) The quality of convergence actions implementation (ii) The improvement in the key nutrition intervention coverage, including the improvement in overall immunization coverage rates and the reduction of zero dose children, (iii) the implementation and/or outcome of village performance assessment, (iv) additional criterion of good district performance which will provide bonus points will be the adoption of CNAP and implementation of a climate and nutrition anchor project in the district/city.

Results Area 4: Service delivery and convergence at village & household level for stunting reduction

Situation

127. Stunting reduction efforts at the village and household level in Indonesia have been focused on improving nutrition, hygiene, and healthcare access. Key existing interventions so far at the village level include:

- **Integrated Health Post (Posyandu):** This is a community-based health center that provides maternal and child health services, including growth monitoring, immunizations, and nutrition counseling. The Posyandu program has been implemented in thousands of villages across Indonesia and has been effective in improving maternal and child health outcomes.¹³⁷
- **Home-based food fortification:** This intervention involves adding micronutrient powder to complementary foods that are commonly consumed in households with young children, such as porridge or rice. The micronutrient powder contains a mix of vitamins and minerals, including iron, zinc, and vitamin A, which are important for healthy growth and development. This intervention has been shown to be effective in reducing anemia and improving growth outcomes in children.¹³⁸

¹³⁷ Government of Indonesia. (2018). National Strategy to Accelerate Stunting Prevention (2018-2021).

<https://stuntingprevention.org/wp-content/uploads/2019/11/National-Strategy-to-Accelerate-Stunting-Prevention.pdf>; Sunarti, S., Rustina, Y., Hadi, H., & Soekarjo, D. D. (2020). Effectiveness of Posyandu Program in Reducing Undernutrition Among Children Under Five Years Old in Indonesia. *International Journal of Environmental Research and Public Health*, 17(8), 2803. <https://doi.org/10.3390/ijerph17082803>

¹³⁸ Sutanto, K., et al. (2015). Home Fortification with Micronutrient Powders (MNPs) Improved Anemia and Iron Status but Not Vitamin A Status of Young Children in a Slum Area of Jakarta, Indonesia. *Nutrients*, 7(12), 10390–10404. <https://doi.org/10.3390/nu7125536>; Sukotjo, S., et al. (2013). Scaling Up Home-Based Fortification of Foods with Multiple Micronutrient Powders for Health and Nutrition: Meeting the Challenges in Indonesia. *Food and Nutrition Bulletin*, 34(2), S168-S175. <https://doi.org/10.1177/156482651303425206>

- **Improved breastfeeding practices:** Breastfeeding is a key factor in preventing stunting, as breast milk provides essential nutrients and antibodies that support healthy growth and development. However, many mothers in Indonesia do not practice exclusive breastfeeding, or stop breastfeeding too early. To address this issue, interventions have been implemented to promote exclusive breastfeeding, such as counseling and support from trained health workers, and creating breastfeeding-friendly environments in public spaces.¹³⁹
- **Water, sanitation, and hygiene (WASH) interventions:** Poor WASH conditions contribute to the spread of disease and infections, which can lead to stunting. Interventions to improve WASH conditions include providing access to clean water and sanitation facilities, promoting handwashing with soap, and improving waste management. These interventions have been implemented at both the community and household levels and have been effective in improving hygiene practices and reducing the prevalence of stunting.¹⁴⁰

128. Village kader play an important role in stunting reduction efforts in Indonesia. *Kader* is a term used for community health workers who are responsible for providing basic health services and health education to their community. In the context of stunting reduction, village *kader* are trained to provide information and education to families about healthy nutrition practices, breastfeeding, hygiene, and sanitation. They also provide health screenings and referrals for malnourished children. According to the National Strategy to Accelerate Stunting Prevention (2018-2021) by the Government of Indonesia, the role of village *kader* is crucial in stunting prevention and reduction. The strategy aims to strengthen the capacity of *kader* through training and supervision, as well as providing incentives to encourage their participation in stunting prevention efforts. The *kader* also work closely with Posyandu (Integrated Health Post) to monitor the growth and development of children and provide referrals to health services when necessary. In addition, a study conducted in Indonesia found that the involvement of *kader* in stunting reduction programs can improve knowledge and practices related to nutrition and hygiene among families, which can lead to a reduction in stunting prevalence. The study also suggests that *kader* can be effective in reaching out to families in remote and underprivileged areas, where access to health services is limited.¹⁴¹

129. Perpres 72, under Pillar 1, further deploys Human Development Workers (HDW) to support convergence of the priority interventions at the village-level. Building on the Government's Generasi project for increasing access to basic health and education services in the villages, the government has been deploying HDW in target districts for reducing stunting. HDW are typically members of the community and are generally senior posyandu cadre, ECED teachers or women's leaders. The role of HDW is to work across sectors to increase and improve village delivery, monitoring and uptake of key nutrition-

¹³⁹ Ekowati, L. L., et al. (2020). Promoting Breastfeeding in Indonesia: Are We on the Right Track? *International Journal of Environmental Research and Public Health*, 17(2), 593. <https://doi.org/10.3390/ijerph17020593>; Utomo, B., et al. (2018). Exclusive Breastfeeding Practice and Its Associated Factors in Indonesia: Evidence from a National Representative Survey. *International Journal of Environmental Research and Public Health*, 15(11), 2579. <https://doi.org/10.3390/ijerph15112579>

¹⁴⁰ World Bank Group. (2017). Indonesia: Scaling Up WASH Services for the Poor. <https://www.worldbank.org/en/results/2017/05/02/indonesia-scaling-up-wash-services-for-the-poor>; Cha, S., et al. (2019). Effect of a Rural WASH Intervention on Child Growth and Anemia Prevalence in Indonesia: A Cluster Randomized Controlled Trial. *PLoS Medicine*, 16(4), e1002781. <https://doi.org/10.1371/journal.pmed.1002781>

¹⁴¹ Government of Indonesia. (2018). National Strategy to Accelerate Stunting Prevention (2018-2021). <https://stuntingprevention.org/wp-content/uploads/2019/11/National-Strategy-to-Accelerate-Stunting-Prevention.pdf>; Sari, N. M., et al. (2020). The Role of Community Health Workers in Stunting Prevention: A Qualitative Study in Indonesia. *BMC Public Health*, 20(1), 1739. <https://doi.org/10.1186/s12889-020-09732-5>

specific and nutrition-sensitive interventions in the health, ECED, social protection, and water and sanitation sectors. The HDW typically undertake the following tasks:

- **Social Mapping and Stunting Diagnostic**—the HDW supports villages to conduct a social mapping of all 1,000-day households in their assigned village, and identify their current access to and use of the SRAS’s priority interventions.
- **Village Convergence Scorecard**—building on the Generasi experience of tracking 12 performance indicators monthly, HDW supports villages to monitor delivery of the priority interventions to all 1,000-day households in the village, and to report on progress in quarterly community meetings and overall performance in semester-based village reports. HDW use the android based eHDW application as a tool to monitor progress of the delivery services and the achievement of the services by the targeted beneficiaries, provide analytics, diagnostic and recommendation for follow up action based on the verification by the supply side technical staff, i.e. puskesmas, ECED, etc. eHDW became a critical tool for HDW to advocate the village head on using village funds to be able to support activities related to stunting prevention based on the data. As per Ministry of Finance (MOF) regulation, the Village Score Card (VSC) is being used as the condition for village to be able to disburse the village funds. The below table summarizes the village convergence scorecard used by HDWs.

Village convergence scores still stand at 44%, which mean that the average acceptance of the five complete intervention service packages – including Mother and Child Health, Water and Sanitation, Nutrition counselling, Health security and Early Child Education – by the target of 1,000 HPKs has only reached 44%.

Table 12: Village Convergence Score per Years

#	FY 2019	FY 2020	FY 2021	FY 2022
Village Convergence Score	N/A	40.4 %	44.2 %	44.2 %

Table 13: Percentage of service acceptance coverage

Intervention Services	FY 2022
Mother and Child Health	25%
Water & Sanitation	58%
Nutrition Counselling	24%
Health/ Social Security	50%
Early Child Education	22%

- **Facilitate the RDS and Village Rembuk Stunting** - With the aim of supporting health development and stunting prevention at the village level, MoV recommends that each village establish a community center forum for discussion, communication and education in health aspects, called the RDS (“Rumah

Desa Sehat”). And each village holds the rembuk stunting before the Village Development Meeting (Musrembang Desa) as part of the annual village development planning system to determine village development activities including activities to accelerate the stunting reduction in the village. A HDW under Perpres 72 and RAN PASTI is responsible on data management in village level and support the TPPS and TPK in village on conducting Village Rembuk Stunting by provision of updating data on stunting village service deliveries as well as beneficiaries in targeted household at risk. Together with TPPS, HDW will facilitate the rembuk stunting and/or RDS to advocate the use of village funds to support stunting program in village activity planning and budgeting. Using eHDW application, HDW will regularly monitor and reporting the implementation of stunting package delivery in village as a part of convergence Village Score card report. However, it is still required a strong technical assistance/mentoring from TPP (district and sub-district TA by MOV) for HDW to ensure the quality of tasks and provide regular evaluation. Another challenge is occurred on eHDW app especially with areas having difficult access to infrastructure. However, MOV is now developing the strategy on the development of eHDW with alternative options, such as a web-based app, that can be accessed especially by HDW in disadvantage villages. Further challenge, under the Perpres 72, now is to integrate the model into different technical monitoring tools and reporting from other stakeholder to avoid duplication.

130. Perpres 72 additionally introduces Stunting Reduction Acceleration Teams (TPPS) and Family Companion Teams (TPK). - To Accelerate Stunting Reduction at the village/*kelurahan* level, the village head/*lurah* is expected to establish a village/*kelurahan* Stunting Reduction Acceleration team. The village/*kelurahan* Stunting Reduction Acceleration team is tasked with coordinating, synergizing and evaluating the Acceleration of Stunting Reduction at the village/*kelurahan* level. The village/*kelurahan* Stunting Reduction Acceleration team is expected to engage: (i) Health workers, including midwives, nutritionists and environmental health workers; (ii) Family Planning Counsellors and/or Family Planning Field Workers; and, (iii) Family Welfare Promotion and Empowerment Team (TP-PKK). The team also involves Village Family Planning Assistants (PPKBD) and/or Sub-PPKBD/Human Development Workers (KPM), cadre, and/or other community elements. The membership structure of the village/*kelurahan* Stunting Reduction Acceleration team will also depend on the Village/*kelurahan* Government’s needs.

131. With the implementation of Perpres 72, there is significant need for the provision of clear technical and operation guidance that could be used by all relevant field actors at the village level. Such guidance could include integrated implementation guidelines, formalized Standard Operations Procedures (SOP), integrated training modules, guidance on using available resources for effective coordination at the field level (such as Minilok Puskesmas), the use of RDS, guidance on conducting regular monitoring, and evaluation in village level and reporting, standard complaint handling procedures, etc.

132. Technical and operational guidance is particularly important as MoH aims to significantly increase the number of active Posyandus. Posyandus can play a pivotal role in closing gaps with respect to geographical and financial access to quality healthcare across Indonesia. As part of the country’s health transformation agenda, MoH aims to increase the number of active Posyandus from approximately 140,000 today to 300,000. Active Posyandu are those that are supported by at least five cadres and are conduct routine posyandu activities (health services for pregnant women/ toddlers/ adolescents/ productive age/ elderly) 1 time a month at least 8 times per year and providing health services at least for pregnant women and or toddlers and or adolescents health services to the community.

133. MoH also introduced Integrated Primary Care (ILP) as part of the Primary Healthcare Transformation, which recognizes that primary care is the foundation of a strong and effective

healthcare system. By integrating primary care services, patients can access a range of health services that are tailored to their specific needs, including prevention, diagnosis, treatment, and rehabilitation. ILP involves the coordination of various healthcare providers and stakeholders, including doctors, nurses, midwives, pharmacists, and other health professionals. It also involves the integration of different health programs and services, such as maternal and child health, immunization, family planning, and nutrition.

134. The implementation of ILP is a complex process that requires strong leadership, effective communication, and collaboration among stakeholders. It involves the development of a strong referral system, the establishment of community health centers, and the use of technology to facilitate the sharing of health information. To integrate primary health care services in Puskesmas, Posyandu, and villages, MoH, MoHA, and MoV should collaborate to develop a joint policy. This policy should outline clear roles and responsibilities for all involved parties and serve as a reference for central and regional governments, as well as villages.

135. To improve access to quality PHC, a new coordination mechanism called Posyandu Prima will be introduced at the village level. Posyandu Prima, an integrated health service provider, originates from the integration of Pustus and Poskesdes and will remain in the network of Puskesmas.⁴ Posyandu Prima will gradually obtain access to permanent buildings, supporting infrastructure and services of at least 2 cadres along with 1 nurse and 1 midwife in each village. Cadres are a vital part of Indonesia's healthcare system, especially in rural and remote areas. However, to ensure the quality of healthcare services provided by cadres, it is crucial to ensure that they possess the required competencies. The Ministry of Health has developed a national competency framework for cadres, which serves as a guide for developing training programs and assessing their competencies. Posyandu cadres will be trained and expected to undertake the following tasks: (i) delivery of health services across the patient life cycle in an integrated manner, (ii) mobilization of community for health education, empowerment and routine monitoring and evaluation and (iii) provision of basic health check-ups and detection of high-risk community members through home visits and issuance of referrals to Puskemas as necessary. Puskesmas should provide training programs and ongoing support to cadres, utilizing a competency-based approach and hands-on training and mentoring. Additionally, it is essential to monitor and evaluate the competencies of cadres regularly, using the data to improve the training programs and support provided to cadres.

136. Human resources for health (HRH) including cadres are an integral component in delivering high-quality PHC services to the community. Indonesia's PHC continues to be crippled by insufficient HRH capacity, lack of continuous investment in HRH capacity building and a high drop-out rate of cadres due to low incentives. The outstanding gaps in the number, distribution, and skills of crucial HRH need to be addressed to ensure equitable PHC for all Indonesians and to promote stunting reduction at the village level.

Table 14: Provisional facility gap assessment results

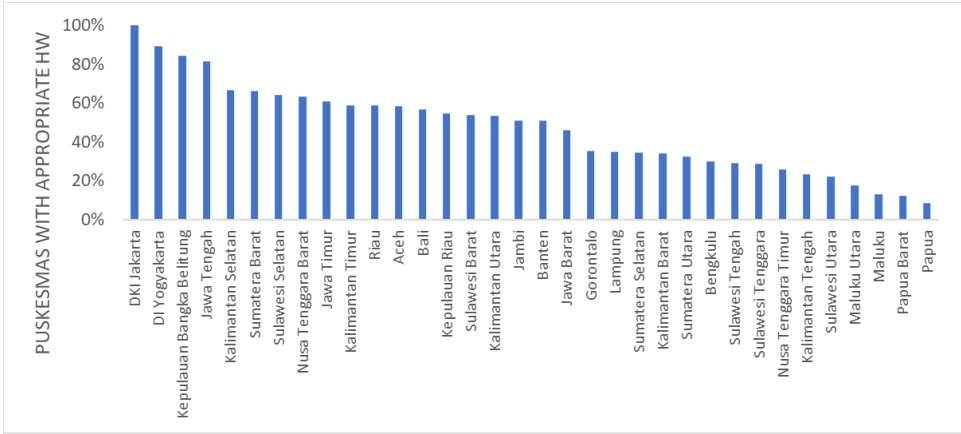
Category		Need	Available
Health facilities	Puskesmas	7,230	10,292 Puskesmas total but there are 171 subdistricts without Puskesmas
	Posyandu Prima	85,000	~20,000
	Posyandu	300,000	~237,000

Human resources for health	Kader	1,670,000	N/A
	2 per Posyandu Prima 5 per Posyandu	170,000 1,500,000	
Health worker	1 nurse and 1 midwife per Posyandu Prima	170,000	N/A
		85,000	
		85,000	

Source: Ministry of Health

137. A comprehensive assessment of the number of HRH that is missing at the PHC level, their location, and required skills is needed, as data is scarce. Yet, an initial picture for the three levels of primary care can be painted. At the Puskesmas level, in 16 Provinces, less than half of Puskesmas has an appropriate health workforce. In 7 Provinces, more than one in ten Puskesmas does not have a doctor. For the new PHC level to be introduced, Posyandu Primas, HRH needs to be identified, either from the Poskesdes or Pustus to be upgraded and transformed, or newly hired. For Posyandus, there currently exist 237,000 out of the envisaged total of 300,000 facilities, leaving a gap of 63,000, including *kaders*.

Figure 11: Percent of Puskesmas with Appropriate Health Workforce, 2021, by Province (source: MOH Health Profiles, 2021)



138. However, significant strides have been made towards the development of HRH capacity building and the retention of cadres through tangible and intangible incentives. To improve the quality of healthcare and nutrition services provided by cadres, it is also important to provide incentives to motivate and retain them in their roles. MoH has introduced a system of incentives for cadres, which includes financial and non-financial incentives such as training opportunities, career development, and recognition for good performance. These incentives help to address the challenges of high turnover rates and low motivation among cadres. Puskesmas should work closely with local government and other stakeholders to ensure that the incentives are implemented effectively and sustainably. By providing appropriate incentives and support, cadres can play a crucial role in improving the quality of primary healthcare services in Indonesia.

Soundness of INEY Phase 2 Results Area 4

139. Results Area 4 (RA 4) aims to incentivize service delivery and convergence at the village and household level for stunting reduction. RA 4 delivery supports activities that will converge delivery of

priority interventions on all target households in villages. The objectives of RA 4 are to: (i) strengthen capacity of village kaders to implement Perpres 72 activities, including identifying households at risk of stunting and supporting nutrition intervention convergence; (ii) monitor changes in village convergence based on the consolidated beneficiary, Village Convergence Scorecard, and expenditure data; (iii) strengthen Posyandus as the site of maternal and child health and nutrition service delivery; and (iv) impact coverage of key nutrition-specific services. The RA further aims to incentivize villages to allocate additional budget from the Dana Desa to improve demand and supply for priority nutrition-specific and nutrition-sensitive interventions and increase the quality of and participation in antenatal care growth promotion and immunization activities.

140. RA 4 recognizes that villages are critical to both the delivery and convergence of priority nutrition-specific and nutrition-sensitive interventions. This is because:

- Village-level institutions are involved in frontline delivery of key nutrition-specific and nutrition-sensitive interventions to beneficiaries—village institutions involved in the delivery of nutrition interventions include posyandu (almost all nutrition-specific interventions in collaboration with sub-district Puskesmas including community-based growth promotion as well as family planning interventions), PAUD (nutrition-sensitive parent counselling and early learning services more generally), and BP SPAM and similar community organizations (construction, maintenance and management of water and sanitation facilities). Village governments are also involved in the oversight of the government’s national social assistance programs (PKH and BPNT).
- Villages have significant financial resources available in the form of Dana Desa and other revenues (e.g., ADD, PAD) that they can use for frontline delivery of priority nutrition services - The Village Fund (Dana Desa) and other revenues in the village have the potential to finance activities to support the accelerated reduction of stunting in the village as long as these activities can be carried out by the village or become the authority of the village and obtain approval in village meetings.
- Convergence of priority interventions at the village level is critical to addressing stunting—an analysis of stunting variation across regions, districts and villages found that there is much more variation within villages than there is between villages, districts and regions. This suggests that a fundamental challenge to accelerating stunting reduction is identifying and delivering the priority interventions to all 1,000-day households within a village. Although it is important to identify the poor, stunting remains very high amongst all income quintiles and therefore universal “whole-of-village” approaches are particularly important.

141. RA 4 also recognizes village service convergence for reduced stunting in Indonesia demonstrates several elements of technical soundness including:

- **Evidence-based approach:** There have been several studies evaluating the impact of converging village & household service delivery on reducing stunting in Indonesia. A study published in the journal BMC Public Health in 2020 found that village convergence was associated with a significant reduction in the prevalence of stunting among children under two years old in the participating villages.¹⁴² Another study published in the Journal of Nutrition Education and Behavior in 2021 found that village convergence was effective in improving knowledge and practices related to child feeding and hygiene among mothers in the participating villages.¹⁴³
- **Comprehensive and integrated approach:** Converging village & household service delivery takes

¹⁴² Kusumawardani, N., et al. (2020). Implementation of village convergence in integrated service posts and its association with child stunting in Indonesia: A cross-sectional study. BMC Public Health, 20(1), 1-9.

¹⁴³ Agustina, R., et al. (2021). Improving maternal knowledge and practice on feeding and hygiene through Village Convergence in Central Java. Journal of Nutrition Education and Behavior, 53(3), 260-268.

a multi-sectoral approach, involving various stakeholders, and addresses several underlying factors contributing to stunting, such as access to health and nutrition services, education on healthy lifestyles, and community participation.

- **Local context sensitivity:** Converging village & household service delivery recognizes the importance of tailoring interventions to the local context, including the cultural, social, and economic factors that affect child health and nutrition. The program involves community participation in planning and implementation to ensure that interventions are relevant and effective.
- **Capacity building:** Converging village & household service delivery includes capacity building for health workers and community leaders to improve the quality of health services and promote behavior change.
- **Sustainability:** Converging village & household service delivery aims to build sustainable solutions to address stunting by empowering communities to take ownership of their health and nutrition.

142. RA 4 additionally recognizes that strengthening Posyandu is crucial in reducing the prevalence of stunting. Posyandu serves as a PHC facility that provides health and nutrition services to pregnant women, infants, and children under five. By improving the quality of services provided at Posyandu, such as maternal and child health checks, nutrition education, and growth monitoring, it is expected that more mothers and children will receive appropriate health and nutrition interventions. This can lead to improved maternal and child health outcomes, such as reducing the incidence of malnutrition and stunting. Posyandu can play a vital role in preventing stunting by providing regular health and nutrition services, including immunizations, growth monitoring, and counseling on proper infant and young child feeding practices. Posyandu can also provide nutrition supplements and fortified foods to pregnant women and children, such as iron-folic acid tablets, vitamin A, and zinc supplements, which are essential for the growth and development of infants and young children.

143. The first DLI of RA 4 (DLI 9) aims to ensure that village frontline volunteers (kaders) are skilled and support their villages to achieve good performance in the acceleration of stunting reduction. DLI 9 focuses on establishing the institutional frameworks and tools to ensure that frontline kaders (namely Posyandu, HDW, and members of the TPK) have the capacities and support needed to carry out the specific and sensitive interventions, monitor and report on progress, and promote convergence for the stunting reduction agenda. With the introduction of new Perpres 72 implementation arrangements, the focus will be on developing an integrated module to deliver to all *kaders* involved in frontline implementation of the program to enhance clarity and coordination of roles and responsibilities. The DLI will incentivize the institutional homes of the human development workers, village assistance team (TPK), and Posyandu kaders to improve guideline and training programs. It will further then monitor the deployment of training for HDW and TPK to identify 1,000-day households, zero dose children, plus adolescents and bride-to-be, mapping priority stunting needs and systematically reporting on village convergence. DLI 9 will incentive the agencies based on (a) integrated training module for the stunting reduction program endorsed; (b) TPK training module finalized; (c) Posyandu kader training on 25 skills finalized; (d) HDW training module finalized, number of villages with: (a) all Posyandu kaders trained in the update module; (b) all TPK members trained in the updated module; and (c) all KPM trained in the updated module. MOV has annually issued the regulation of the use Dana Desa to finance the incentives and training for village kader. District Government (Health Dinas and MOV Dinas/PMD) also allocate district fund through APBD Kabupaten to support incentive and training for village kader. DLI 9 will also reward achieving good performance in the acceleration of stunting reduction at the village level based on the criteria set forth by the Gol.

144. The second DLI under RA 4 (DLI 10) incentivizes strengthening the provision of quality essential health and nutrition services at the village level. It firstly rewards increases in the number of active Posyandu and increases in the number of villages receiving and implementing oversight and coaching on the institutionalization of Posyandu, meeting requirements set forth in the Verification Protocol . DLI 10 also rewards the issuance of regulation on *Pustu* as part of the Integration of Primary Health Care Program (including minimum service standards) and provides incentives for increases in the number of *Pustu* established and functioning.

IPF Component

IPF Component

145. The Program includes an IPF component to provide catalytic technical assistance (TA), capacity building, and M&E support to the ministries/agencies responsible for DLI achievement (Table below). The IPF component will be financed through recipient-executed grants from GFF and Gavi through the IHCA multi-donor trust fund. Activities are common across these financing sources and will be co-financed by both. The component will support activities outside of the Program boundary which will (a) contribute to the achievement of Program results; and/or (b) support continued institutionalization, quality improvement, and innovation with respect to multisectoral stunting reduction program. The IPF component will be implemented by project implementation units (PIUs) in SoVP, Bappenas, MoH, BKKBN, MoHA, and MoV. Details of the IPF component activities, implementation arrangements, fiduciary, and environmental and social aspects are included in Annex 8.

146. The IPF component serves to: (i) strengthen multisectoral coordination, advocacy, and debottlenecking role of SoVP; (ii) strengthen the capacity of Bappenas to implement their planning and budgeting functions and enhance the use of results monitoring; (iii) support BKKBN in role as lead of the implementation sub-committee at central and subnational levels in strengthening the Stunting Reduction Acceleration Teams and Family Companion Team;; (iv) enable MoH to support sub-national levels to deliver quality essential health and nutrition services through the ILP with an emphasis on reaching zero-dose immunization children; (v) enable MoHA to support sub-national implementation of the stunting reduction program through a regional TA pool to enhance the quality and the use of district convergence actions implementation and support to subnational governments to implement Posyandu; (vi) deploy technical assistance and capacity building through MoV for improving the functionality of the HDW *kaders*, village level implementation and coordination of the stunting reduction program, and eHDW data collection system; and (vii) support overall Program implementation, monitoring, and adherence to Program agreements while also supporting other ministries/agencies to contribute to the results of the INEY 2 Program.

Table 15: Investing in Nutrition and Early Years 2 Investment Project Financing Component Structure and Financing by Source

Subcomponent	Lead Agency	GFF (US\$, millions)	IHCA (US\$, millions)	Total
1.1: Strengthen leadership, advocacy, and debottlenecking role of SOVP	SOVP	1.5	0.5	2.0

1.2: Strengthen results planning, budgeting, and M&E	Bappenas	3.0	1.0	4.0
1.3: Strengthen coordination of implementation team and household convergence	BKKBN	2.5	1.0	3.5
1.4: Strengthen delivery of essential health and nutrition services	MOH	2.5	5.0	7.5
1.5: Strengthen Capacity for District Convergence	MOHA	3.0	2.5	5.5
1.6: Strengthen Capacity for Village Convergence	MOV	2.5	2.0	4.5
1.7: Strengthen line ministries/agencies and delivery of stunting reduction Program	Bappenas	2.5	1.0	3.5
Total		17.5	13.0	30.5

147. There will be seven subcomponents under the IPF component. The subcomponents will provide financial support to each IPF implementing agency for the procurement of individual consultants and/or firms for administrative and technical support and operational costs to strengthen technical and administrative capacity; carry out capacity building and policy socialization; conduct technical coordination meetings/workshops, design and implement research initiatives; support evaluation and debottlenecking through development and use of data systems, dashboards, and online tools; and create knowledge management products, among others, to support Indonesia’s stunting reduction initiative.

Activities to be financed by subcomponent are as follows:

- (a) **Subcomponent 1.1: Strengthen leadership, advocacy, and debottlenecking role of SOVP.** The subcomponent will support the Vice President as the chair of the acceleration of stunting reduction; facilitate advocacy, commitment, and leadership of TPPS; and strengthen the EA function of the INEY 2 Program. Activities will focus on debottlenecking functions in the SOVP and strengthening programmatic performance monitoring and accountability from the Steering Team, including prioritization of nutrition-specific interventions and zero-dose immunization. The subcomponent will finance individual consultants in the TP2S secretariat in SOVP, operational costs of field travel/monitoring, workshops, and meetings, costs of analytical work, and research; development and maintenance of data systems and dashboards, operations support (fuel, office lease, server costs), and capacity building.
- (b) **Subcomponent 1.2: Strengthen results planning, budgeting, and M&E (Bappenas).** This subcomponent will enable *Bappenas* to strengthen its functions in synchronized planning, budgeting, and M&E for the stunting reduction program. Activities are arranged around the following areas:
 - (i) **Strengthening capacity for national-level synchronized planning, budgeting, and M&E.** The specific activities include budget and development performance analysis, semester and annual expenditure and performance review report formulation and dissemination, M&E guidelines formulation and socialization, *Perpres* M&E framework formulation and piloting, dashboard development and management, and *Perpres* stunting data analysis. To carry out these activities, this focus area requires a team of

consultants such as M&E officer, M&E specialist, data specialist, data analyst, front-end developer, back-end developer, database engineer, system analyst, budget performance analyst, and program performance analyst.

- (ii) **Strengthening capacity for policy and nutrition program advocacy at the national and regional level.** This focus area aims to strengthen advocacy efforts for policy and nutrition programs at the national and regional levels. The activities include RAN-PG, CNAP, stunting summit support, regional planning documents guidance and facilitation on stunting reduction, district performance assessment, food fortification, and financial incentive system. The consultants required for this component include food-nutrition policy analyst, subnational policy analyst, and food fortification specialist.
 - (iii) **Strengthening *Dana Alokasi Khusus* (DAK) reporting systems quality for stunting reduction.** This focus area aims to improve the quality of reporting on DAK allocation and the utilization of village funds for stunting reduction. The activity for this component includes review of DAK stunting reduction guidelines and capacity building to regions. The consultant required for this focus area is a fiscal transfer fund analyst.
 - (iv) **Integrated program knowledge and learning products for replication.** This focus area aims to develop integrated program knowledge and learning products for replication. The activities include knowledge platform maintenance and development and annual public communication. The consultants required are web developer and maintenance and communication specialist.
- (c) **Subcomponent 1.3: Strengthen coordination of implementation team and household convergence (BKKBN).** The subcomponent will enable BKKBN to strengthen its capacity to coordinate the multisectoral implementation team for stunting reduction, provide TA to facilitate household-level convergence, and enhance M&E systems. The subcomponent will support, among others, (i) workshops, meetings, and facilitation to improve implementation of RAN-Pasti through coordination of stunting reduction implementation across sectors (including religious and traditional community leaders) and at the subnational level; (ii) capacity building of TPPS, including formulation and issuance of technical guidelines, trainings, multimedia capacity, and building tools, including for the integration of zero-dose monitoring as part of the TPPS and TPK responsibilities; (iii) capacity building of TPK, including the preparation and revision of TPK training modules (identification and assistance of at-risk families, such as those with children receiving zero-dose immunization, monitoring, reporting, and so on); (iv) strengthening of M&E, in coordination with *Bappenas*, through preparation of training modules (including zero-dose monitoring, reporting and use of data systems such as *elsimil*, nutrition, immunization, sanitation, and so on), meetings, field tests, data analytics, and evaluations; (v) strengthening of the integrated parenting classes to accelerate stunting reduction through formulation of guidelines, curricula, and training and deployment through e-learning modules; (vi) scale-up of innovative digital job-aid tools for frontline workers to enhance inter-personal and mass BCC for stunting reduction; (vii) documentation of field implementation and lessons learned; and (viii) coordination on the development of semiannual TPPS report. To support these activities, BKKBN will finance individual and firm TA and consultants and operational costs to support implementation of the stunting reduction program related to project management, BCC, health and nutrition, capacity building and training management, data analytics and integration, field mobilization advocacy and coordination, information technology, and communications and digital media.
- (d) **Subcomponent 1.4: Strengthen delivery of essential health and nutrition services (MOH).**

This subcomponent will support the MOH in providing national and subnational TA, capacity building, and M&E support for implementation of quality essential health and nutrition interventions, execution of strategies to reach zero-dose immunization services, and delivery of the ILP model through support to *Puskesmas*, *Pustu*, and *Posyandu*. TA will strengthen district performance management system to improve quality of frontline health and nutrition services through quality assurance mechanisms, integrated digital monitoring systems, and better use of data for course-correction and tailored local response. These activities will aim to improve the links between health system and community-based delivery platform through strengthened supportive supervision process, community outreach and referral system, improved community decision-making and social accountability. The subcomponent will finance a subnational TA pool for implementation of the PHC transformation at the subnational level, which includes a focus on improving the links between health system and community-based delivery platform through strengthened supportive supervision process, community outreach, and referral system and on targeting zero-dose children through *Posyandu* and *Pustu*. It will also support the MOH's priority activities for monitoring, BCC, and innovation for reducing zero-dose immunization as part of the stunting reduction program and activities to enhance periodic monitoring of the impact of COVID-19 on essential health and nutrition services.

- (e) **Subcomponent 1.5: Strengthen Capacity for District Convergence (MOHA).** This subcomponent will enable MOHA carry out activities across four dimensions: continuation of the TA pool provision; providing, updating, and revising of guidelines and instruments for implementation of the stunting reduction program at subnational levels; capacity building through TA and operations costs, travel for supervision, oversight and support to implementation of subnational implementation of the stunting reduction program, meetings, workshop, and support for provincial activities; and TA, operational costs, travel, meetings, and workshops for learning, monitoring, and evaluation involving MOHA and cross-sectoral stakeholders at the central and/or regional level. Specific activities to be financed include (i) capacity building on district data analysis, including nutritional status, immunization, and zero-dose immunization, to inform district policy formulation in targeting and prioritizing stunting interventions; (ii) strengthening of the convergence actions' monitoring strategy, instruments, and its use for performance assessment and knowledge development, (iii) cross-ministries consultations on the districts' performance progress and lessons learned; (iv) TA to incorporate planning, budgeting, financing, implementation, and reporting of zero-dose agenda into convergence action/expenditure guidelines; (v) institutionalization of capacity building on converging interventions to support stunting reduction agenda in the RPJMN 2024–2029¹⁴⁴ and beyond. This subcomponent will finance a regional TA pool to carry out (iv) and (v) above and strengthen the district planning and budgeting and results orientation of the intergovernmental fiscal transfer system to incentivize service quality improvements, including for zero-dose immunization. The TA pool, which was initially conceived as a vehicle for building capacity of provinces to support districts and conduct the performance assessment, will continue its support to regions, particularly for capacity building for districts data analysis to strengthen situation analysis, action plan preparation, and performance review.
- (f) **Subcomponent 1.6: Strengthen Capacity for Village Convergence (MOV).** The

¹⁴⁴ As stunting prevention/reduction will be one of the priorities in the new national medium-term development plan (RPJMN).

subcomponent will focus on strengthening capacity for the planning, budgeting, financing, implementation, and monitoring of activities needed to achieve village convergence. The component will provide TA and capacity building to prepare regulations and guidelines to support the utilization of village funds for stunting reduction in village including support to regularize the incentives of *kaders* and prepare training packages for frontline community workers such as the Family Assistance Team, the *Posyandu kader* (community health workers), and HDW who play a pivotal role in enhancing awareness, advocating effectiveness of village planning and budgeting, mobilizing the community, and maintaining access and demand for essential health services. It will include incorporating, into HDW's capacity-building activities, the steps to identify and target zero-dose children and coordinate responsibilities for zero-dose monitoring across village implementers. The subcomponent will also support MOV to scale up innovative digital job-aid tools for frontline workers to enhance interpersonal behavioral change communication. The MOV will provide, among others, (i) socialization and technical assistance on utilization of e-learning to strengthen capacity of village-level implementers; (ii) TA on village-level acceleration of stunting reduction and e-HDW TA, including use of eHDW to identify zero-dose children and refer to the health system; (iii) integrated capacity building for village actors to monitor and use village convergence scorecard data, including monitoring the trends in the immunization coverage indicators in zero-dose priority areas; (iv) formulation of blended learning approaches to strengthen village-level implementation capacity; (v) M&E of village-level stunting reduction convergence; and (vi) management support, including capacity building for professional facilitator at the subnational level as an HDW's mentor. MOV will recruit individual consultants to carry out the tasks with expertise in team and project management; data and information systems; IT specialists in web, app, and systems development; M&E; capacity development; community development; policy analysis; knowledge management; FM; and procurement.

- (g) **Subcomponent 1.7: Strengthen line ministry/agency delivery of stunting reduction program (*Bappenas*)**. The subcomponent will provide individual and firm consultancies, operational costs, training, travel, meetings, and workshops on behalf of implementing ministries and agencies in the stunting reduction program which are not PIUs (including, but not limited to, Kemenko PMK and MOECRT) and whose activities are critical to the INEY 2 objectives. The subcomponent will also finance an administrative service firm to support the IPF, which requires a team of consultants such as team leader, program assistant, finance administration specialist and officer, and operational team members to provide support to the INEY 2 secretariat. These consultants will help to meet the legal, fiduciary, and E&S requirements of the IPF component. This includes experts in project management, advocacy, M&E, reporting, knowledge management, fieldwork, media, communications, graphic design, public policy, project administration, finance, procurement, and E&S matters.

INSTITUTIONAL ARRANGEMENTS AND CAPACITY

148. INEY 2 institutional arrangements will be aligned with the GOI institutional structures and implementation arrangements, supporting the transition of the stunting reduction program from *Stranas Stunting to Perpres 72*. INEY's MTR and an institutional review during INEY 2 preparation have found that this alignment, while complex, not only meets the World Bank's fiduciary and other requirements but has proven resilient to challenges ranging from pandemics to political transitions.

149. To better align INEY 2 implementation arrangements with the division between Steering and Implementation Committees, *Bappenas*, as Vice Chair of Steering Committee, has accepted SOVP's request to serve as executing agency (EA) for the INEY2 PforR and Coordinating Project Management Unit (CPMU) for the IPF.¹⁴⁵ As EA, *Bappenas* will facilitate the implementation and monitoring of the PforR Program and ensure adherence to the program management, legal, fiduciary, and E&S obligations of the government as outlined in the loan agreement and the Program Action Plan (PAP). *Bappenas* will be the main interlocutor between the GOI and the World Bank. It will coordinate, with support from *Setwapres* as necessary, among the DLI implementing units. It will also coordinate with the MOF and implementing units to facilitate DLI reporting, request the Finance and Development Monitoring Agency (*Badan Pengawasan Keuangan dan Pembangunan*, BPKP) to execute DLI verification, facilitate availability of ministry audit reports, and coordinate with the MOF on disbursement and any required restructuring. As the CPMU, *Bappenas* shall be responsible for the overall coordination of the IPF component activities and adherence to the FM, procurement, and E&S obligations (details annex 8). *Bappenas* will finance a secretariat to support these functions. SOVP of the Ministry of State Secretariat will continue to support the INEY 2 Program, exercising its mandate under *Perpres 72* and leveraging the convening power in support of the Vice President Chair of the Steering Committee. As a PIU for the IPF component, SOVP will continue its assignment and leadership role established under *Perpres 72* and support the INEY 2 EA by facilitating supra-ministerial coordination and accountability for the multisectoral stunting reduction, including for the PforR program. This role aligns with institutional review findings emphasizing the centrality of SOVP's coordination and accountability functions in the success of the stunting reduction program over the past five years.

150. The following arrangements will be introduced specifically for INEY 2: (a) a Steering Committee for INEY 2, chaired by *Bappenas* with members from the participating line ministries and agencies, responsible for overall strategic direction considerations, advice, and recommendations on INEY 2 Program; and (b) an Implementation Committee for INEY 2, chaired by *Bappenas* and co-chaired by the INEY 2 implementing agencies, with composition responsible for coordinating activities related to the Program's implementation including the achievement of DLIs and key results of the INEY 2 Program.

151. SOVP of the Ministry of State Secretariat will support the INEY2 Program, exercising its mandate under *Perpres 72* and leveraging the convening power in support of the Vice President Chair of the Steering Committee. As a project implementation unit (PIU), SOVP will continue its assignment and leadership role established under *Stranas Stunting* and support the INEY2 EA to carry out supra-ministerial coordination and accountability for the multisectoral stunting reduction, including for the PforR program.

¹⁴⁵ The institutional review commissioned during INEY 2 preparation also examined the potential of BKKBN, Kemenko PMK, and MOH to take on the EA and CPMU functions. However, *Bappenas* was determined as the most suitable alternative to SOVP in terms of personnel, experience in handling donor-financed projects, infrastructure related to projects, and institutional authority to lead the Program.

This role aligns with institutional review findings emphasizing the centrality of SoVP's coordination and accountability functions in the success of the stunting reduction program over the past five years. SoVP will maintain its focus on coordination across sectors and across levels of government, and debottlenecking for any issues or challenges faced by implementing ministries and agencies. SOVP will convene the joint annual national stunting summit (DLI 1) to review the performance of the *Perpres 72* at national and subnational levels, guide subsequent year activity and budget priorities, and will serve as the basis for holding ministers, provincial governors, district heads, and mayors accountable for accelerating progress.

152. The DLIs, DLRs, and Program Actions aim to mitigate risks incurred in the transition from *Stranas Stunting to Perpres 72* and INEY to INEY 2 implementation arrangements and align with institutional roles and responsibilities. As with any institutional change, time and support have been required to restabilize effective coordination at all levels. It is now clear that SoVP will continue its critical role in advocacy, multisectoral coordination, and debottlenecking. DLI 1 aims to harmonize central level leadership and coordination. BKKBN has rapidly gained confidence in its role as a new PIU, and its overall role at the national level, including strengthening the linkages of INEY2 with the *RAN-PASTI*. While this action plan fully adopts the goals and strategies outlined in *Perpres 72*, it has hitherto placed higher emphasis on the activities introduced by BKKBN itself, such as introduction of the TPPS and TPK. As BKKBN is now increasingly working with MOHA, MOH and MOV to harmonize subnational implementation, there is an agreement to update the *RAN-PASTI* in 2024 to reflect coordinated roles of these key stakeholders. DLI focal point entities have been streamlined to the extent possible to maximize accountability while aligning to the Gol bureaucratic structure.

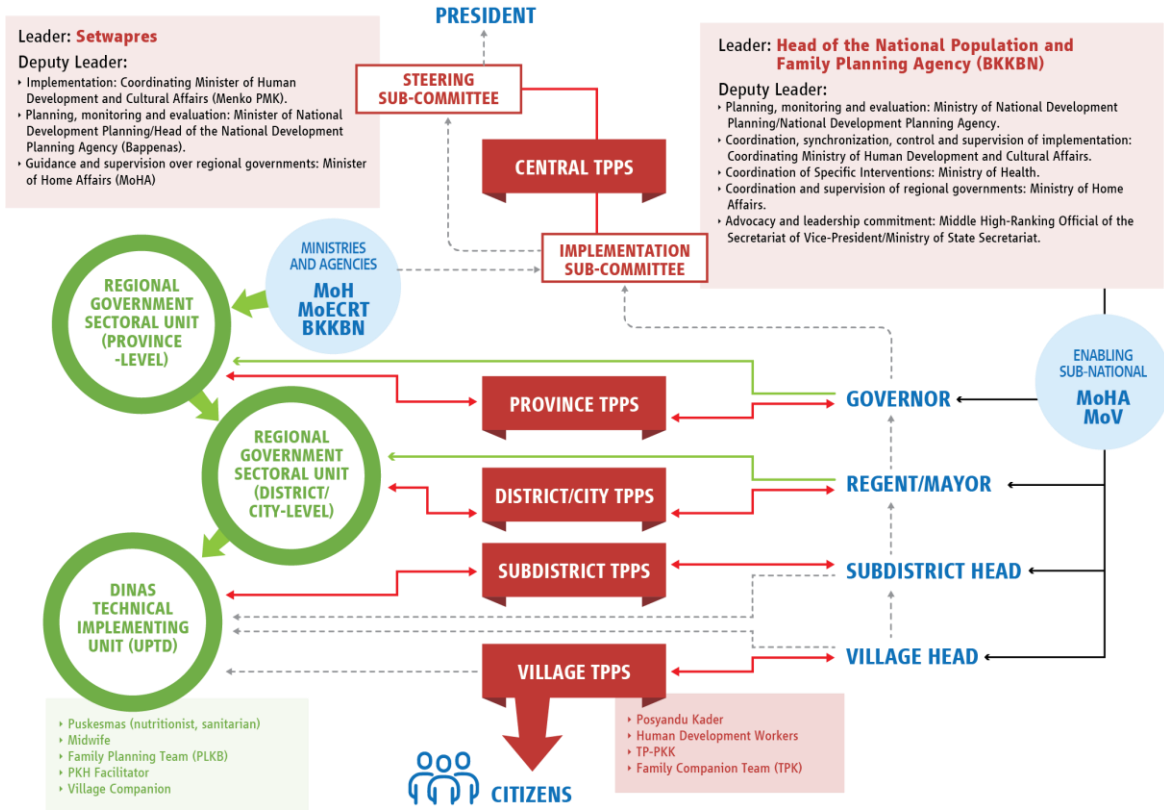
153. Based on lessons learned from INEY's first phase, the IPF component will be strategically deployed to provide technical assistance and capacity building for key implementing agencies to institutionalize the multisectoral stunting reduction program. Program secretariats will be financed through the IPF component to support SoVP (in the advocacy, coordination, and debottlenecking functions) and Bappenas (planning, budgeting, and M&E).

154. INEY's first phase saw some challenges in the realization of targets for sub-national implementation through sectoral offices at district level and at village level. Two actions have been taken to improve implementation progress:

- (a) **Alignment of DLIs with *Perpres 72* results:** Implementation at sub-national level for 'stuck' DLIs improved as DLI targets were embedded in the *Perpres 72* results framework and monitored at president's level on an annual basis. DLIs have been linked with *Perpres 72* targets to improve achievement and accountability.
- (b) **Deployment of sub-national technical assistance to improve rollout and implementation fidelity:** Under INEY's first phase, MoHA deployed a sub-national TA pool to increase capacity of provincial governments to guide, monitor, and evaluate district government performance in converging interventions and increase district capacity to deliver on the newly introduced district convergence actions. The TA pool successfully supported districts in their development of diagnostics and implementation of performance assessments and facilitated good practice learning between districts. However, the TA pool was limited to the convergence action function and did not cover sectoral intervention. Therefore, INEY 2 will replicate the TA pool design and support MoH to strengthen delivery of the essential health and nutrition services through the ILP model at district and village level. The TA pools augment the ability of the central level

ministries/agencies in improving districts'/villages' implementation fidelity in translating national guidelines to the local context.

Figure 12: Implementation Arrangements of Indonesia's National Program for the Acceleration of Stunting Reduction



Note: TPPS = Stunting Reduction Acceleration Team; TP-PKK = Mobilizing Team-Family Welfare Development

Source: Perpres 72.

Table 16: Implementation Arrangements for Investing in Nutrition and Early Years Phase 2 PforR and IPF

Ministry/Agency	Roles and Responsibilities
Steering Committee of Central Team for Acceleration for Stunting Reduction as notified in PerPres 72/2021)	<p>Chairman: Deputy Minister for Development of Human, Society and Cultural Affairs</p> <p>Members:</p> <ul style="list-style-type: none"> (i) Deputy of Policy Support for Human Development and Equality, Secretariat of the Vice President ; (ii) Director General of Public Health, Ministry of Health; (iii) Director General of Regional Development, Ministry of Home Affairs; (iv) Director General of Village Government Development, Ministry of Home Affairs;

	<p>(v) Secretary of National Population and Family Planning Board;</p> <p>(vi) Director General of Villages and Rural Development, Ministry of Villages, Underdeveloped Regions and Transmigration;</p> <p>(vii) Director General of State Budget, Ministry of Finance</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Provide directions about stunting reduction acceleration policy, considerations, advice, and recommendations to address challenges and obstacles to stunting reduction acceleration, and report on Stunting Reduction Acceleration to the President annually or whenever necessary. • The Steering Committee would extend its role to provide oversight and monitor implementation progress of the INEY2 PforR.
<p>Implementation Committee (as notified in Perpres 72/2021)</p>	<p>Chairman: Director of Health and Community Nutrition, Ministry of National Development Planning</p> <p>Co-chairs:</p> <p>(i) Deputy Assistant of Poverty Alleviation, Vice President Secretariat,</p> <p>(ii) Director of Nutrition and Mother and Child Health, Ministry of Health;</p> <p>(iii) Director of Regional Governance Synchronization III, Ministry of Home Affairs;</p> <p>(iv) Director of Field Line Development and Movement, National Population and Family Planning Board;</p> <p>(v) Director of Social, Cultural, Environment Development for Villages and Rural Areas, Ministry of Villages, Underdeveloped Regions and Transmigration;</p> <p>(vi) Director of Budget for Human and Cultural Development, Ministry of Finance.</p> <p>Members:</p> <p>(i) Director of Regional Development Planning, Evaluation, and Information, Ministry of Home Affairs;</p> <p>(ii) Director of Immunization Management, Ministry of Health;</p> <p>(iii) Director of Health Promotion, Ministry of Health;</p> <p>(iv) Head of Health Policy Center, Ministry of Health;</p> <p>(v) Director of Primary Health Care, Ministry of Health;</p> <p>(vi) Head of Data and Information Center, Ministry of Health;</p> <p>(vii) Director of Report and Statistics, National Population and Family Planning Board;</p> <p>(viii) Director of General Transfer Fund, Ministry of Finance;</p> <p>(ix) Director of Early Childhood Education, Ministry of Education, Culture, Research, and Technology;</p> <p>(x) Director of Specific Transfer Fund, Ministry of Finance;</p> <p>(xi) Director of Public Health Governance, Ministry of Health;</p> <p>Director of State Budget Formulation, Ministry of Finance.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Prepare a national action plan for Stunting Reduction Acceleration. • Coordinate, synchronize, and integrate stunting reduction acceleration programs and activities among ministries and agencies, provincial regional governments, district/city regional governments, village governments, and stakeholders. • Prepare draft solutions to challenges and obstacles to stunting reduction acceleration.

	<ul style="list-style-type: none"> • Coordinate M&E of stunting reduction acceleration. • Coordinate institutional and human resources capacity building in ministries/agencies, provincial regional governments, district/city regional governments and village governments in stunting reduction acceleration. • Coordinate the strengthening of cooperation and partnership with stakeholders in stunting reduction acceleration.
INEY 2 Coordination Committee (SOVP and Bappenas)	<ul style="list-style-type: none"> • Co-chairs will facilitate implementation support missions under INEY 2 and closely collaborate on the National Stunting Summit And other advocacy and accountability activities. The co-chairs will ensure the participation of all implementing agencies in the implementation support mission and ad hoc reviews, as required, to review performance of the PforR and IPF at least once in every six months.
Secretariat of Vice President (SOVP) of the Ministry of State Secretariat	<ul style="list-style-type: none"> • Co-chair of the INEY 2 Coordination Committee • IPF PIU • Chair of the GOI Stunting Reduction Team Steering Committee • Implementing agency for the achievement of DLI 1.1 • Leads multistakeholder coordination across sectors and across levels of government • Leads debottlenecking for any issues or challenges faced by implementing ministries and agencies. • Convenes the joint annual National Stunting Summit (DLI 1) to review the performance of <i>Perpres 72</i> at national and subnational levels, guide subsequent year activity and budget priorities, and will serve as the basis for holding ministers, provincial governors, district heads, and mayors accountable for accelerating progress in stunting reduction.
MOF	<ul style="list-style-type: none"> • Together with <i>Bappenas</i>, ensures the Program has necessary plans and budget allocations aligned to Program targets and policies. • Supports <i>Bappenas</i> for the achievement of DLI 2.2 and 7. • Provides data on stunting reduction budget allocation and actual realization of central government line ministries spending on nutrition.
Bappenas	<ul style="list-style-type: none"> • Deputy Chairman for Planning, Monitoring and Evaluation for the <i>Perpres 72</i> Implementation Sub-Team • As EA of the INEY 2 PforR, <ul style="list-style-type: none"> ○ Monitors progress of the Program toward the PDO; ○ Is responsible for overall coordination and implementation of Program activities with IAs/PIUs to discuss progress and GOI's activities towards the DLIs/DLRs achievement; ○ Ensures overall oversight of the Program; ○ Monitors adherence to the Loan Agreement and PAP and ensure necessary actions are taken; ○ Coordinates with the BPKP and ensure necessary information is provided for DLI verification; ○ Reviews and discusses with the relevant ministries/agencies on the activities and DLIs/DLRs include the MOF and BPKP; and ○ Ensures adherence to technical, fiduciary, and E&S obligations. • Coordinating PMU for IPF component • PIU for IPF component • Implementing agency for DLIs 1, 2.1, 2.2, 3.2, 3.3, 5.3 and 8.2 • Together with Director General (DG) Budget, MOF, coordinates planning and budgeting between ministries and agencies for the Program • Together with DG Budget, MOF, to develop a system and conduct annual

	<p>budget tagging and tracking</p> <ul style="list-style-type: none"> Leads M&E for the PforR and stunting reduction program in support of BKKBN
BKKBN	<ul style="list-style-type: none"> Chair of the Implementation Sub-committee under <i>Perpres 72</i> Implementing agency for DLIs 1, 3.3, 9.2, and 9.3 IPF PIU Prepares the update of the national action plan (RAN-PASTI) for stunting reduction beyond 2024 Supports the stunting reduction acceleration teams at provincial, district, sub-district, and village levels Coordinates the acceleration of stunting prevention at the family level which is expected to mitigate challenges in the implementation of the complaints handling at the village level, in coordination with the SOVP, <i>Bappenas</i>, MOH, MOV, and subnational task forces Establishes coordination between the central TPPS, provincial TPPS, and district/city TPPS to implement RAN-PASTI in supporting targeted specific interventions and sensitive interventions in accelerating stunting reduction
MOH Nutrition and Maternal and Child Health Directorate (Direktorat Gizi dan KIA)	<ul style="list-style-type: none"> Implementing agency for achievement of DLIs 4.2, 5.1, 5.4, and 6.3 Supportive agency for DLIs 1.1, 3.1, 4.1, 6.1, 6.2, and 10.2 Echelon II unit under the Directorate General of Public Health tasked with providing guidance and coordination for implementation of maternal and child nutrition and adolescent health policies and services Updates and implements nutrition-specific guidelines; supports integration of nutrition in <i>Posyandu kader</i> training Monitors scale-up of national nutritional action program (<i>aksi bergizi</i>), which provides support for adolescent nutrition in school Supports the MOECRT in the implementation of holistic integrated early childhood education (PAUD) centers
MOH Health Development Policy Agency (BKPK)	<ul style="list-style-type: none"> Implementing agency for DLIs 3.1, 5.1, 5.2, and 7 Carries out the formulation and provision of health development policy recommendations Conducts the national anthropometric survey (SSGI) and publishes it on a government website Conducts a micronutrient survey Updates and issues guidelines, nutrition status data and new nutrition specific interventions Is responsible for the counter verification for BOK Kinerja Puskesmas
MOH Health Promotion and Community Empowerment Directorate (<i>Direktorat Promosi Kesehatan dan Pemberdayaan Masyarakat</i>), Public Health Governance Directorate (<i>Direktorat Tata Kelola Kesehatan Masyarakat</i>)	<ul style="list-style-type: none"> Implementing agency for DLIs 4.2, 6.1, 9.1, 10.1, and 10.2 Health Promotion and Community Empowerment Directorate's prepares and carries out health promotion activities and disseminates all forms of health information and developing health resources to carry out community empowerment activities in the health sector, including training of <i>posyandu kader</i>. Public Health Governance Directorate's prepares and implements policies, provide technical guidance and M&E in regard to health services in the community. Public Health Governance Directorate is tasked with supervise Primary Healthcare Integration scale-up across Indonesia—including provision of guidelines and materials for <i>Puskesmas</i>, <i>Posyandu</i>, and <i>Pustu</i> Promkes, together with Nutrition and MCH, supports scale-up of Akzi Bergizi implementation in 12 priority provinces.

MOH Planning Bureau (Roren)	<ul style="list-style-type: none"> • Tasked with coordinating implement units at the MOH • Responsible for the IPF component • Implementing agency for achievement of DLI 7 • Issue formula allocation and guidelines for performance-based allocation for BOK Puskesmas
MOH Immunization	<ul style="list-style-type: none"> • Implementing agency for DLI 6.4 and 6.5 • Coordinate for zero-dose Immunization
MOH Fasyankes	<ul style="list-style-type: none"> • Support Gizi KIA to implement DLI 6.1 and Directorate of Public Health Governance for DLI 10.2 • Responsible for ensuring medical equipment (ALKES) at Puskesmas and Pustu level
MOH Pusdatin and DTO	<ul style="list-style-type: none"> • Collaborate with Gizi KIA to implement DLI 6.2 and Directorate of Public Health Governance for DLI 10.2 • Responsible for collecting/recording and reporting data of program as per DLI 6.2 and DLI 10.2
MOH MOH, Directorate General of Pharmaceutical and Medical Devices	<ul style="list-style-type: none"> • Support the implementation of DLI 5.1 in coordination with Directorate Nutrition and Maternal and Child Health • Responsible in ensuring the availability and distribution of MMS
MOH Directorate of Quality Improvement of Human Resources	<ul style="list-style-type: none"> • Support implementation of DLI 6.1 for fulfillment of human resources at <i>Puskesmas</i> and DLI 10.2 for human resources at <i>Pustu</i>
Ministry of Village	<ul style="list-style-type: none"> • Implementing agency for achievement of DLIs 1.1, 9.2, 9.3, 9.4, supporting for 10.2 • Provide Village Minister Regulations regarding the use of village funds that can be used for activities related to stunting, incentives, and training of village actors and cadres (HDW, <i>Posyandu</i> cadres, Toddler and Family Development Kader [Kader Bina Keluarga Balita, BKB] cadres, village apparatus, and so on) • Provide guidance related to facilitating the acceleration of stunting reduction in villages (guidance from MOV and/or joint guidance with other relevant ministries/institution such as BKKBN, MOHA, and MOH) • Provide coaching or training to village cadres (HDW) and village actors, including strengthening the village TPPS (with BKKBN) • Provide data related to village convergence including the tool for the data collection (eHDW) • Developing forums and platforms for community engagement through <i>Rumah Desa Sehat</i> (RDS) forums and Village Rembuk Stunting • Integrating planning for stunting prevention activities in the regular planning system (<i>Musrenbang</i>)
MOHA Directorate of Local Government Affairs Synchronization III (<i>SUPD III</i>), Directorate General of Regional Development (<i>Bina Pembangunan Daerah, Bangda</i>)	<ul style="list-style-type: none"> • Implementing agency for DLIs 1.1, DLI 6.4, 6.5, DLI 6.4, DLI 6.5, 8.1, 8.2, and 8.3; IPF PIU • Strengthens the subnational governments' capacity to converge the national, regional, and village program • Together with the MOH, is responsible agency for DLI 6.4 and DLI 6.5 • Together with the MOF, is responsible agency for DLI 8.2 • To manage activities, budget, and targeted results under IPF Subcomponent 1.4 Strengthen Capacity for District Convergence • To prepare project planning (AWP), budgeting, procurement, financial administration, safeguards monitoring, project monitoring, evaluation, and

	<ul style="list-style-type: none"> reporting, gender, and grievance redress mechanism • Prepare/update technical guidelines, standard operating procedures, and relevant guidance (NSPK) related to convergence actions, district performance assessment • Together with the MOF to prepare the guideline for SNG budget tagging and expenditure tracking for stunting reduction acceleration • To supervise the activities implementation undertaken by service providers and provide required guidance
<p>MOHA Directorate of Village Community and Customary Institution, PKK, <i>Posyandu</i>, (<i>Direktorat Lembaga Kemasyarakatan dan Adat Desa, PKK, dan Posyandu</i>) and Directorate Village Financial Management and Asset – under Directorate General of Village Government</p>	<ul style="list-style-type: none"> • Implementing agency for supporting DLI 4.2, 9.2, and 10.2 • General: to strengthen the village governments’ capacity to converge the program at village level, strengthen <i>posyandu</i> and cadres’ capacity and incentives • To supervise the activities’ implementation undertaken by service providers and provide required guidance
<p>MOECRT</p>	<ul style="list-style-type: none"> • Implementing agency for DLI 4.1 and the implementation of PAUD HI with the support of Kemenko PMK, MOH, MVV, and MOHA • Together with Kemenko PMK, facilitate cross-sectoral collaboration and coordination on the implementation of PAUD HI • Support the coordination and capacity of local government to create regulation, task force, and regional action plan of PAUD HI • Provide technical guidelines and assistance, training, and supervision to provincial and district education office to improve PAUD HI implementation • Provide data for verification of achievement of DLI 4 • Conduct M&E

ASSESSING THE PROGRAM EXPENDITURE FRAMEWORK

155. The PforR Program expenditure framework is derived from the GoI National Stunting Budget Tagging and Tracking Exercise of central level expenditures. It includes a portion of the central level expenditures of the DLI focal point ministries/agencies that is necessary to facilitate the delivery of nutrition-specific interventions, select nutrition-sensitive interventions, and the six convergence instruments. It includes spending in ministries/agencies responsible for service delivery (MoH, MoECRT, BKKBN) and at five ministries/agencies (SoVP, Bappenas, MoF, MoV, and MoHA) for convergence instruments. To facilitate tracking of spending at the national level, Bappenas and MoF will “tag” expenditure lines across ministries that are related to the program. While the sub-national level spending is critical to achieve DLIs, only the proximal, national-level actions enabling this subnational spending and the quantum thereof are included in the Program’s expenditure framework. The composition of line ministries involved in INEY-1 and INEY phase 2 are slightly different, in that there are three (3) more line ministries/agencies included in INEY’s Phase 2 program expenditure (MoF, MoEC and BKKBN).

156. World Bank financing for INEY phase 2’s PforR represents 51.4 percent of the government Program boundary (Big P). The budget of line ministries involved in INEY phase 2 amounts to US\$75 billion over five years, out of which US\$11.7 billion represent the Government’s program (small p). The line

ministry budgets include budgets from eight key stakeholders: the Vice President Office, MoHA, MoF, MoEC, MoH, Bappenas, MoV and BKKBN. The P4R Program (big P) is estimated at US\$1.2 billion over 5 years (detailed calculations are included in the expenditure framework section of the technical assessment). The US\$600 million World Bank financing – implemented as a PforR Program – represents 51.4 percent of Big P (see table 15).

157. The analysis shows that the expenditure framework is adequate to enable the achievement of the development objectives. As part of its 2020 Public Expenditure Review, the World Bank found that Indonesia’s spending on nutrition is adequate and that better outcomes depend on improving budget absorption and its effectiveness in reaching 1,000-day households. The 2022 Annual Expenditure and Performance review report indicated that budget realization and output achievement against annual targets across nineteen nutrition-tagged Line Ministries and Agencies in 2021 were 96.5% and >90%, respectively. These preliminary results were marked improvements from the first the expenditure and performance review report, which found FY2019 budget realization and output achievement of nutrition-tagged Line Ministries and Agencies at 80-95% and 84.7%, respectively. Further, the expenditure framework contributes to the efficient execution of government programs by:

- a) favoring the maintenance of financial sustainability and the predictability of resource availability, essential for the continuous funding of government programs and the delivery of services.
- b) allowing the alignment of the policy objectives, selected priorities, and intended results established in the government’s strategies with the resource allocation defined in the budget and in the budget execution.
- c) creating the mechanisms and incentives supporting an efficient service delivery and value for money in the government program.

Table 17: INEY Phase 2 Program boundaries

		APBN 2023 (Rate US\$ = 15000IDR)		
		small p	Attribution	Big P
		(Thousands IDR)		(Thousands IDR)
		Line ministry budget		
007 Ministry of State Secretariat (Vice President office)		2,609,749,781		
007.01. CA	Service Delivery Program for the President and Vice President	1,080,195,215	4.7%	50,358,500
010 Ministry of Home Affairs (MOHA)		2,981,302,990		
010.08. CP	Population Management Program	523,515,457	0.1%	523,515
010.04. CM	Regional and Village Government Capacity Program	112,341,857	19.4%	21,802,600
015 Ministry of Finance (MoF)		45,224,522,772		
015.03. CB	State Expenditure Management Program	13,179,093	10.0%	1,317,909
015.03. CC	State Revenue Management Program	4,771,607	10.0%	477,161
01503. CE	Fiscal Policy Program	1,477,338	10.0%	147,734
023 Ministry of Education, Culture, Research and Technology (MoEC)		80,221,010,125		
023.01.D.	PAUD Program and 12 Year Compulsory Education	8,510,137,184	10.0%	851,013,718
024 Ministry of Health (MoH)		85,458,749,274		
024.03. DD	Public Health Program	450,313,685	59.0%	265,625,500
024.04. DG	Health Service Program and JKN	18,358,432,030	10.0%	1,835,843,203
024.11	Health Development Policy Program	864,408,178	10.0%	86,440,818
024.01. WA	Management Support Program	2,710,516,449	0.7%	19,425,000
055 Ministry of National Development Planning/BAPPENAS		1,607,331,766		
055.01.CK	National Development Planning Program	816,194,269	15.3%	124,541,000
067 National Population and Family Planning Board (MoV)		2,997,030,851		
067.03.CT	Disadvantaged Regions, Border Areas, Rural, and Transmigration Programs	174,556,528	42.1%	73,442,000

068 National Population and Family Planning Board		4,249,298,822		
068.01. DJ	Family Development, Population and Family Planning Programs		1,732,777,713	10.0%
	Total	225,348,996,381	35,352,816,603	3,504,236,430
	in US\$ (per year)	15,023,266,425	2,356,854,440	233,615,762
	in US\$ (5-year period)	75,116,332,127	11,784,272,201	1,168,078,810
	in IDR	1,126,744,981,905	176,764,083,015	17,521,182,149
	Percentage of Big P out of small p			9.91%
	Percentage of Big P financed by the World Bank			51.37%

Expenditure framework methodology

158. The program expenditure boundary estimate was derived from the latest Bappenas/MoF tagging and tracking exercise and with expert judgement for weighting. There were several line ministries/agencies already involve in the first tagging and tracking exercise done by Bappenas/MoF, SoVP, MoHA, Bappenas and MoV. For these line ministries, the program expenditure estimation was generated by weighting the 2023 allocated budget with the share of latest year realization out of the 2023 budget for respective line ministry. For example, expenditure estimate for MoHA was calculate by:

- a- 2023 allocated budget: 1,080 billion IDR
- b- Latest year realization: 50 billion IDR
- c- Weighted = $(a/b) = 4.7\%$
- d- MoHA program expenditure estimation = $a \times c = 50$ billion IDR

For the line ministries MoEC, MoF and BKKBN, the weighting was generated using expert judgement given that these ministries are only involved in stunting-related activities through INEY-Phase 2. As per expert judgement, the weight attributed for these ministries was 10%, with assumption that 10% of expenditures for these line ministries contribute to stunting reduction. A different approach was used for the MoH to account for the fact that it has been part of INEY phase 1 while simultaneously implementing several PforR program at the same time. The expenditure estimation for MoH needed to therefore take into account how the Ministry's program budget line items are also included in the frameworks of other PforR Programs. For the *Program for Community Health* the weight attributed was 59% based on the tagging/tracking experiences, for the *Program for Health Development Policy* the weight attributed was 10%, and for the *Program for Health Service* and *JKN* (as well as Program for Management support) the weight attributed was 10% and 0.7% respectively.

ASSESSMENT AND DESCRIPTION OF PROGRAM RESULTS FRAMEWORK AND M&E

159. The results framework is well-defined with realistic indicators that are specific, measurable, attainable, relevant, and timely (SMART). The framework provides a clear and concise set of goals and indicators that are unambiguous and can be routinely monitored for progress and accountability. The indicators are specific, with well-defined targets that outline exactly what is expected to be achieved. Further, the indicators proposed are clearly measurable, with clear metrics and data sources outlined for each indicator. The indicators are also attainable and realistic, with targets that are based on current the country context and capacities. Lastly, the chosen indicators are relevant and linked to the PDO and to each results area.

160. The details results framework of the INEY Phase 2 PforR is presented below:

Indicator Name	DLI	Baseline	Intermediate Targets			End Target
			1	2	3	
To enhance delivery of services						
Number of active <i>Posyandu</i> delivering essential health and nutrition services according to agreed standards (Number)	10	0.00	20,000	30,000	40,000	50,000
Number of identified under-performing districts increasing coverage of complete immunization in under-five children (Number)	7	0.00	20.00	40.00	60.00	80.00
To accelerate the reduction of stunting						
Number of villages achieving good performance in the acceleration of stunting reduction (Number)	8	0.00	15,000	20,000	30,000	40,000.00
Percentage of children under age who are monitored for their growth and development (Percentage)		62.00	65.00	67.00	69.00	70.00

Intermediate Results Indicator by Results Areas

Indicator Name	DLI	Baseline	Intermediate Targets			End Target
			1	2	3	
1. Leadership, commitment and accountability for stunting reduction						
Number of districts rewarded for good performance on acceleration of stunting reduction during Annual National Stunting Summit (Number)	1	0.00	100.00	150.00	250.00	300.00
Annual assessment of government results-based nutrition planning and budgeting system (Text)	2	<p>No Guidelines on utilization of performance data;</p> <p>No capability to capture intervention location data in budget performance and expenditure reporting.</p>	<p>By May 2024, Bappenas and MOF will update the 2018 guidelines to:</p> <p>(a) tag, track and evaluate the performance of nutrition-related budgets beyond existing line ministries' expenditures only (e.g. including non-financial data, subsidies, latest available DAK transfers data, and/or subnational data from priority provinces)</p> <p>(b) recommend a combination of future inputs, activities, detailed outputs, and processes to achieve targeted</p>	Annual budget performance and expenditures report issued and utilized in accordance with updated guidelines.	Annual budget performance and expenditures report issued and utilized in accordance with updated guidelines.	Annual budget performance and expenditures report issued and utilized in accordance with updated guidelines.

Indicator Name	DLI	Baseline	Intermediate Targets			End Target
			1	2	3	
			impacts/outcomes; and (c) utilize results of performance evaluations in formulating next annual planning and budgeting on stunting reduction to better align with, and readjust allocations to achieve, the stunting reduction program's strategic objectives/targets			
Semi-annual and annual progress reports issued based on integrated and climate-responsive monitoring and evaluation (M&E) systems to support the acceleration of stunting reduction (Text)	3	No comprehensive M&E reporting for the stunting reduction program.	Semi-annual and annual progress reports detailing progress of the stunting reduction program, key bottlenecks, and recommendations for program improvement issued	Semi-annual and annual progress reports detailing progress of the stunting reduction program, key bottlenecks, and recommendations for program improvement issued	Semi-annual and annual progress reports detailing progress of the stunting reduction program, key bottlenecks, and recommendations for program improvement issued	Semi-annual and annual progress reports detailing progress of the stunting reduction program, key bottlenecks, and recommendations for program improvement issued
Indonesia increases climate responsiveness of Stranas Stunting (Text)	2	The National Program for Acceleration of Stunting Reduction does not include climate and nutrition adaptation activities or monitoring.	Climate and nutrition targets linked in the National Medium Term Development Plan	Indonesia issues national climate and nutrition adaptation plan (CNAP) as part of the National Action Plan for Food and Nutrition with monitoring framework	Annual progress reports for stunting reduction integrate CNAP reporting	Annual progress reports for stunting reduction integrate CNAP reporting
2. Delivery and quality of specific and sensitive interventions						
Junior and senior high schools in priority districts distribute iron-folic acid supplements as	4	3,552	4,552	5,552	6,552	7,552

Indicator Name	DLI	Baseline	Intermediate Targets			End Target
			1	2	3	
part of the implementation of the Nutrition Action Program to improve nutritional status for in-school adolescents and given the standard to distribute at least 26 iron-folic acid tablets a year (Percentage)						
3. Service delivery and convergence at district/city level for stunting reduction						
Number of <i>Puskesmas</i> that meet minimum clinical standards for service-readiness for essential maternal, newborn, child, and adolescent health and nutrition services (Number)	6	0.00	2,000.00	3,000.00	4,000.00	4,000.00
Number of children under five receiving a full set of basic immunizations in priority districts (Number)	7	640,000.00	660,000.00	680,000.00	705,000.00	725,000.00
Number of children under five receiving Pentavalent vaccine/DPT1 (Number) in priority districts	7	540,000.00	570,000.00	600,000.00	630,000.00	660,000.00
Percentage of pregnant women in the priority districts receiving the sixth ANC visit (Percentage)	7	0.00	20.00	40.00	50.00	60.00
4. Service delivery and convergence at village and household levels for stunting reduction						

Indicator Name	DLI	Baseline	Intermediate Targets			End Target
			1	2	3	
Percentage of villages engaging citizens in planning and budgeting to achieve good performance in converging stunting reduction (Percentage)	9	0.00	20.00	30.00	40.00	50.00
Number of <i>Posyandu</i> where at least 1 <i>Kaders</i> have completed the new basic training modules for maternal health, child (<5) health, school-age/adolescent health (Number)	9	0.00	20,000	30,000	40,000	50,000.00

M&E arrangements and capacity

161. The institutional arrangements for monitoring and evaluation of the PforR utilize well-established GoI mechanisms to support the Program. Bappenas, as the lead for monitoring and evaluation in the implementation sub-committee, has established a system for monitoring and evaluation of the *Stranas Stunting*. Adaptation of the M&E system is currently under way to accommodate the *Perpres 72* results framework and its operationalization will be supported under DLI 3. While most ministries and agencies have systems for collecting and reporting the required data, the capacity at the frontlines to carry out these functions is highly variable. Therefore, DLI 9 will support capacity strengthening for data collection at the village level. The IPF component will enable the PIUs to carry out monitoring and evaluation and capacity building activities above and beyond that which is supported in the government program. The Bank-executed technical assistance (including from dedicated GFF resources) encourages further monitoring and evaluation systems strengthening and the strategic use of data for decision making and programmatic improvement.

162. Achievement of the PDO will be measured by four PDO-level indicators and a set of intermediate results indicators. The selection of output and intermediate outcomes as intermediate results indicators will help measure important milestones in the implementation of DLIs. The focus is on strengthening governance and institutional arrangements, enhancing the delivery, quality, and utilization of the specific and sensitive services to accelerate stunting outcomes, and improving the coordination and monitoring of service convergence. Several areas, such as district/village performance and ‘active’ Posyandu have been monitored through the GOI system. However, INEY Phase 2 DLIs are introducing new indicator definitions which will be initiated under the Program, resulting in zero-value baselines.

163. To the extent possible, the indicators are derived from the *Stranas Stunting* indicators found in the *Perpres 72*. These indicators are incorporated in the *Perpres 72* M&E system supported under DLI 3 and will primarily be reported by the responsible ministries/agencies through existing information systems and data. PDO indicators 1, 2, and 4 will be estimated by the MoH using data from the existing health management information system and national anthropometric surveys, as relevant. PDO Indicator 3 will be estimated by the MoV using the Ministry’s progress review documents. MoH is responsible for producing six of the ten intermediate results indicators, with the rest to be extracted from reports produced by MoHA, MoF, BKKBN, MoECRT and MoV. Aligned with the key functions of the M&E system mandated by *Perpres 72*, these results indicators will allow an assessment of progress and effectiveness of implementation of activities for stunting reduction, support generation data for feedback to improve quality of services and inform planning and budgeting, and support strengthened accountability of national and subnational stakeholders for use of inputs for impact on stunting outcomes. While some indicators may not currently be collected as a part of the *Perpres 72* M&E system, they will be added to the M&E guidelines and collected from other means of qualitative and/or quantitative data collection and reported through Bappenas and BKKBN to SoVP as the Program’s executing agency. The results and progress will be summarized in a semi-annual Program progress report and a Program completion report.

164. In addition to providing Program reports, Bappenas coordinates the M&E system activities at the national level in support of BKKBN. The *Perpres 72* mandates Bappenas to coordinate M&E activities at the national level and to develop a M&E framework that includes at the national and each subnational level M&E indicators to be collected, their definitions and sources, and guidance on the use of data. Bappenas is currently developing guidelines, expected to be issued within the first year of the Program,

that will cover each of these areas. M&E activities under the new guidelines will be carried out by line ministries responsible for the delivery of nutrition-specific and nutrition-sensitive services under the *Perpres*.

165. An MTR of the Program will be undertaken on or before December 2025. The MTR will review the progress achieved in the implementation of the Program, and any constraints or challenges being experienced to achieve the results and objectives envisaged under the Program. To this end, Bappenas will prepare a report integrating the results of the Program's monitoring and evaluation activities on the progress achieved in the carrying out of the Program and setting out the measures recommended to ensure the efficient carrying out of the Program and the achievement of the objective of the Program. The MTR will provide an opportunity to undertake any necessary remedial actions, including any necessary restructuring of the Program, in light of the implementation experience.

ECONOMIC AND FINANCIAL ANALYSIS

166. Existing evidence indicates that investments for stunting reduction in Indonesia generate positive economic returns with an expected \$48 return for every \$1 invested. Ensuring optimum nutrition—particularly during the 1,000-day period from pregnancy to a child's second birthday—can alter an individual's development trajectory and maximize their productive potential. Chronic malnutrition has important lifelong consequences for health and cognitive development. Being stunted (low height-for-age) in early childhood is associated with a delayed start at school, reduced schooling attainment, and substantially decreased adult incomes at both the individual and country level.¹⁴⁶ These consequences add up to overall gross domestic product (GDP) losses of 4 to 11 percent in Asia.¹⁴⁷ Importantly, chronic undernutrition can be transmitted through an inter-generational cycle, where malnourished mothers are more likely to have stunted children.¹⁴⁸ Investments in nutrition are highly cost-effective and among the best value-for-money development actions.¹⁴⁹ The global investment framework for nutrition developed by the World Bank in partnership with R4D, 1000 Days, and the Bill and Melinda Gates Foundation estimated high returns on every dollar invested in nutrition: from \$4 in returns for treating acute malnutrition (wasting) to \$11 for preventing stunting, \$12 for the treatment and prevention of anemia,

¹⁴⁶ Daniels MC, Adair LS. Growth in young Filipino children predicts schooling trajectories through high school. *J Nutr*. 2004 Jun;134(6):1439-46. doi: 10.1093/jn/134.6.1439. PMID: 15173409;

Fink G, Peet E, Danaei G, Andrews K, McCoy DC, Sudfeld CR, Smith Fawzi MC, Ezzati M, Fawzi WW. Schooling and wage income losses due to early-childhood growth faltering in developing countries: national, regional, and global estimates. *Am J Clin Nutr*. 2016 Jul;104(1):104-12. doi: 10.3945/ajcn.115.123968. PMID: 27357091.;

Hoddinott J, Maluccio JA, Behrman JR, Flores R, Martorell R. Effect of a nutrition intervention during early childhood on economic productivity in Guatemalan adults. *Lancet*. 2008 Feb 2;371(9610):411-6. doi: 10.1016/S0140-6736(08)60205-6. PMID: 18242415.;

Martorell R, Horta BL, Adair LS, Stein AD, Richter L, Fall CH, Bhargava SK, Biswas SK, Perez L, Barros FC, Victora CG; Consortium on Health Orientated Research in Transitional Societies Group. Weight gain in the first two years of life is an important predictor of schooling outcomes in pooled analyses from five birth cohorts from low- and middle-income countries. *J Nutr*. 2010 Feb;140(2):348-54. doi: 10.3945/jn.109.112300. Epub 2009 Dec 9. PMID: 20007336; PMCID: PMC2806888.

¹⁴⁷ Horton and Steckel. 2013. A Scorecard for Humanity: Malnutrition. *Copenhagen Consensus Center*.

¹⁴⁸ Aguayo VM, Nair R, Badgaiyan N, Krishna V. Determinants of stunting and poor linear growth in children under 2 years of age in India: an in-depth analysis of Maharashtra's comprehensive nutrition survey. *Matern Child Nutr*. 2016 May;12 Suppl 1(Suppl 1):121-40. doi: 10.1111/mcn.12259. PMID: 27187911; PMCID: PMC5084823.;

Ozaltin E, Hill K, Subramanian SV. Association of maternal stature with offspring mortality, underweight, and stunting in low- to middle-income countries. *JAMA*. 2010 Apr 21;303(15):1507-16. doi: 10.1001/jama.2010.450. PMID: 20407060; PMCID: PMC3100588.

¹⁴⁹ Barrett, C. 2015. Benefits and Costs of the Food Security and Nutrition Targets for the Post-2015 Development. *Copenhagen Consensus Center*.

and \$35 for increasing the prevalence of exclusive breastfeeding.¹⁵⁰ Indonesia has one of the highest benefit-cost ratios for investments in stunting; it is estimated that every dollar spent generates \$48 in economic return.¹⁵¹ Not only do investments in nutrition produce substantial economic benefits, but they also lay the groundwork for the success of investments in other sectors. Investments in the early years—including early life nutrition, early learning and stimulation, and nurturing care and protection from stress—ensure that all children reach their human potential and contribute to the economic growth of their nation.

167. A detailed economic and financial analysis of the INEY program – with conservative estimates – produces a net present value of US\$ 10,362,213,194 and benefit-cost ratio of 21.3. Taking into account the present value of Program costs (estimated at \$ 510,824,614), and the present value of expected benefits (estimated at \$10,362,213,194), the net present value of the proposed Program is expected to be \$10,873,037,808. The positive net present value indicates that project benefits outweigh project costs, making this a sound investment. The benefit-cost ratio resulting from the analysis is estimated at 21.3 meaning that for each US\$1 of investment through the proposed Program, a return of US\$21.3 is expected. These results are based on very conservative assumptions and likely underestimate the total Program benefits. They also fail to account for positive spillovers that will arise from efficiency gains from the project due to improved technical and allocative efficiency. For example, health care savings for health systems and households due to reduced morbidity and mortality are not considered. Cost benefit calculations are included in the table below and the methodology is detailed in the Box below.

Table 18: Summary calculations of cost-benefit analysis of INEY Phase 2 Program

Year	mid-2023	2024	2025	2026	2027	mid-2028
Program duration in % of total duration	0.10	0.20	0.20	0.20	0.20	0.10

Cost Estimates

Disbursement (in \$)	62,400,000	124,800,000	124,800,000	124,800,000	124,800,000	62,400,000
Discount rate	6%					
Present Value of Costs	510,824,614					

Benefit Estimates

Population Growth	0.7%					
Total population in targeted regions	125,537,147	126,415,908	127,300,819	128,191,925	129,089,268	129,992,893
Estimated population that would directly benefit from INEY interventions (focusing only on 0-4 years old)	32,514,121	32,741,720	32,970,912	33,201,708	33,434,120	33,668,159
Estimated averted mortality from INEY interventions	390,169	392,901	395,651	398,421	401,209	404,018

¹⁵⁰ Shekar M, Kakietek J, D'Alimonte MR, Rogers HE, Eberwein JD, Akuoku JK, Pereira A, Soe-Lin S, Hecht R. Reaching the global target to reduce stunting: an investment framework. *Health Policy Plan.* 2017 Jun 1;32(5):657-668. doi: 10.1093/heapol/czw184. PMID: 28453717; PMCID: PMC5406759.

¹⁵¹ Hoddinott, J., Alderman, H., Behrman, J. R., Haddad, L., and Horton, S. (2013), "The Economic Rationale for Investing in Stunting Reduction." *Maternal Child Nutrition* 9: 69–82.

Average gained productive life-years per person (very conservative estimate of 0.5 productive life year gained)	0.5	0.5	0.5	0.5	0.5	0.5
Total gained productive life-years	195,085	196,450	197,825	199,210	200,605	202,009
GNI per capita (current \$US) for Indonesia (2021)	4,180	4,180	4,180	4,180	4,181	4,182
Estimated Benefit (in \$US) from avoided mortality	815,454,160	821,162,339	826,910,475	832,698,849	838,728,345	844,801,453
Estimated Benefit (in \$US) from increased productivity from reduced stunting	1,359,090,266	1,368,603,898	1,378,184,125	1,387,831,414	1,397,880,575	1,408,002,421
Estimated cases of anemia prevented	70,270	93,417	131,920	143,591	144,592	146,593
Estimated Benefit (in \$US) from anemia cases prevented among pregnant women	351,351	467,085	659,602	717,954	722,959	732,964
Total positive cash flow	2,174,895,777	2,190,233,322	2,205,754,203	2,221,248,217	2,237,331,880	2,253,536,838
Discount rate	6%					
Present Value of Economic Benefits	10,873,037,808					

Key Findings	
Net present Value of the Proposed Project	10,362,213,194
Benefit-Cost Ratio	21.3

168. Rationale for public sector provision/financing. In general terms, public investment in health and nutrition focusing on women, infants, and young children can be rationalized based on its nature as a merit good (a good whose availability should not depend on the ability to pay). In addition, public financing, regulation, and even provision of health and nutrition services are justifiable because of widely recognized market failures resulting from information asymmetries, presence of supplier-driven demand, complex and opaque production functions, and other market imperfections. Therefore, in Indonesia, as in most countries in the region, basic health and nutrition services, including those whose provision will be supported by the proposed program, are already provided primarily through the public sector. Public financing and provision of health and nutrition services are necessary to improve the efficiency and equity of service delivery.

169. The P4R program will also improve technical and allocative efficiency in the health system, particularly in relation to the delivery of stunting reduction intervention. By strengthening institutional capacity and improving availability and quality of key inputs at the village level, more health facilities will be pushed to the production function frontier, and therefore, deliver better services to the extent possible at a given cost. The project will also contribute to improved allocative efficiency in the health system by shifting funding from more expensive curative treatments to preventative and primary care interventions.

170. The project will contribute to promote equity in access to nutrition services and will reduce the financial burden on poor households. Evidence shows that nutrition services that reduce stunting are correlated with a more equitable distribution of health in populations, a finding that holds in both cross-

national and within-national studies.¹⁵² Studies from various countries demonstrate that a healthcare system oriented towards specialist care creates inequity in access. On the other hand, health systems in low-income countries with well-established primary care systems tend to be more pro-poor, equitable and accessible. In addition, it is expected that redirecting resources from expensive treatments to relatively inexpensive basic primary interventions would reduce spending on higher levels of care and the subsequent out-of-pocket payments poor individuals would have to incur.

Box: Notes on EFA Methodology

The cost benefit analysis relies on conservative methods to forecast costs and benefits associated with the proposed Program. This is particularly important given the uncertainties that govern intervention impact magnitude and project implementation efficacy. To monetize the benefit associated with providing services under the Program, the analysis examines productive life years gained due to reduced mortality. This is done by calculating the number of years gained among beneficiaries as a result of a project intervention and calculating the economic benefit of these years. Productive life years gained is a modified mortality measure where remaining life expectancy is considered. This method accrues more weight to young target populations as is the case for stunting reduction programs. Given the nature of the proposed Program and its likelihood of having great impact among children under 5, this method was seen to be most suitable for this context.

Assumptions in the analysis and the rationale behind them are as follows:

- **Discount rate:** in estimating present values, the discount rate is assumed to be six percent (6%). This estimate is currently in line with the Indonesia 10Y Government Bond with a 6.860% yield. The discount rate is also assumed to be constant for the duration of the Program.
- **Population growth rate:** Population growth rate is assumed to be 0.7 percent and constant over the life of the project. This is the latest recorded national population growth rate according to the World Bank World Development Indicators in 2021. The national population growth rate is applied to targeted district growth rates.¹⁵³
- Population in targeted regions that could directly benefit from services under the Program is estimated to be approximately 25.6% of the total population in those regions. This is a conservative estimate informed by the demographic profile of Indonesia.¹⁵⁴
- Out of this estimated population, estimates for averted mortality and reduction in stunting are obtained from the Lives Saved Tool (LiST) which projects the impact of scaling up on maternal, newborn, and child health, and nutrition (MNCH&N) interventions in low- and middle-income countries. Estimates adopt very conservative parameters and rely only on the services supported by INEY Phase 2.
- Average gained productive life-years per person is assumed to be a 0.5 year – a very conservative estimate for stunting reduction interventions that tend to have much larger impacts on one’s life expectancy.
- GNI per capita is assumed to be constant and equal to the GNI per capita of \$4,180 USD in 2021. This value is used to monetized gained productive life years throughout the project.

¹⁵² Starfield B, Shi L, Macinko J. Contribution of Primary Care to Health Systems and Health. *The Milbank Quarterly*. 2005;83(3):457-502. doi:10.1111/j.1468-0009.2005.00409.x.

¹⁵³ World Bank. 2021. World Development Indicators

¹⁵⁴ UN populations. 2023. UN population estimates.

Keeping GNI per capita constant is another way in which the modeling is conservative as it doesn't not reflect potential gains from increased GNI to increased productivity.