



AN EVIDENCE-BASED POLICY BRIEF

REDUCING STUNTING AMONG CHILDREN UNDER 5 YEARS OF AGE IN LAO PDR

Stunting reduction is prioritized by the Government of Lao PDR as a key development issue in national and sectorial plans and strategies. This policy brief summarizes the current state of knowledge regarding stunting reduction in Lao PDR. The information presented is expected to positively influence policy and programming choices.

Stunting is a manifestation of irreversible chronic malnutrition that is directly associated with high mortality and poor cognitive development in the short and long term among children. The prevalence of stunting among children under 5 years old has shown a substantial reduction in the last two decades in Lao PDR reducing from 40.4% in 2006 to 33.0% in 2017. Despite the significant improvements, the current prevalence of stunting

is still high, and disparities exist among provinces. Identified protective factors to prevent stunting in Lao PDR include wealth status, handwashing with soap, and appropriate feeding, especially among infants and young children. On the other hand, the age of the mother, a lower education level for the mother, the geographical location and higher parity are among the factors that increase the risk of being stunted. Apart from these factors, it is important to consider that the ongoing COVID-19 crisis presents a challenge for the successful reduction of stunting. It is expected that the pandemic will have a tremendous negative impact on the economic growth and household income with negative consequences on access to food, health, education and nutrition services among others.

Policy recommendations for successful reduction of stunting in Lao PDR



Invest in maternal and child nutrition practices throughout the life cycle. Especially in the first 1000 days of life.



Strengthen Nutrition-WASH programming to address household and environmental factors that contribute to stunting.



Strengthen child protection systems to prevent early marriage and childbirth.



Prioritize social protection schemes targeting poor and deprived households.



Support families in making informed choices on family planning.

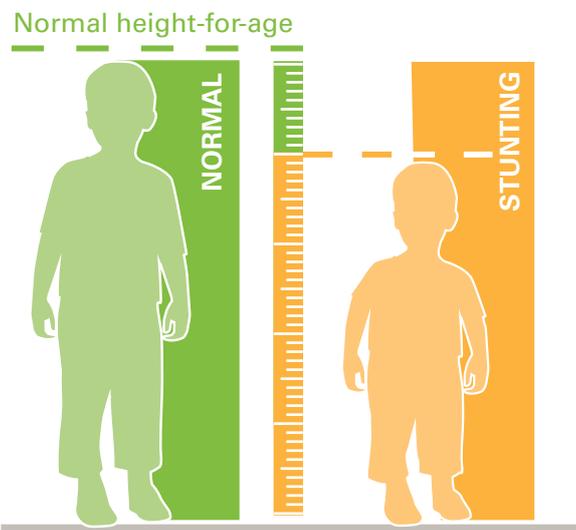


Address the negative consequences of the COVID-19 pandemic on households through shock responsive social protection and other mitigation measures

INTRODUCTION

Stunting is defined as height for age more than two standard deviations below the World Health Organization (WHO) child growth standards median¹. In simple words stunting is when a child has a low height for their age. Stunting is irreversible and it is a manifestation of prolonged or chronic inadequate dietary intake and repeated infections among children. Stunting is directly associated with higher mortality and affects brain development among children, thereby reducing mental capacity and school performance². Stunting has negative effects in adult life by increasing the risk of chronic diseases and reducing productivity. It affects the individual, the community and the nation.

Figure 1: Picture of stunting (low height for age)



The global prevalence of stunting among children under 5 years has shown substantial improvements over time, having reduced from 26% in 2010 to 21.3% in 2019 worldwide. In South East Asian countries, the prevalence of stunting has also shown a decrease. Cambodia had a prevalence of 32.4% in 2014 versus 39.9% in 2010; Indonesia had a 30.5% prevalence in 2018 versus 37.2% in 2013; The Philippines had a 30.3% prevalence in 2018 versus 33.6% in 2011; Vietnam presented a 23.8% in 2017 versus 27.5% prevalence in 2011. Thailand had a prevalence of 13.4% in 2019 versus 16.4% in 2012 and Myanmar presented a prevalence of 26.7% in 2018 versus 35.1% prevalence in 2009^{3,4,5}.

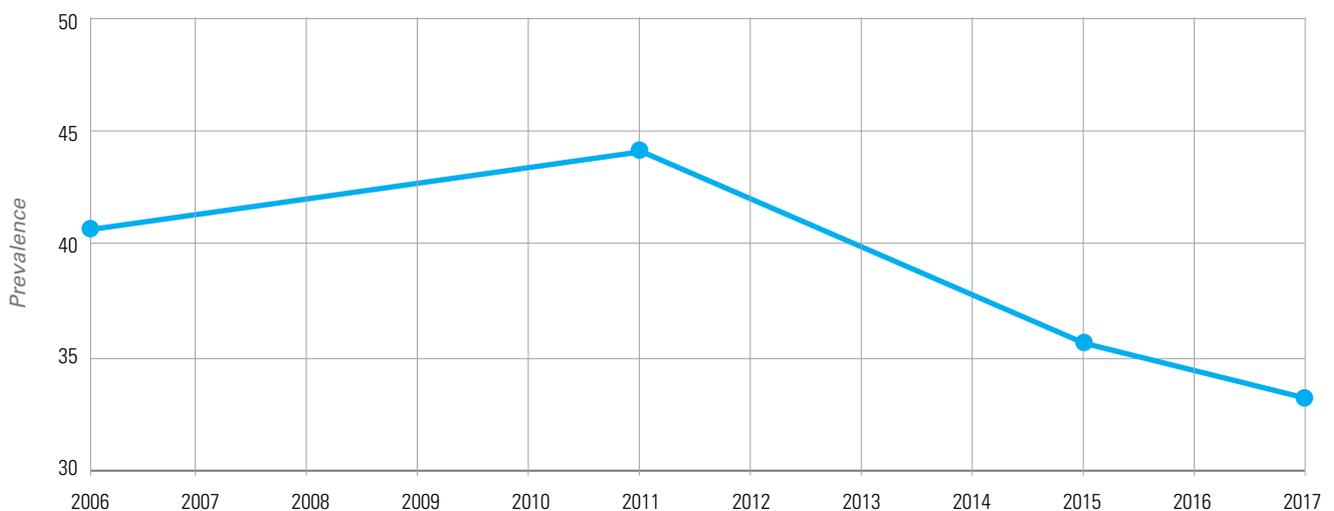
Figure 2: Prevalence of Stunting in South East Asia



STUNTING AMONG CHILDREN UNDER 5 YEARS IN LAO PDR

The national prevalence of stunting among children under 5 years has shown a consistent decline for the past two decades. The prevalence of stunting significantly reduced at the national level from 44.1% in 2011/12 to 33.0% in 2017 ($p < 0.001$)^{8,9}.

Figure 3: Trend of stunting prevalence in Lao PDR

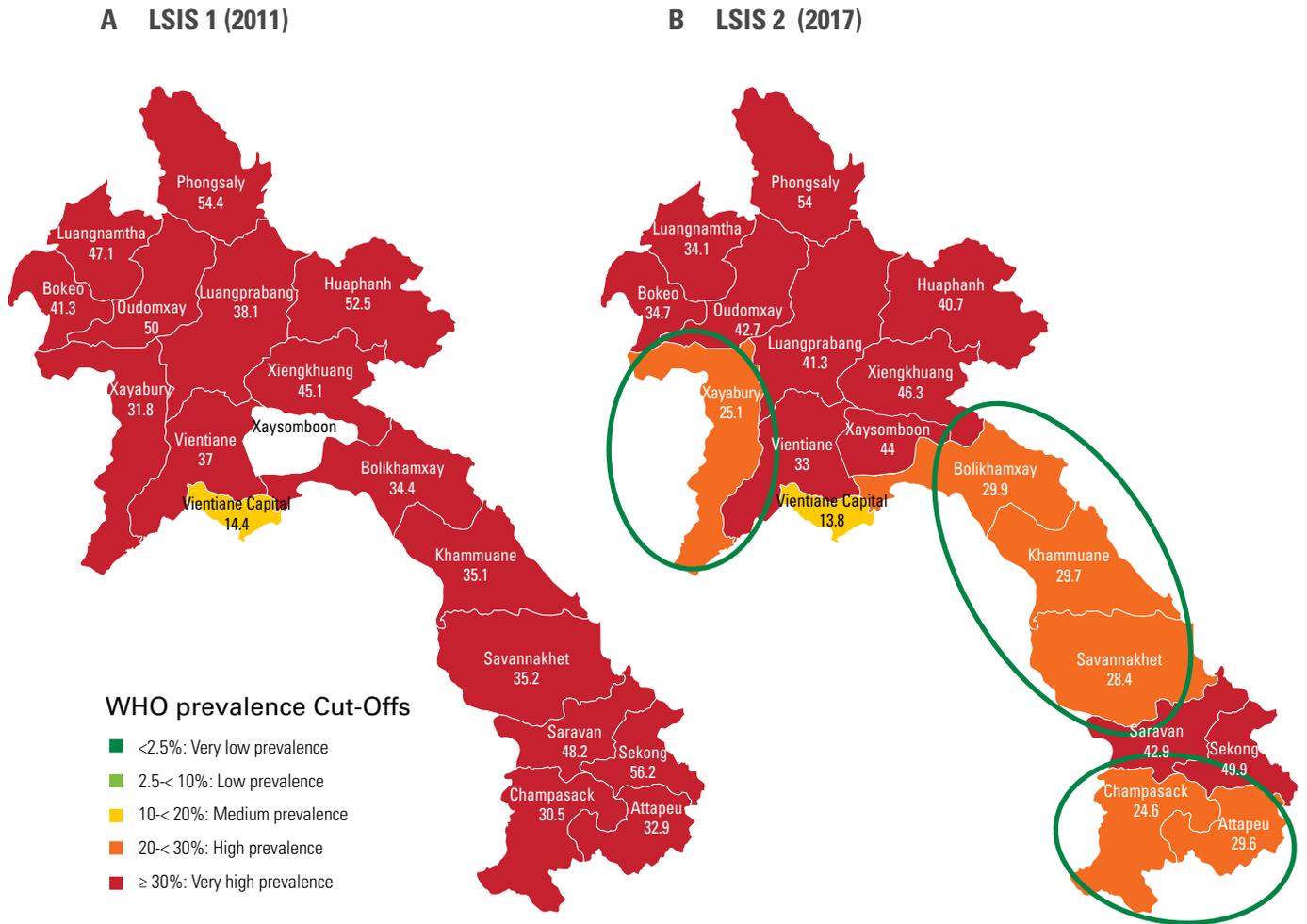


Source: MICS 2006, LSIS 2011/12, LCAAS 2015, LSIS 2017

Despite a substantial reduction of stunting at the national level, significant and wide disparities exist among provinces. The most up to date information on the prevalence of stunting shows that it ranges from 13.8% in Vientiane Capital to 54% in the province of Phongsaly (LSIS 2017). According to the WHO, stunting prevalence of 30% or more is classified as “very high prevalence” and of public health concern that requires action by policy makers⁴. As could be seen from figure 3 below, in 2011/12 almost all the provinces in Lao PDR except for Vientiane Capital had stunting prevalence more than the 30% threshold. A remarkable shift was observed in 2017 whereby 11 out of 18 provinces had stunting prevalence rate above 30%. Green circles denote areas with substantial improvement on stunting^{8,9}.



Figure 4: Stunting maps in 2011-2012 versus 2017



PREDICTORS OF STUNTING IN LAO PDR

Data analyses on predictors of stunting using the Lao Social Indicator Survey (LSIS), 2017 did show that the most predominant protective factors to prevent stunting were wealth status, handwashing with soap and appropriate feeding in infant and young child feeding. The age of the mother, geographical location (area and region), higher parity and type of toilet facility used were among the factors that significantly increase the risk of being stunted in Lao PDR.

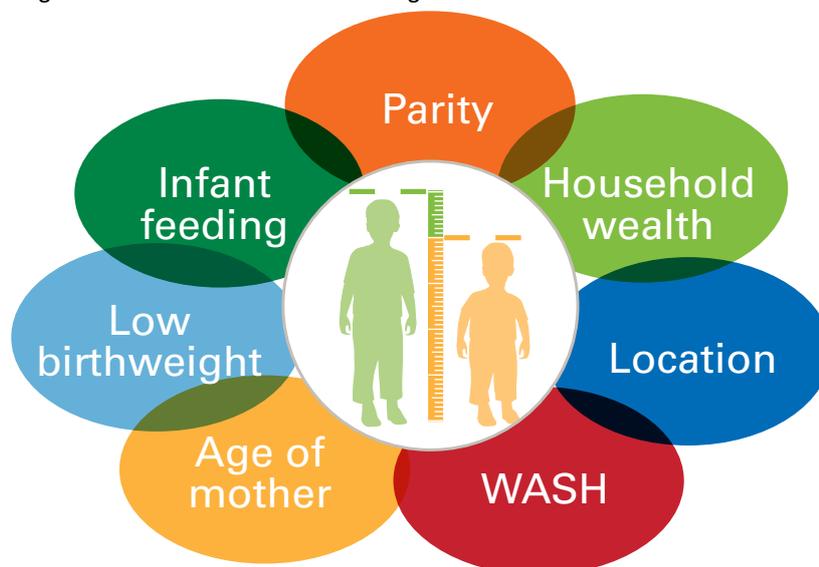
Predictors of stunting among children under five years old in Lao PDR

PREDICTOR	ODDS RATIO	P-VALUE	95% C.I. OR	
			Lower	Upper
 Wealth index	3.741	<0.001	3.009	4.652
 Parity	1.131	<0.001	1.093	1.170
 Soap or detergent present at place of handwashing	1.220	<0.05	1.028	1.450
 Type of toilet facility used by household	1.327	<0.05	1.045	1.685
 Area (urban/rural)	1.532	<0.01	1.138	2.064
 Region (central, north, south)	0.840	<0.01	0.759	0.930
 Age of mother	0.969	<0.001	0.961	0.977
 Appropriate feeding for children 0-23 months	0.840	<0.05	0.713	0.989

Regression analysis using the Lao Social Indicator Survey, 2017

The predictors found to be significantly associated with stunting in Lao PDR are consistent with factors that have been proposed to be associated or causative of stunting worldwide. It is known for example, that children in rural areas without roads, whose mothers have no education and from the poorest quintile are 2-3 more times likely to be stunted. Disparities exist by wealth. The poorest children are the most affected by stunting in Lao PDR.

Figure 5: Diagram showing factors associated with stunting in Lao PDR.



Data analyses stratifying stunting by wealth index confirm that stunting is higher at lower wealth not only in Lao PDR, but also in other South Asian countries. These trends have been confirmed in Cambodia, Indonesia, Timor Leste and Vietnam⁵.

Figure 6: Stunting stratified by wealth in South East Asian countries

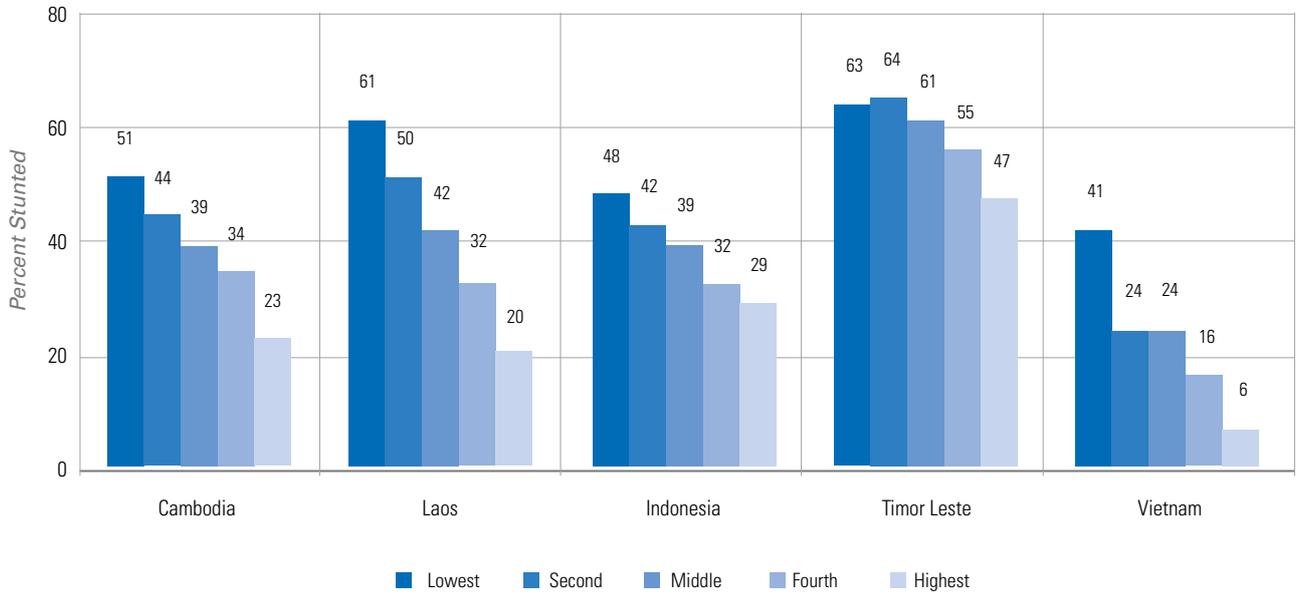
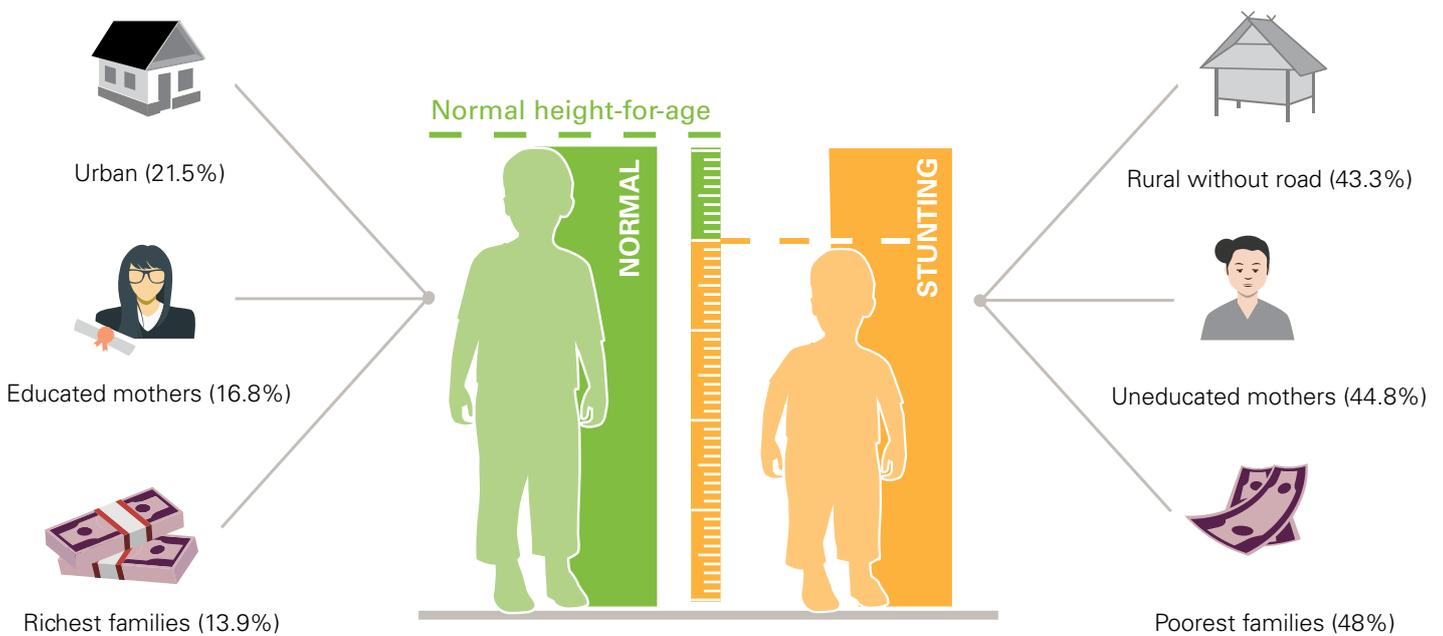


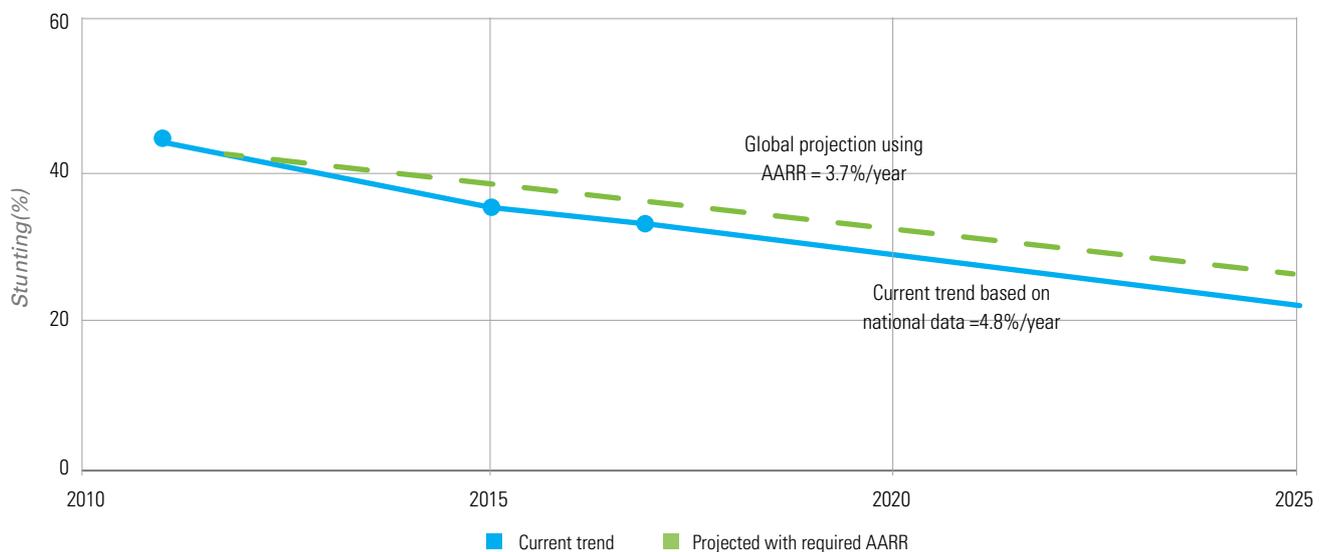
Figure 7: Distribution of stunting in Lao PDR (LSIS 2, 2017)



TRACKING PROGRESS ON STUNTING REDUCTION IN LAO PDR

Stunting is one of the six WHO global nutrition targets together with anaemia in women of reproductive age, low birth weight, childhood overweight, exclusive breastfeeding at first 6 months and childhood wasting¹⁰. The World Health Assembly global target for reduction of stunting in 2025 is 40%. In the case of Lao PDR it means that it is expected to reduce the prevalence of stunting from 44.2% in 2011-12 (LSIS I) to 26.2% by 2025. Globally, the required Average Annual Rate of Reduction (AARR) to reach this goal is 3.7. However, based on available data, it is estimated that the current AARR is equal to 4.8 for Lao PDR. With the current trend of AARR and if nutrition investments are sustained, the country is on track to achieve its target of stunting reduction by 2025 as stipulated by the World Health Assembly¹⁰.

Figure 8: Current trend versus projected trend with required AARR

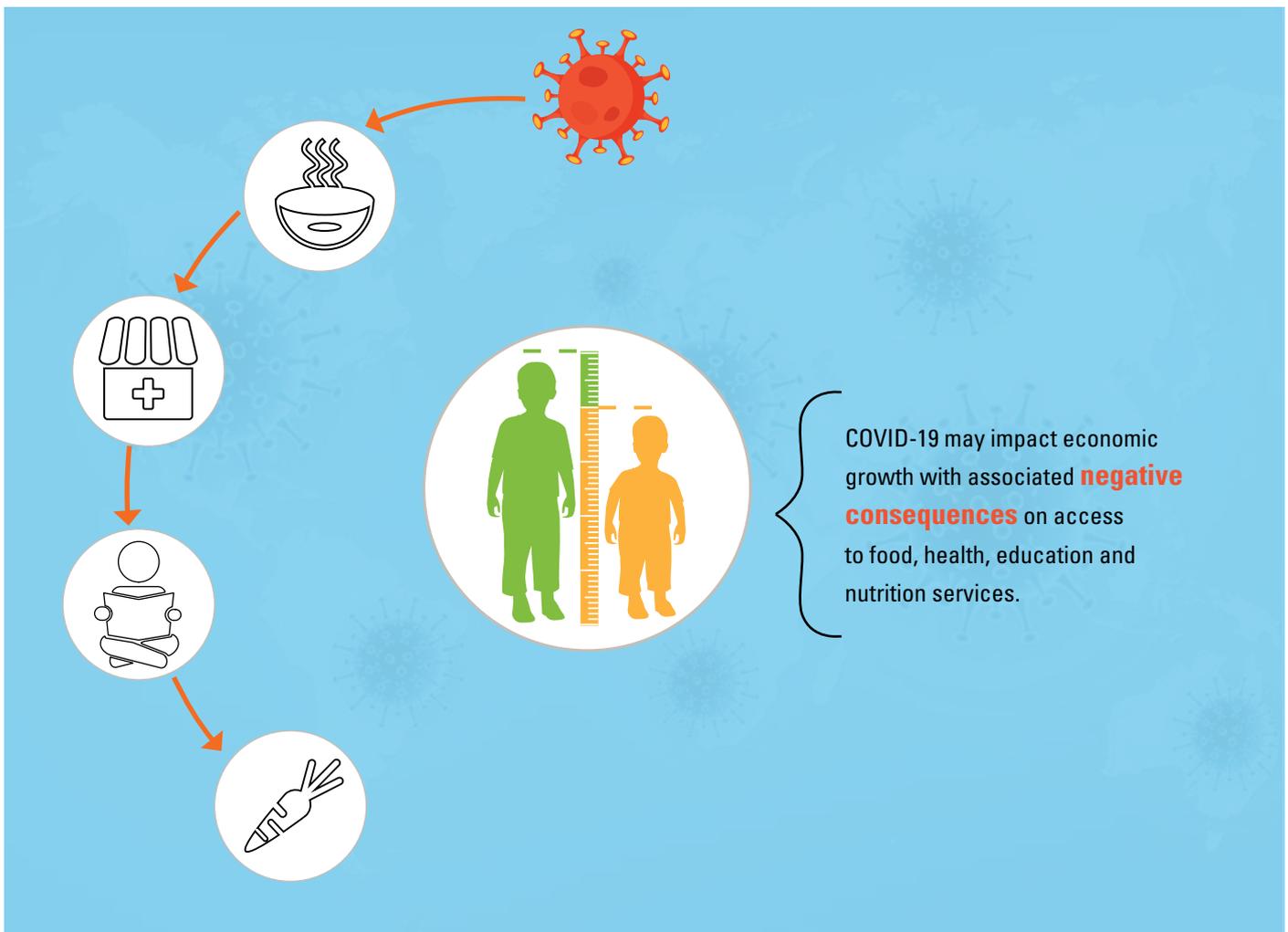


Source: WHO Global targets tracking tool



COVID-19 PANDEMIC AND THE LIKELY IMPACT ON REDUCTION OF STUNTING IN LAO PDR

Based on the most updated data, Lao PDR is on track to achieving the World Health Assembly target of stunting reduction by 2025¹⁰. However, the ongoing COVID-19 pandemic may impact economic growth with associated negative consequences on access to food, health, education and nutrition services among others. In 2020, it was estimated that the Gross Domestic Product of the country will decline to minus 0.6 percent as all sectors experience adverse shocks of varying intensity¹¹. The impact of the crisis is expected to negatively influence all the nutritional indicators, including stunting. The extent on how much the COVID-19 crisis will affect stunting has to be taken into consideration for new projections¹².



RECOMMENDATIONS

High-level multi-sectorial coordination involving government and development partners, civil-society organizations and initiatives that involve public-private partnerships will contribute to improved nutritional status among children under 5 years of age. Multi-sectorial action serves as an accelerator for addressing the predictors of stunting such as improvements of water supply, promotion of hygiene practices, food security, health services, and education or, through re-direction of resources, to focus on priorities to improve nutrition at the national and sub national levels. Improvements in public health infrastructure and capacity building in urban and rural areas contribute to reduce stunting. Lastly, but by no means less importantly, the successful trend on reduction of stunting needs proper control of the COVID-19 situation in the country.

Main policy recommendations:



Invest in maternal and child nutrition practices throughout the life cycle. Especially in the first 1000 days of life

Optimal maternal nutritional status before, during and after pregnancy impacts on proper child's growth and development. Intrauterine growth restrictions observed in undernourished mothers increases the risk of having stunted children. Breastfeeding promotion, particularly exclusive breastfeeding at least until 6 months of age is a recognized protective factor to prevent stunting. Proper Infant and Young Child Feeding (IYCF) practices and complementary feeding promotion as well as micronutrient supplementation and fortification are also well-known protective factors to reduce stunting. Special attention is needed for adequate nutrition covering the first 1000 days including life in-utero to the first 2 years of life to prevent stunting.



Strengthen Nutrition-WASH programming to address household and environmental factors that contribute to stunting

Poor water, sanitation and hygiene practices are well-known causes of undernutrition and stunting in children. Interventions to prevent children from infections that cause diarrhoea, intestinal worms and control of environmental causes such as unsafe drinking options are encouraged through WASH. Continuing efforts to promote hand washing with soap and promotion of hygiene behaviours are key for the successful reduction of stunting among children.



Strengthen child protection systems to prevent early marriage and child birth

The age of the mother and low birth weight were both associated with a higher risk of stunting. Child protection systems and empowering women with livelihoods and better education have been associated with reductions in stunting and other forms of malnutrition. Adolescent pregnancy has negative consequences for both mother and the offspring and therefore has to be discouraged. Maternal education has an impact not only on nutritional, dietary and hygiene practices to reduce stunting, but also on the ability of future mothers for caring practices.



Prioritize social protection schemes targeting poor and deprived households

Social protection programmes and adequate food access are relevant to improve food security and livelihood. An expansion of social protection programmes is key to increase income and improve the quality of life of the most vulnerable. The promotion of parental education and particularly maternal education of the most vulnerable are also key to preventing stunting.



Support families in making informed choices on family planning

Short-spaced births are responsible of increasing the risk of stunting. Efforts to promote informed choices on family planning such as the proper use of contraceptive methods are important to allow the body of the mother to properly recover the essential nutrients required for optimal pregnancy and therefore to reduce stunting.



To control the negative consequences of the COVID-19 crisis on health and economics

The COVID-19 crisis is expected to have a negative impact on the economy of the country. This will impact the overall health and nutritional outcomes of communities including stunting. Addressing the negative consequences of the COVID-19 pandemic on households through shock responsive social protection and other mitigation measures are highly desired. Example, cash transfer to poor and vulnerable households.



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