

Lao PDR

PRIORITIZING HEALTH INVESTMENTS FOR HUMAN CAPITAL DEVELOPMENT

SEPTEMBER 2022

KEY MESSAGES

- 1** Reaching full coverage targets for Family Planning and Nutrition, Maternal, Newborn, Child and Adolescent Health interventions in Lao PDR by 2030 is affordable and can generate six dollars in economic returns for every dollar invested (benefit-cost ratio = 6:1).
- 2** This study recommends simultaneous implementation of the most cost-effective interventions in the provinces with the worst maternal, infant and child survival indicators. This approach is recommended due to the limited fiscal space and the need to enhance efficiency in allocating resources across provinces and districts.
- 3** The greatest return on investment is in making rights-based family planning methods available in all provinces to reduce unintended pregnancies. Averting unintended pregnancies can further decrease the cost requirements for other health interventions and lead to economic benefits from increased workforce participation, additional years of education for adolescents, and increased lifetime earnings for women. Family planning scale-up can also significantly reduce maternal and child deaths and improve other health and nutrition indicators (stunting) due to the decline in fertility risks from spacing and improved birth outcomes such as adequate birth weight.
- 4** Even though the interventions included in this study have different benefit-cost ratios, with some having higher ratios than others, all interventions are required to reach the Sustainable Development Goals health targets.

INTRODUCTION

Despite maternal and child morbidity and mortality rates falling over the last decade, significant reductions will still be required for Lao PDR to achieve the health-related Sustainable Development Goals. Adolescent fertility rates are among the highest in the Asia-Pacific region, and the coverage of essential health services is limited (particularly in rural and remote areas), despite the strong commitment of the country to achieve Universal Health Coverage (UHC) and realise the human right to health.

The main objective of this analysis is to highlight the health and economic benefits of investing in Family Planning and Nutrition, Maternal, Newborn, Child and Adolescent Health services, to make the case for increased domestic financing and to provide evidence-based priority setting to invest scarce resources where they will have the most impact.

The evidence presented in this study makes a case for targeting synergetic interventions and favouring scaling up with a focus on efficiency and cost savings rather than a more comprehensive, less focused approach. These estimates demonstrate that reaching full coverage targets for Family Planning and Nutrition, Maternal, Newborn, Child and Adolescent Health in Lao PDR by 2030 is affordable and makes economic sense.

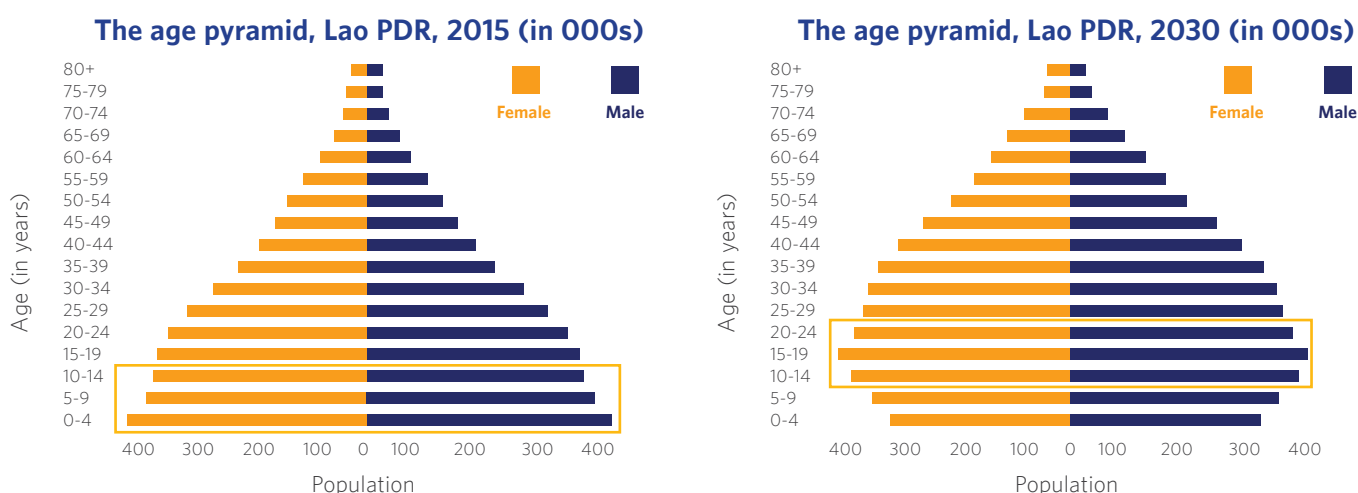
The Demographic Change

As Lao PDR faces an ongoing and rapid demographic transition, enormous opportunities and challenges arise when the country is preparing to benefit from the demographic change to maximise human capital development. Declining fertility rates and a growing proportion of the working-age population open potential for reaping the demographic dividend.

The population growth in Lao PDR and its changing structure and regional distribution will have decisive impacts on health services in the years to come. With current trends, the total population of Lao PDR is projected to increase by almost 1 million to reach 8.1 million in 2030. One out of ten people will be older than 65 years of age, however the largest age groups will be those in the working age and reproductive age especially women at the age of 15-49 years (Figure 1).

Therefore, adequate investments are required to meet the expected increase in demands for quality Sexual and Reproductive, Nutrition, Maternal, Newborn, Child and Adolescent Health Services.

Figure 1: Current and Projected Age Structure of Lao PDR



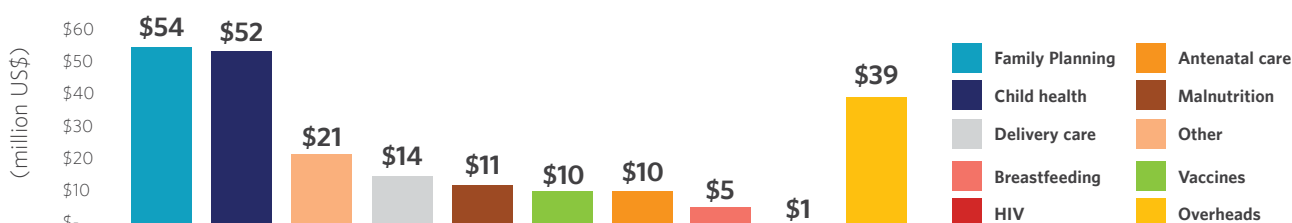
* Extract from the Demographic change for development Lao People's Democratic Republic 2030 report.

Making the case for Family Planning and Nutrition, Maternal, Newborn, Child and Adolescent Health Investments in Lao PDR

The Investment Case considers the costs and potential socio-economic impacts of investing to meet full coverage targets in Lao PDR for Family Planning and Nutrition, Maternal, Newborn, Child and Adolescent Health interventions by 2030.

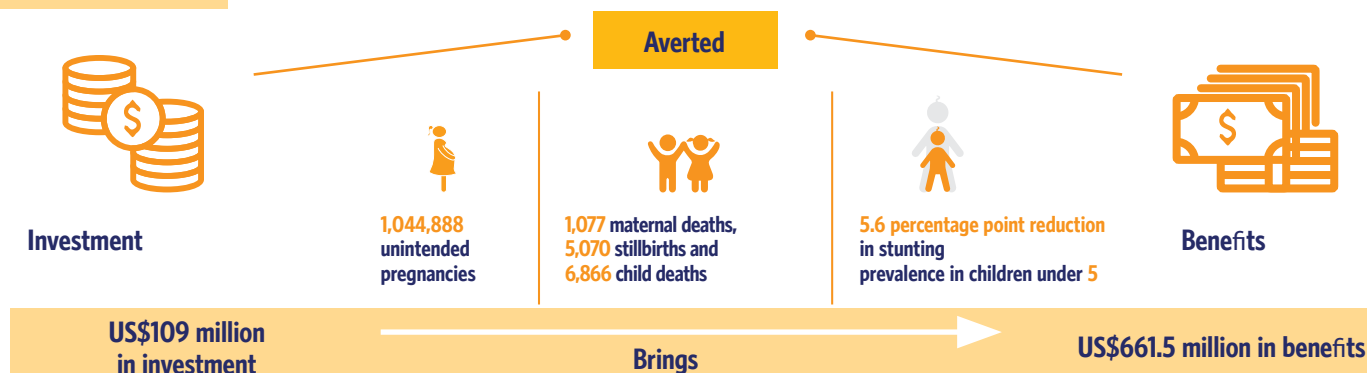
The total intervention costs of the full scale-up scenario (defined as increasing the coverage of interventions, starting from 2022 to reach 95 per cent coverage targets by 2030) were US\$217.0 million over the period 2022-2030, equivalent to an additional US\$109.0 million more than business as usual (baseline scenario). Most investments are needed for Family Planning, followed by Child Health, Maternal Health (Antenatal and Delivery care) and Malnutrition (Figure 2).

Figure 2: Total costs full scale-up scenario (2022-2030): aggregate across 18 provinces.



Health outcomes are compared across a baseline and a full scale-up scenario. The full scale-up scenario was estimated to have a benefit-cost ratio of 6:1 compared with the business-as-usual scenario and was estimated to cost an additional US\$109.0 million (discounted). In turn, this investment would return US\$661.5 million (discounted) in economic benefits due to unintended pregnancies, maternal and newborn deaths, stillbirths, and stunting cases averted (Figure 3).

Figure 3: Averted



Breakdown of the US\$ 661.5 million by main areas:

Education

Averting unintended pregnancies among adolescents means they can attend school and acquire life and vocational skills leading to increased lifetime earnings and economic benefits for women.

Social benefits

Prevention of maternal and newborn deaths, means reduced lost years and reduced maternal years with disability.

Working life

By averting unintended pregnancy, women have better opportunities to actively participate in income generation activities and increase workforce participation.

The greatest return on investment would come from investing in the availability of rights-based family planning methods, which are some of the most economical interventions. women and girls to make informed choices on contraceptive use and respond to the high-level unmet needs for family planning, particularly among adolescents.

The contribution of family planning scale-up is also a significant reduction in maternal deaths, child deaths and stunted children due to the decline in fertility risks. This can reduce the cost requirements for other interventions and decrease the demand for services by ensuring a decline in unintended pregnancies and births. Furthermore, reducing unintended pregnancies can lead to economic benefits from increased workforce participation, additional years of education for adolescents, and increased lifetime earnings for women.

The next highest benefit-cost ratios were for Childhood Vaccination, Breastfeeding Promotion and HIV interventions, driven by the low cost of vaccines and the significant number of child deaths they can avert. The other highest benefits cost ratios interventions were Antenatal care, Nutrition and Delivery care, respectively. The benefit-cost ratio for investing in Child Health is relatively lower, largely due to the higher intervention unit costs. However, the impact on child mortality is still significant.

Table 1: Costs, economic benefits and benefit-cost ratios for different sets of interventions.

Aggregate across 18 provinces, for the full scale-up compared with business-as-usual scenarios.

Intervention package	Total additional cost 2022-2030*	Total benefit 2022-2030**	Benefit-cost ratio
Family planning	US\$16.7M	US\$560.0.2M	33.6
HIV [^]	US\$0.008M	US\$0.103M	12.5
Vaccines	US\$1.8M	US\$12.1M	6.6
Breastfeeding promotion	US\$2.2M	US\$6.6M	3.0
Antenatal care	US\$6.5M	US\$16.3M	2.5
Malnutrition	US\$11.9M	US\$14.7M	1.2
Delivery Care	US\$10.3M	US\$12.5M	1.2
Child health	US\$46.8M	US\$44.3M	0.9

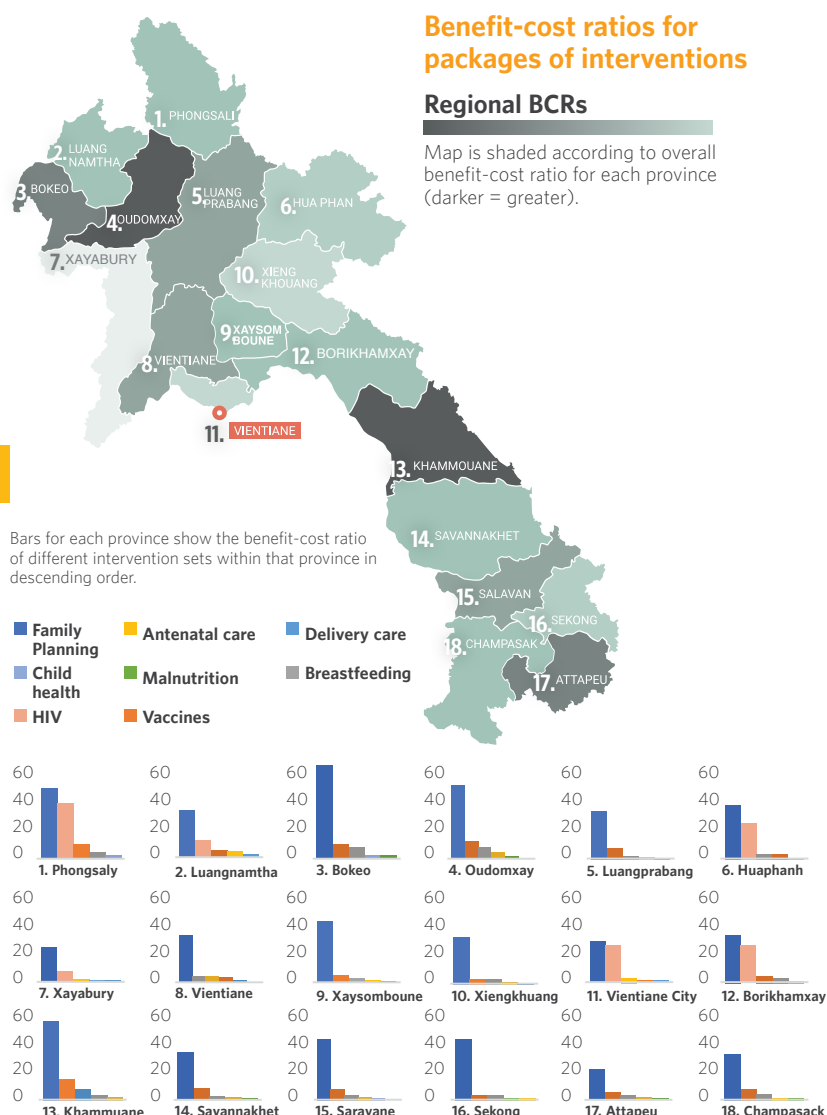
* Includes intervention + overhead costs, discounted at 3% per annum.

** Discounted at 3% per annum.

[^] Interventions for pregnant women and newborns.

Full benefits of malnutrition and child health, particularly reductions in stunting, may not be captured over the 2030 time frame, and would continue to accrue.

Figure 5: Sub-national prioritization analysis.



SUBNATIONAL PRIORITIZATION STRATEGY

At the subnational level, the highest returns come from investing in provinces with the highest burdens, mainly the highest mortality rates. Family planning has the highest benefit-cost ratio in all provinces by a significant margin. The second choice was generally split across vaccination (11/18 provinces) and HIV interventions for pregnant women and children (6/18 provinces), with breastfeeding promotion second in Vientiane and third in 12/18 other provinces, Figure 5.

Vientiane and Huaphan are notable for prioritizing breastfeeding interventions over vaccination due to moderate rates of appropriate breastfeeding but comparatively high coverages of all vaccines. Xayabury is the only region that prioritises neither vaccination nor breastfeeding promotion after family planning, resulting from comparatively low rates of neonatal, infant, and child mortality compared with other provinces.

CONCLUSIONS

- This study demonstrates that reaching full coverage targets for Family Planning and Nutrition, Maternal, Newborn, Child and Adolescent Health interventions in Lao PDR by 2030 is an excellent investment that can potentially generate six dollars in economic returns for every dollar invested (benefit-cost ratio = 6:1).
- The most significant return on investment would come from the availability of rights-based family planning methods to reduce unintended pregnancies leading to educational benefits, increased lifetime earnings for girls, and economic benefits from greater workforce participation among women. The contribution of family planning scale-up is also a considerable reduction in maternal deaths, child deaths and stunted children due to the decline in fertility risks from spacing and improved birth outcomes such as adequate birth weight.
- Despite the interventions included in this study having different benefit-cost ratios, with some having higher ratios than others, all interventions are required to reach the Sustainable Development Goals health targets. An essential next step to optimising the allocation of limited financial resources will be identifying the most cost-effective mix of interventions required for each province based on their relevant health indicators, using the methodology adopted in this analysis. This approach is suggested due to the limited fiscal space and the need to enhance the allocative efficiency of public funding across provinces and districts, which is one of the key strategic objectives of the Health Financing Strategy 2021-2025 for Lao PDR.

METHODOLOGICAL FRAMEWORK

The analysis was conducted independently for 18 provinces of Lao PDR. National results are presented as the aggregate of these models.

The health impacts of intervention scale-up that were estimated included unwanted pregnancies averted, maternal deaths, stillbirths and child deaths averted, and stunting cases averted. These were calculated using the Lives Saved Tool (LiST).

Health benefits were converted to workforce participation, education, and social economic benefits.

UNFPA thanks the Burnet Institute researchers who developed this study: Nick Scott, Dominic Delpert, Thomas Walsh, and Yinzong Xiao. UNFPA acknowledges UNFPA staff for their contributions to this work: Mariam A. Khan, Victor Valdivieso, Siriphone Sakulku, Davide De Beni, Federica Maurizio and Randima Jayasinghe.