

CHILD NUTRITION AND HEALTH

Current and Future Trends

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KEY HIGHLIGHTS

- Egypt is expected to see significant population growth over the next decade, albeit at a slower pace, reaching 111 million in 2025, 120 million in 2030, and 128 million in 2035.
- Egypt will need to serve the needs of 10.9 million children under five years and a total of 42.0 million children under 18 years by the year 2030.
- In 2020, Egypt met 26.9% of the World Health Organization (WHO) threshold set for Primary Healthcare (PHC) facility density, which calls for two PHC facilities per 10,000 population. To align with the standard, Egypt needed an additional 14,956 PHC facilities in 2020, and will need an additional 18,599 by 2030.
- Anaemia is prevalent among children under five, where the EFHS 2021 indicated that 43% of children were anaemic, which means that 4.8 million children were anaemic in 2021; this is expected to remain high if no drastic measures are taken to address this.
- Data from the Egypt Family Health Survey (EFHS) 2021, indicated a soar in the number of caesarean deliveries (72.2%), significantly exceeding the ideal rate for caesarean sections, set between 10% and 15% by the international healthcare community and this adds a burden on the healthcare services.

WHAT IS THIS BRIEF ABOUT?

Egypt is expected to see significant population growth over the next decade, despite the noticeable decrease in fertility rate, due to the increasing share of women entering the reproductive age bracket. In 2022, the Central Agency for Public Mobilization and Statistics (CAPMAS) estimated that Egypt's population reached 105.4 million, while it is expected to increase by another 1.9 million by the end of 2023 to reach 107.3 million. Meanwhile, CAPMAS estimates

that Egypt's population will reach almost 120 million people by 2030 and 128.2 million by 2035. Children under the age of 18 will account for around one-third of the population (35%) in 2030; this is expected to decline to 31% in 2035 from a proportion of 40% in 2022. As for children under five, their proportion will slightly decline from 13.6% of the population in 2022 to reach 9.1% in 2030, and furthermore to 8.6% in 2035.

UNICEF EGYPT DATA SNAPSHOT SERIES

The UNICEF Egypt Data Snapshot Series aims at encouraging evidence-based discussion on critical child-related issues. This data brief is produced by UNICEF Egypt using recent evidence and integrating data from multiple sources.

While a growing population can prove to be a challenge in terms of the pressure it places on delivering the country's development agenda and more broadly its commitment to achieving the Sustainable Development Goals (SDGs), it can also present an opportunity. Egypt's fast-growing population will continue to include a high share of children, or a population that is transitioning into their most productive years, which if harnessed, could open up the potential for a demographic dividend and thus support significant economic growth and social development. To reap this opportunity, Egypt will need to ensure continued investment in the country's human capital and ensure the holistic development of children and young people such as through a prioritization of basic services, including health, nutrition, education, and skills-building for smooth school-to-work transition.

This data snapshot attempts to understand the effect of population growth on children's health and nutrition, using recent CAPMAS reports and estimates for population projections from 2017 to 2052 (CAPMAS, 2019)¹ and available health data in the public domain. Global standards are used in the analysis to benchmark Egypt's performance today and in the future against internationally set targets. Given anticipated population expansion, the brief aims to shed light on how the healthcare system will be impacted, what health/medical needs the government will need to cater for in the future and how this may impact on the quality of service delivery. The brief will also assess how the current status of key indicators related to children's health and nutrition would be impacted by these demographic trends.

WHAT ARE THE GOVERNMENT'S EFFORTS TO IMPROVE THE LIVING CONDITIONS IN EGYPT?

The Government of Egypt (GoE) has made great strides to enhance human capital and improve living conditions of people in Egypt. Nonetheless, future efforts are indispensable to be able to provide quality public services and to compensate for population growth. During the past decade, Egypt has implemented several initiatives and programs to achieve sustainable development at many levels and to provide a better quality of life to its citizens.

In 2018, the GoE launched **100 million Seha** (100 million healthy lives) which aimed to banish Hepatitis C virus (HCV), detect non-communicable diseases, and support early detection of breast cancer. The campaign provided the opportunity for Egyptians, migrants, and refugees to get screened and it also offered free treatment for confirmed HCV cases. The initiative made substantial progress towards eliminating HCV. This was followed by a campaign to curb malnutrition in children by targeting school children in the age group 6-12. Also, as part of the 100 million Seha initiative, the Women Health Initiative evolved targeting women with focus on early detection of breast cancer. The initiative was designed to screen 28 million women across the country and provide treatment free of charge. Other initiatives emerged from the 100 million Seha initiative, including an initiative to support maternal and foetal health, another one for the early detection and treatment of hearing loss and impairment in new-borns, as well as vaccination campaigns against COVID-19.

In 2019, a presidential initiative called **Nour Hayat** "Light of Life" was announced. The initiative aims to provide early detection and treatment for vision impairment or loss of vision through screening 5 million primary school students nationwide. The first phase of the initiative targeted 660,000 primary students. In October 2020, a little over 880,000 primary school students were tested and about 90,000 students were supplied with prescription glasses.

Hayah Karima (decent life) was launched in 2019 as a national multifaceted initiative that addresses multidimensional poverty, unemployment and improves the quality of life for Egyptians in the most vulnerable governorates. The implementation of Hayah Karima is planned over three phases and targets 4,741 villages and 30,888 satellites for development projects. During the first phase, 382 health units and central hospitals were established, 317 ambulances provided, as well as 14.2 thousand classrooms and 787 youth centres built. Additionally, Hayah Karima implemented sanitation and water treatment projects (MPED, 2022/2023). The government has also designed the **National Project for Development of the Egyptian Family** which is being implemented over a three-year period (2021-2023). The project tackles the challenges associated with population growth throughout several pillars.

¹ This brief is based on the CAPMAS population projections released in 2019. The analysis will be updated upon release of new projections by CAPMAS.



WHAT ARE THE POPULATION GROWTH TRENDS IN EGYPT?

In 2017, CAPMAS announced the results of the population, housing and establishment census, indicating that the Egypt's Population had reached 95.5 million people, a 22.7 million surge compared with the 2006 census. Utilising the cohort survival projection method, CAPMAS has also projected population growth from 2017 until 2052. In its projections, CAPMAS provided three scenarios using various growth rates: high, moderate, and low. This document relies on the moderate population growth rate scenario, which will be presented here.

Egypt is expected to see an increase of about 21 million people from 2023 until 2035, while maintaining the same

male to female ratio of 51% to 49%, respectively. Meanwhile, CAMPAS projections indicate that with lower fertility rates the number of children under five years of age is expected to decline.

Overall, the number of children under five in 2017 was 13.0 million, this slightly declines to 12.3 in 2021 and to 11.3 million in 2025, then further drops in 2030 to reach 10.9 million and then slightly increases to 11 million in 2035. Overall, it is estimated to have a 15% decline in the number of children under five by 2035 compared to the numbers reported in 2017.

The number of children under 18 years is not expected to change much during the period in question. Initially, CAPMAS estimates a slight increase in the number of children under 18 from 38.1 million in 2021 to 42.0 million in 2030, before the numbers slightly decline to the same numbers observed in 2021. Eventually, there is only a 2% decline in the number of children under the age of 18 between 2023 and 2035.

The expected population growth along with the decline in fertility rates will reflect on the composition of the Egyptian population and thus the population pyramid. In 2023, Egypt's population pyramid has a broad base, especially

Figure 1: Projected Growth in Children Under Five years in Egypt 2017-2035 (millions)

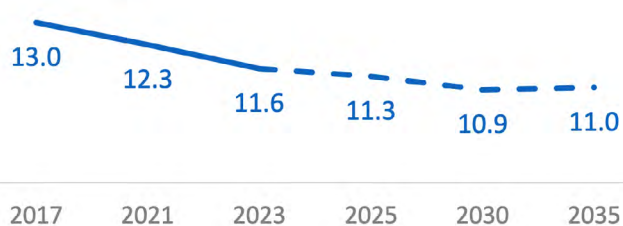


Figure 2: Projected Growth in Children Under 18 years in Egypt 2017-2035 (millions)

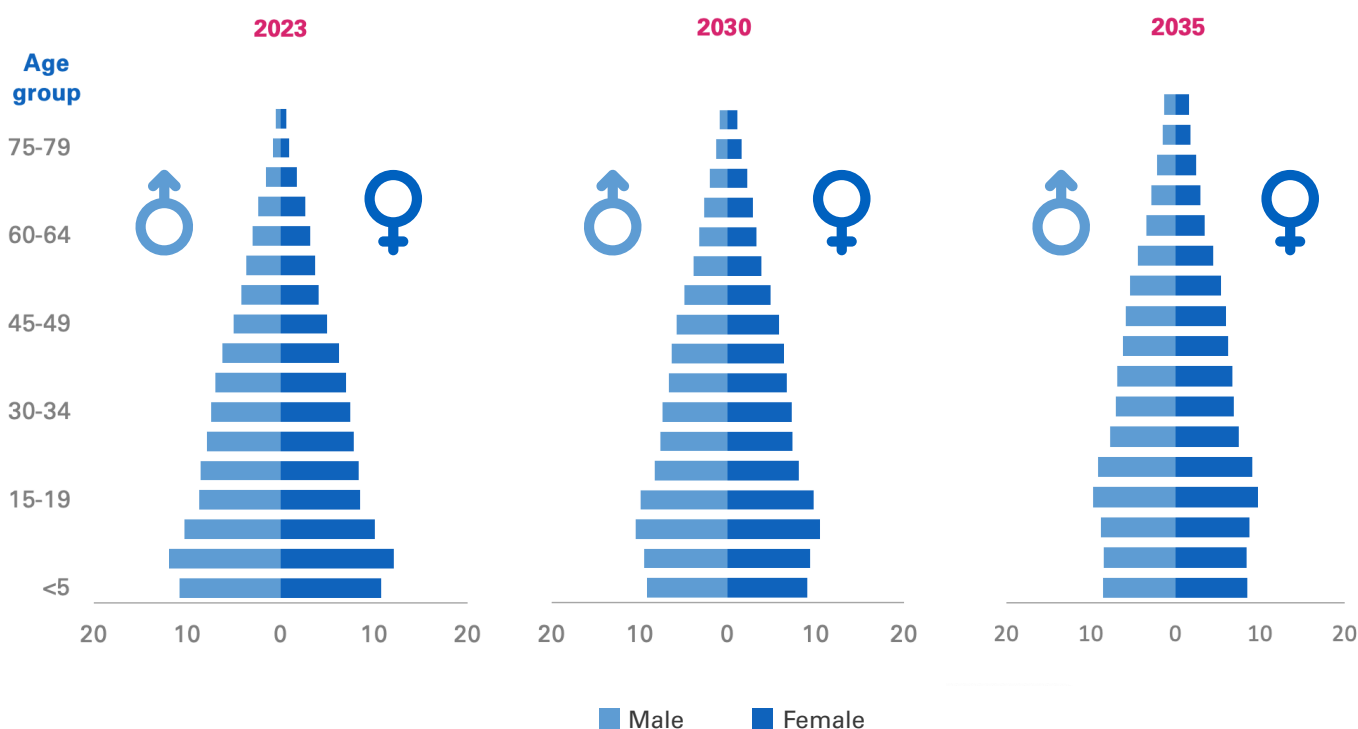


in the age group 5-9, indicating that fertility rates in the past five years have declined and have eventually come down to the same rates observed 10-15 years ago. Also, the narrow-pointed top of the 2023 population pyramid shows that a very small proportion of the population is elderly, suggesting relatively low life expectancy.

In 2035, it is expected that the population pyramid will shift to widen in the youth age group (15-24), and it indicates that Egypt's population is growing at a slower pace than before, while life expectancy is improving. The gradual transition is observed in the three population pyramids shown below where in 2023 the largest age cohort is 5-9, then in 2030 it is the 10-14 age group and further moves to the 15-19 age cohort in 2035. In 2017, children under five represented 13.6% of the population and children under 18 represented 39.9% of the population. Those proportions will steadily shrink to reach 10.2% and 37.6% of the population by the year 2025, for children under the age of five and under the age of 18, respectively. By the year 2030, 9.1% of the population will be children under five and 35.1% will be children under the age of 18. Eventually, in the year 2035 it is expected that 8.6% of the population will be under the age of five, and 31.3% will be under the age of 18. Furthermore, the charts illustrate the relative increase in the proportion of the elderly population. This could be driven by several factors including improved sanitation, hygiene, better healthcare, and healthier lifestyles.

The Government of Egypt (GoE) has made great strides to enhance human capital and improve living conditions of people living in Egypt.

Figure 3: Population pyramid - Egypt





WHY IS IT IMPORTANT TO INVEST IN HEALTH CARE SERVICES?

WHO threshold for facility density
2
 PHC facilities
 per 10,000 population

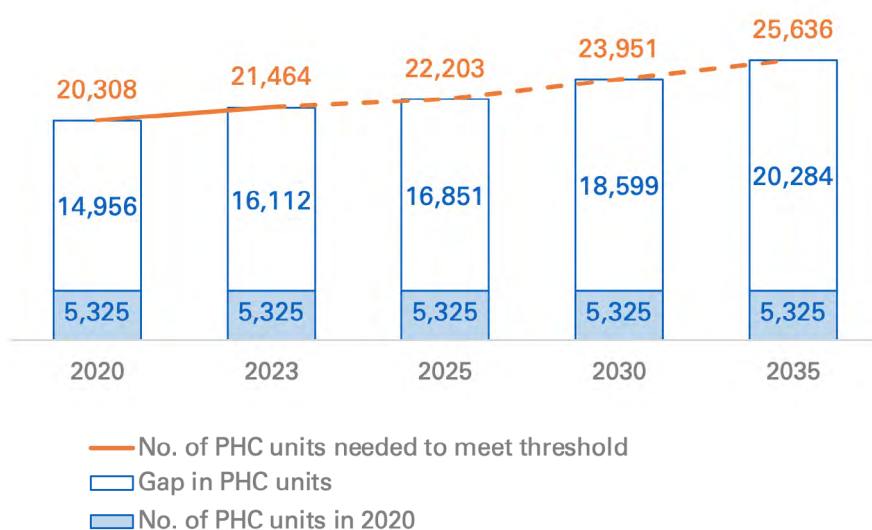


Egypt currently has
0.5
 PHC facilities
 per 10,000 population

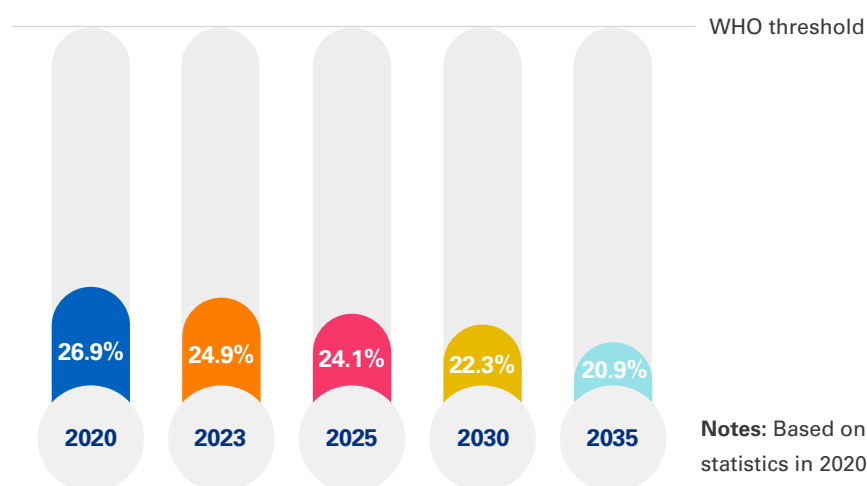
Access to primary health care services for children is crucial to realize good health and nutrition and achieve potential growth and development. In Egypt, **primary health care units** provide preventive or curative care for children, including administering vaccines, monitoring children's growth, and illness treatment free of charge. In addition, primary health care units also provide maternal health care services, family planning services and outpatient primary care. Overall, there are 5,352 public primary health care (PHC) facilities in Egypt distributed across the country. Although there is no standard threshold for the density of PHC units in relation to children, there is a general threshold for the whole population. WHO recommends that PHC unit density is to be at two facilities per 10,000 population to be able to provide universal accessibility and health care services including children's health care services.

According to official statistics, Egypt currently has 0.5 PHC units per 10,000 population, which falls short of the WHO standard by 75%. If the Ministry of Health and Population (MOHP) does not expand its primary care coverage, the PHC unit density is expected to be 0.4 PHC units per 10,000 population by 2035, falling short of the WHO threshold by about 80%. Currently, Egypt needs an additional 14,956 PHC units and will need an additional 20,284 PHC units by year 2035 to increase coverage of primary healthcare and reduce density as recommended by the WHO. Low coverage and high density would adversely affect the quality of healthcare delivery and thus contribute to poor health outcomes among children.

Figure 4: Number of PHC units needed to meet the WHO threshold



PHC facility density:
Egypt Projected scores (% of WHO threshold met)



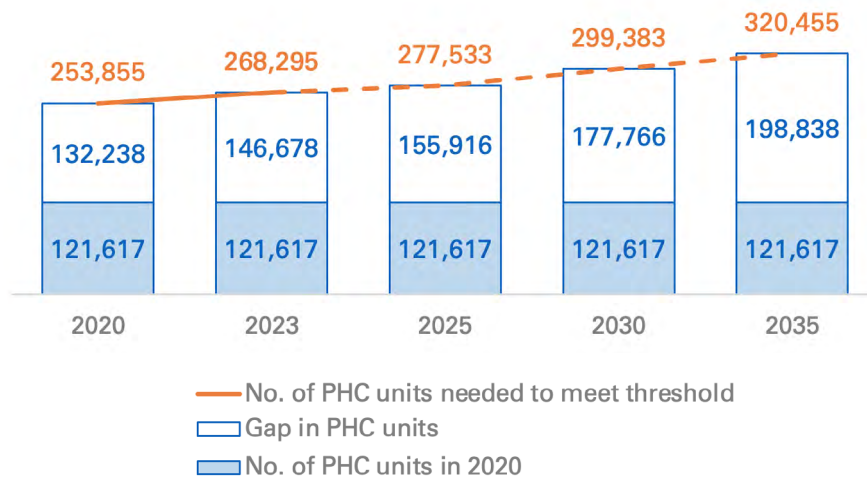
Notes: Based on CAPMAS statistics in 2020 (CAPMAS, 2022)

Another service delivery related indicator is **inpatient bed density**. The WHO sets the standard for bed density at 25 beds per 10,000 population. CAPMAS data in 2020 indicates that Egypt has 121,617 hospital beds in total: 88,597 in governmental facilities, of which 32,510 are MOHP, and 33,020 are private ones. Thus, with the projected population of 107.3 million for this year, hospital bed density is 11.3 per 10,000 population, meeting 47.9% of the WHO target for

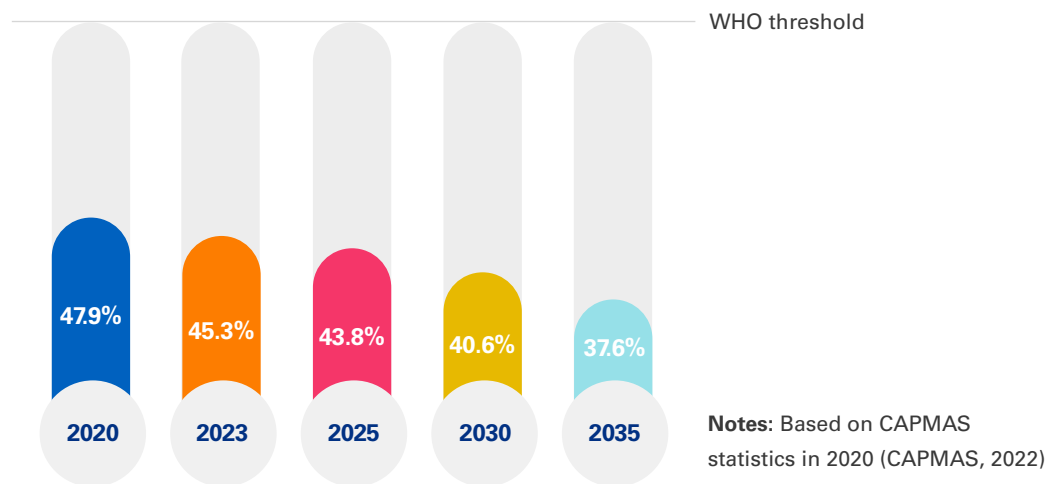
hospital beds despite all the efforts of the government to enhance the health sector. By year 2025, Egypt would need 155,916 more inpatient beds than what was reported in 2020 to meet the WHO threshold, and 198,838 hospital beds by year 2035. Otherwise, the hospital bed density will further decline as the population increases to reach 9.5 beds per 10,000 population by 2035.



Figure 5: Number of hospital beds needed to meet the WHO threshold



Inpatient bed density:
Egypt Projected scores (% of WHO threshold met)



Health workforce needs were set by the World Health Organization (WHO) in 2016 to be 4.45 doctors, nurses, and midwives per 1,000 population² (WHO, 2016). When applied to the context of Egypt, this means that today, the country needs a total of 477,565 medical workers for provision of healthcare services to people living in Egypt, which is not far from the numbers reported by CAPMAS in 2020 (432,273

medical professionals). In 2020, Egypt was only 5% below the WHO standard and only needed an additional 19,589 skilled health workers. Nevertheless, as the population expands, in 2035 Egypt would need a total of 570,392 skilled health workers to meet the WHO standard of 4.45 skilled health workers per 1,000 population or else by then Egypt would be falling short by about 25%.

WHO threshold for health workforce
4.45
skilled health workers
per 10,000 population



Egypt currently has
4.0
skilled health workers
per 10,000 population

² This was based on proxy needs to provide universal health coverage and the minimum threshold of health workers needed to meet the health targets of the SDGs: family planning, antenatal care coverage, skilled birth attendance, DTP3 immunization, tobacco smoking, potable water, sanitation, antiretroviral therapy, tuberculosis treatment, cataract surgery, diabetes, and hypertension treatment.

In 2020, Egypt had 432,273 medical staff meeting 95.6% of the target:



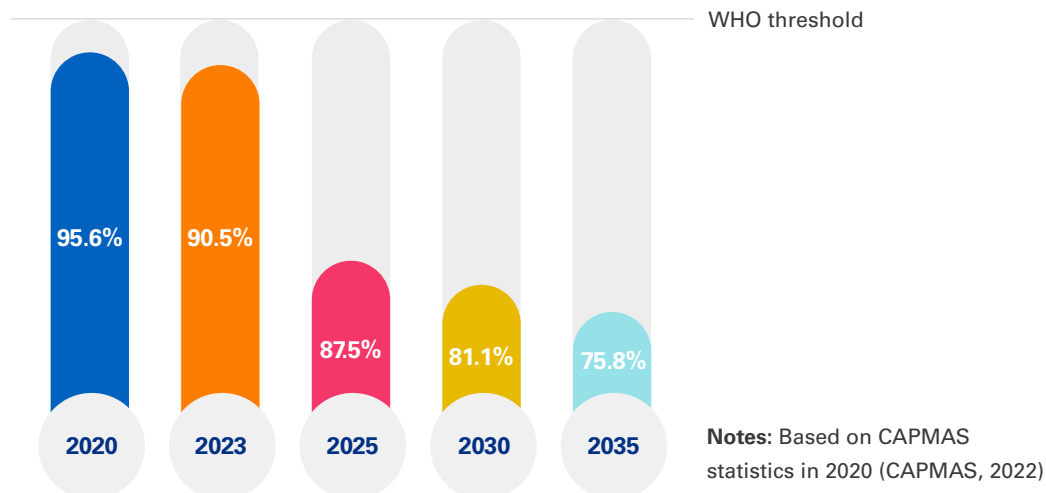
121,394 physicians



30,566 dentists

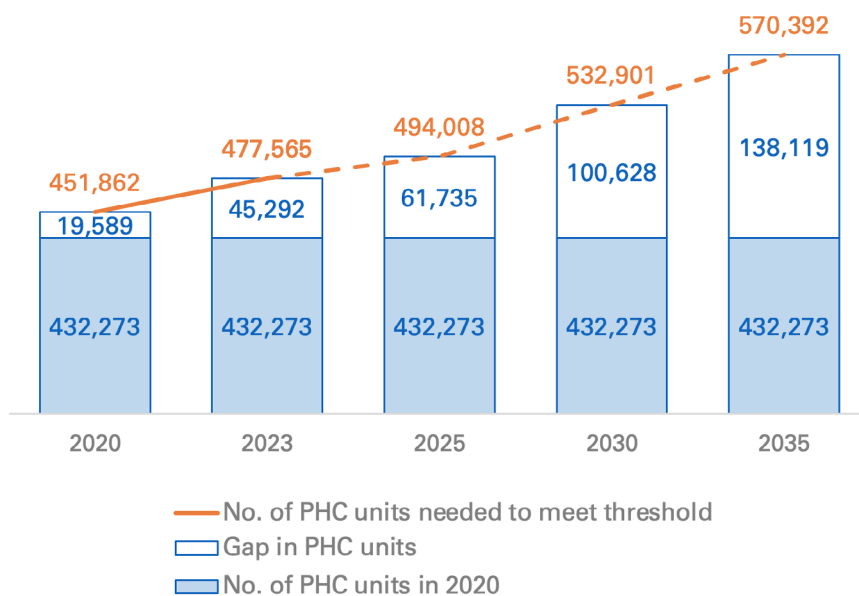


225,765 nurses



The figure below demonstrates the number of skilled health workers required to offset this gap today and, in the future, considering projected population figures discussed earlier as well as the minimum threshold set by WHO.

Figure 6: Number of health workforce needed to meet the WHO standards



Data from the EFHS 2021, indicated that the vast majority of births were delivered by a skilled health provider (97.1%) and inside a health facility (94.7%) accounting for around 63,046 deliveries not performed by a skilled medical provider and 115,222 births delivered outside of a health facility. Meanwhile, there was an observed soar in the number of caesarean deliveries (72.2%), significantly exceeding the

ideal rate for caesarean sections, set between 10% and 15% by the international healthcare community (WHO, 2015). Data suggests that in 2021, 1.57 million births were delivered by a caesarean operation. In addition to the increased risk of complications and infections for both the new-born and the mother in those unfavourable delivery conditions, this adds burden on healthcare services.

WHY IS CHILD NUTRITION STILL A CHALLENGE?

Malnutrition is a multifaceted problem that can adversely affect a country's development. Malnutrition in early childhood can be particularly detrimental, impacting a child's cognitive and physical development with consequences later in life.³ Indicators of child malnutrition are used to monitor progress in sustainable development, particularly, ending hunger and ending all forms of malnutrition by 2030 as laid out in SDG 2. Those indicators were used as a reference point to estimate the expected number of malnourished children in Egypt up to 2035.

The Egypt Family Health Survey 2021 results indicated that there is a clear decline (improvement) in the prevalence of stunting, wasting and overweight among children under five years of age. Despite this fact, the data indicated that there remains a significant number of malnourished children in 2021:

- **1.6 million** children under five were **too short** for their age (i.e., stunted) (12.8%)
- **380 thousand** children under five were **too thin** for their age (i.e., wasted) (3.1%)
- **1.4 million** children under five were **overweight** (11.5%)

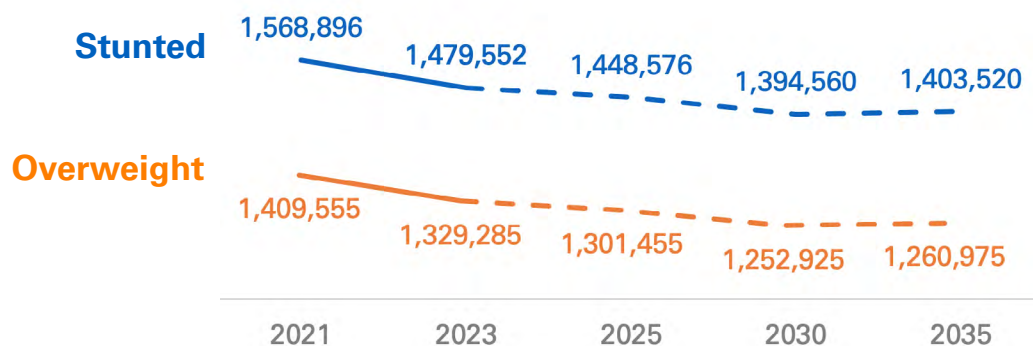


“

End all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons

”

Figure 7: Projected numbers of stunted and overweight children under 5 years



³ According to UNICEF, the first 1,000 days of life - between a woman's pregnancy and her child's second birthday - is a unique period of opportunity when the foundations for optimum health and development across the lifespan are established. The right nutrition and care during this 1,000-day window influences not only whether the child will survive, but also his or her ability to grow, learn and rise out of poverty. As such, it contributes to society's long-term health, stability, and prosperity.

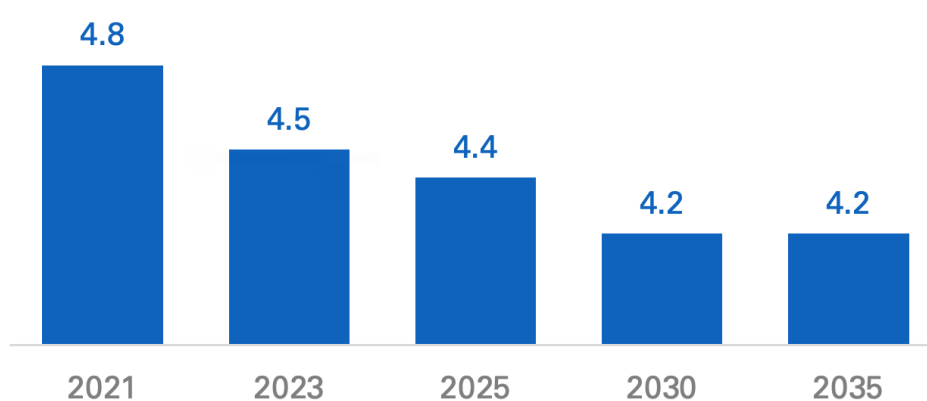
Figure 8: Projected numbers of wasted children under 5 years

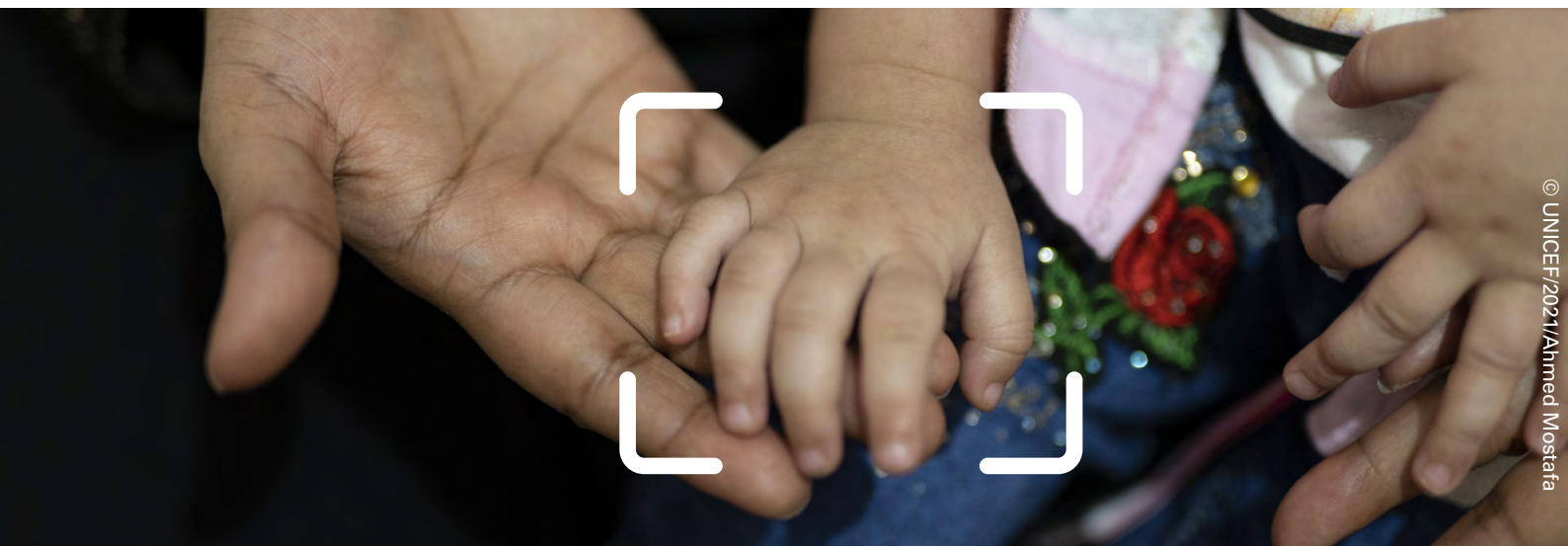
Assuming these prevalence rates remain stagnant and factoring in the projected population growth, which expect fertility rates to continue to come down and thus the number of children under-five to decline as well, it is expected that Egypt would have slightly fewer children who have various forms of malnutrition compared to 2021. For instance, the number of stunted children is expected to drop from 1,568,896 in 2021 to 1,394,560 by 2030 and to 1,403,520 by 2035. The same pattern follows for the number of wasted and overweight children. The number of wasted children is expected to steadily decline to reach 337,745 children in 2030 and then increase by about 20,000 to reach 339,915 children in 2035. As for the number of children who are considered overweight, it is expected that instead of the 1,409,555 children estimated to have been overweight in 2021, those numbers will come down to 1,260,975 in 2035.

If effective interventions prevail, Egypt has a promising opportunity to substantially reduce the number of malnourished children and thus reduce associated direct and indirect costs. However, those interventions need to

account for the adverse effects of inflation on food prices and provide various channels to compensate children under-five for any micronutrient deficiencies or lack of sufficient food.

Although the nutritional status indicators for children have improved, the EFHS 2021 showed a significant increase in **anaemia** levels among children. Based on the 2021 EFHS, the prevalence rate of anaemia is 43%, which means that around 4.8 million children aged 6-59 months were anaemic at the time of the survey. The estimated decline in the number of children 6-59 over time, results in a corresponding decline in the number of anaemic children, if the prevalence rates stay the same. Despite this, the number of estimated anaemic children will be more than 4 million in 2030, which requires concerted efforts to promote healthy nutrition. As noted earlier, particular attention needs to be paid to high food inflation as increased prices are expected to have adverse effects on children's nutrition (quantity and quality) and thus lead to an increase in malnutrition rates in the coming years.

Figure 9: Projected Number of Anaemic Children 6-59 months in Egypt 2021-2035 (millions)



WHAT IS UNICEF DOING ABOUT IT?

To support the Government of Egypt, UNICEF is working at different levels to provide integrated support for children living in Egypt. UNICEF collaborates with various government, international and UN partners and stakeholders to strengthen, improve and scale up provision of services including children health and nutrition, as well as maternal health.

01

UNICEF supported the MoHP to strengthen the capacity of the primary health care system for provision of quality maternal and child health, as well as nutrition services. UNICEF, in collaboration with the ministry, developed the operational model focusing on the “**first 1,000 days**”, targeting vulnerable children and families. Through strengthening the health care system, this approach aims to deliver preventive care and treatment for malnutrition among children. UNICEF worked with the ministry to deliver training for health care providers on MNCH services and integrated management of childhood illnesses. Also, UNICEF in collaboration with WHO launched the Baby-Friendly Hospital Initiative which focuses on providing essential quality care for mothers and their new-born and promote optimal feeding practices. Moreover, UNICEF supported the MoHP in the implementation of the national Vitamin A, iron and folic acid supplementation for women and children aiming to prevent and treat malnutrition.

02

UNICEF worked with the World Health Organization (WHO), the Food and Agriculture Organization of the United Nations (FAO) and the World Food Programme (WFP) to provide technical support to the Ministry of Health and Population (MoHP) and the National Nutrition Institute (NNI) to develop **the national food and nutrition strategy 2022-2030**. The proposed strategy seeks to improve the health care system to deliver high quality nutrition services and to strengthen the food system to realize access to nutritious and affordable food.

03

UNICEF utilizes communication and community outreach to improve awareness on maternal and child malnutrition. UNICEF uses different ways of community outreach through the trained community workers and the RapidPro approach besides the updated social media and advocacy methods. The awareness activities involve capacity building of health workers to provide community counselling and improve awareness related to proper nutrition.



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For more information:



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