

Thai Health 2025



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Birth rate freefall,



how should we adjust and cope?

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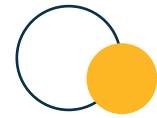
Feature Article



Birth rate freefall, how should we adjust and cope?



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It appears that the natural crises of the 21st century have all reached an “**irreversible**” stage. This includes the destabilization of the planet, as confirmed by the Intergovernmental Panel on Climate Change (IPCC), which asserts that it will be difficult for the Earth to return to the cool, serene state it once had. Another crisis that seems similarly irreversible, like climate change, is the **decline in birth rates** in many countries around the world.

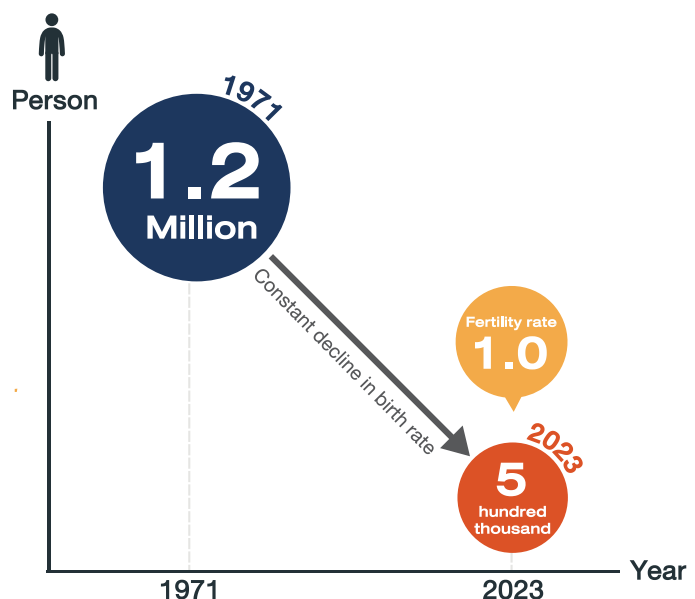
It took the world approximately 190,000 years to build a population base of 1 billion people, and only 200 years to grow from 1 billion (1084) to 8 billion (2022). However, this growth rate is now rapidly and clearly declining. The United Nations projects that the global population will peak at 10.4 billion in the mid-2080s and will decline thereafter.¹ But no one has yet predicted how low the decline will go.

The severity of the falling birth rate, though not uniform across all regions and countries, has caused global alarm. It has sparked fear-arousal headlines in books, articles, and conferences alike—for example, the book *Empty Planet: The Shock of Global Population Decline* by Darrel Bricker and John Ibbitson, published in 2019.² This includes global entrepreneur Elon Musk, who has publicly warned that American society may face extinction in the future, urging Americans to have more children in order to combat what he calls a “population collapse,”^{3,4} and an article exclaiming “You can’t even pay people to have more kids.”⁵ That article discusses various policies that many countries have tried, none of which have succeeded in increasing birth rates. Most recently, in early 2023, the Republic of Korea (South Korea) announced a shockingly low total fertility rate, continuing its decline from 0.78 in 2022 to 0.72—making South Korea the country

with the lowest fertility rate in the world.⁶ The article also cites various measures aimed at boosting the population, including efforts to attract talented young people to settle down and start families in South Korea. However, this has drawn responses from other countries, which argue that this same group of people represents the future hope of their own nations as well.

Thailand is not only sharing this fate but appears to be among the hardest hit in the region. The number of births has been steadily declining since 1971, when the highest recorded number of births was 1.2 million. This figure has continued to fall, reaching only around 500,000 newborns in 2022. In 2023, the total fertility rate stood at about 1.1—the second lowest after Singapore, whose rate dropped below 1.0 for the first time, reaching just 0.97.⁷ Meanwhile, nine other countries (including Timor-Leste) still have total fertility rates close to or above 2.

However, media coverage, critiques, and public discussion continue to revolve around reporting declining birth rates across regions and countries, and the reasons why younger generations are choosing not to have children. The discussion is growing increasingly alarmed at the potential social, economic, and national security implications for individual countries and for humanity at large. This has led to the push for various measures to promote childbirth—including calls for governments to declare low birth rates a “**national agenda**.”



Scholars from various disciplines—demography, economics, social sciences, and others—have tried to compile and synthesize birth-promoting measures that have already been implemented in many countries. These include financial subsidies, tax incentives, the expansion of public infrastructure such as childcare centers and nurseries at workplaces, extended maternity leave for mothers, and paternity leave for fathers. Some countries have allocated large budgets for these policies, yet they have all proven ineffective. Birth rates continue to fall with no sign of a reversal. Despite this, societies seem determined to keep searching for solutions to stimulate childbirth, even though decades of evidence seem to be shouting that “no measure works.” It seems we are all still in the denial stage—and not yet ready to move forward on this challenge.

Declining Births... A Shared Global Crisis

I don't want kids.
I just want pets.
I can't foresee that this will be one of my great regrets.
Your kids are fine.
'Cause they're not mine.
To me, a life lived without children sounds divine.

Some lyrics from the song “I Don't Want Kids”, written and performed by Thomas Benjamin Wild Esq. carry a humorous, satirical, and biting tone—hallmarks of the artist's style. While neither the song nor the artist has achieved global fame, the song received considerable attention on viral media when it was first released in 2018. Part of its appeal likely lies in how it resonates with people of reproductive age, poking fun at persistent questions from parents and friends about future plans for children, or the discomfort when others expect them to hold or play with babies.

The song's message and popularity align well with the current global trend of declining fertility rates.

Although the global population is still growing—projected to reach 8.2 billion in 2024 and continue increasing for another 60 years, potentially peaking at around 10 billion⁸—the fertility rate has been steadily declining, at least since 1950. This has raised serious concerns about population policies and their implications for economic and social transformation.

Thailand's population policy has reversed course from efforts to limit population growth. This shift is reflected in the 8th National Economic and Social Development Plan (1997-2001),⁹ which encouraged Thais to “have appropriately sized families” and to “slow family planning efforts in areas where women's fertility rates were at or below replacement level.” At the same time, the plan still called for “intensifying family planning in areas with high birth rates,” such as the southern and northeastern regions—showing a somewhat ambivalent stance toward promoting childbirth.

Later, in the 11th National Economic and Social Development Plan (2012-2016), the Thai policy direction toward promoting childbirth became clearer. The 11th Plan introduced a policy to “encourage couples who are ready to have more children,” while also aiming to “maintain the current fertility rate and prevent it from declining further.”¹⁰ However, there has yet to be a clear and concrete push in this direction.

Thomas Benjamin Wild Esq



source : www.tombwild.com/press-kit/

Even the alarming report from the Bureau of Registration Administration, Department of Provincial Administration, which stated that the number of live births was lower than the number of deaths, has shown that the Thai population, excluding migration, has started to decrease since 2020.¹¹

The most concrete effort in promoting childbirth so far has been the National Health Security Committee (NHSC), which approved the proposal to include “infertility treatment” as a benefit under the Universal Health Coverage (UHC) scheme (or 30-baht Gold Card program for all Thai citizens). A three-year pilot program will be launched before expanding the initiative, and the goal is to **push for making the promotion of childbirth a “national agenda,”** as discussed in the Committee meeting on March 20, 2024.¹²

Beyond that, there has been little movement in terms of clear, systematic policy measures!

There is only a general approach of **“promoting quality births,”** which subtly implies **a desire for higher birth rates**—but only among those who are ready. This focus seems to place the responsibility on individuals, while the readiness of the state, society, and communities to provide support remains unclear.

At the individual level



Those approaching retirement are beginning to worry as they realize there are fewer and fewer children and grandchildren who might care for them in their later years. Some families have virtually no younger, immediate relatives left. As a result, many are starting to explore new “model” for aging, such as living together with groups of peers. Meanwhile, for people of reproductive age, deciding how many children to have now requires firm decisions and extensive planning—unlike in the past, when marriage and childbearing were simply seen as a normal part of life.

At the community level



People are concerned about the continuity of local culture and traditions, and painfully feel the sense of emptiness when they see no one in the next generation willing to carry on the legacies built by those before them.

At the national level



The government and public agencies are worried about the future labor force that is needed to sustain economic stability and to maintain the welfare system—both of which are built on the assumption of a growing population and expanding workforce.



Many people may question whether the low birth rate situation currently challenging Thai society and economy is something that everyone—and every country around the world is facing at the same time. Are there any countries that are not experiencing this issue? **And how severe** is the situation that Thailand is currently going through?



A research paper titled “*Global fertility in 204 countries and territories, 1950–2021, with forecasts to 2100: a comprehensive demographic analysis for the Global Burden of Disease Study 2021*” was published in *The Lancet*.¹³ That article compiled data on the Total Fertility Rate (TFR)—which refers to the average number of children a woman would have over her reproductive lifetime—for 204 countries around the world, starting from 1950, about 70 years ago, through to 2021. The article also includes projections for the TFR in 2050, which is 26 years from now, and in 2100, which is 76 years from now and marks the end of the 21st century.

Overall, the global TFR has been steadily declining—from 4.8 in 1950 to 2.2 in 2021—and this decline has occurred in every country, though to varying degrees.

When ranking the decline in TFR by region, East Asia experienced the fastest drop: a 78.0% decrease from 5.5 in 1950 to 1.2 in 2021. This is followed by Southeast Asia with a 68.0% drop, South Asia at 67.0%, and Latin America at 66.0%. The region with the slowest rate of decline is Sub-Saharan Africa, where TFR has decreased by only about 38.0%.

Out of the 204 countries examined, 94 still have a TFR at or above the replacement level of 2.1 (the level needed to maintain a “stable” population), while the remaining 110 countries have TFRs below replacement level. Among these, four countries fall into the “ultra-low TFR” category, defined as below 1.0. These include South Korea, which has the lowest TFR at 0.7, followed by Puerto Rico at 0.9, and both Taiwan and Andorra (in Western Europe), which each have a TFR of 0.98. Notably, two of these—South Korea and Taiwan—are in East Asia, the region with the fastest fertility decline, similar to Puerto Rico.

When ranking the decline in TFR by country, it was found that, among the four countries with ultra-low TFRs, only Andorra had not experienced a rapid decline. In fact, Andorra had already had a low fertility rate for the past 70 years. In contrast, South Korea, Puerto Rico, and Taiwan have seen the fastest declines in TFR globally: South Korea’s TFR dropped by 87.4%, Taiwan’s by 85.6%, and Puerto Rico’s by 82.7%.

As for Thailand, it ranks fourth in the world for the fastest TFR decline—dropping from 3.1 in 1950 to 1.3 in 2021, a reduction of 59.1%. It is therefore not surprising that whenever international media report on falling birthrates or population crises, Thailand is frequently cited as a case study alongside South Korea.

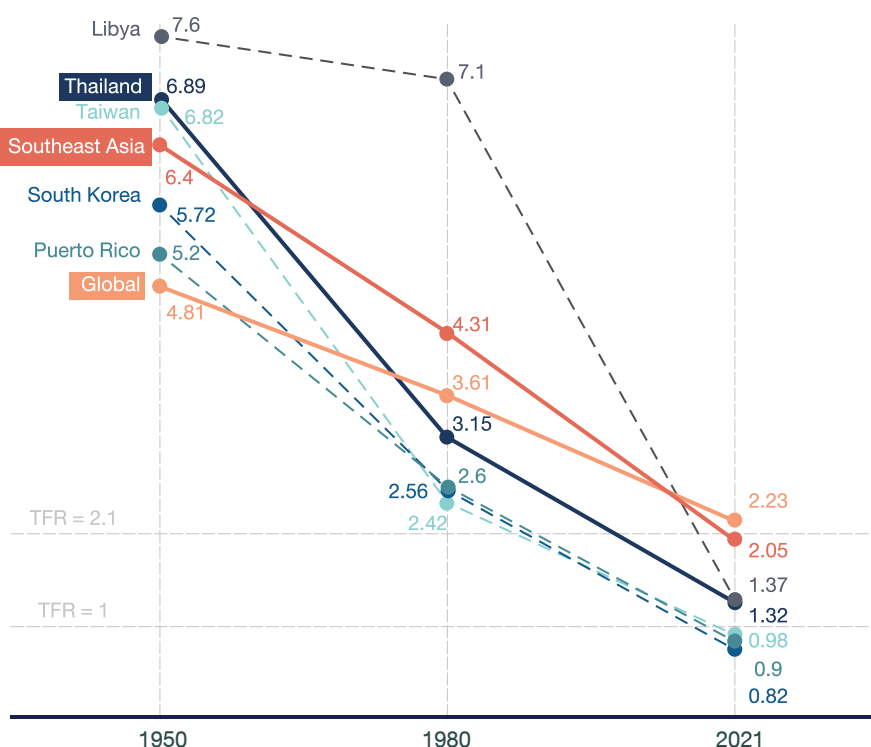


Figure 1: Trends in the decline of the TFR globally, and by some countries: from 1950 – 2021

Source: Excerpted from *Global fertility in 204 countries and territories, 1950–2021, with forecasts to 2100: a comprehensive demographic analysis for the Global Burden of Disease Study 2021*¹⁴

In fact, even though the TFR is declining, population numbers do not immediately decrease in tandem. It takes several generations before the population of a given area, country, or even the world begins to decline. This is because the women born in each generation must first age out of their reproductive years. This creates a time lag between the decline in TFR and the actual decrease in population. Hence, it is not surprising that the global population will continue to grow for some time—about another 60 years, as mentioned earlier. Even in South Korea, which currently has the lowest TFR in the world, the overall population only began to decline in 2020. Similarly, China started reporting a population decrease around the same time as Thailand, in 2023. Meanwhile, Singapore, despite having a low TFR (about 1.2 compared to Thailand’s 1.3) and experiencing a similarly rapid decline, reported an increase in its population from 5.6 million in 2022 to 5.9 million in 2023. This growth includes both native Singaporean citizens (about 1.6% increase) and those granted permanent resident status (about 3.5% increase), reflecting an innovative and emerging policy of replacement migration.¹⁴

Data from the *Central Intelligence Agency*¹⁵ indicate that, as of 2024, there were 41 countries where the absolute number of the population has already begun to decline. Meanwhile, 105 countries are experiencing population growth at a rate of 1% or less—still growing. There are 50 countries with a growth rate of more than 1% but less than 2%, and 32 countries with a growth rate of more than 2% but less than 3%. Only 8 countries have a growth rate of more than 3% up to the highest rate of 4.6%. These countries are Sudan, Niger, Angola, Benin, Equatorial Guinea, Uganda, the Democratic Republic of the Congo, and Chad—all located in Africa.

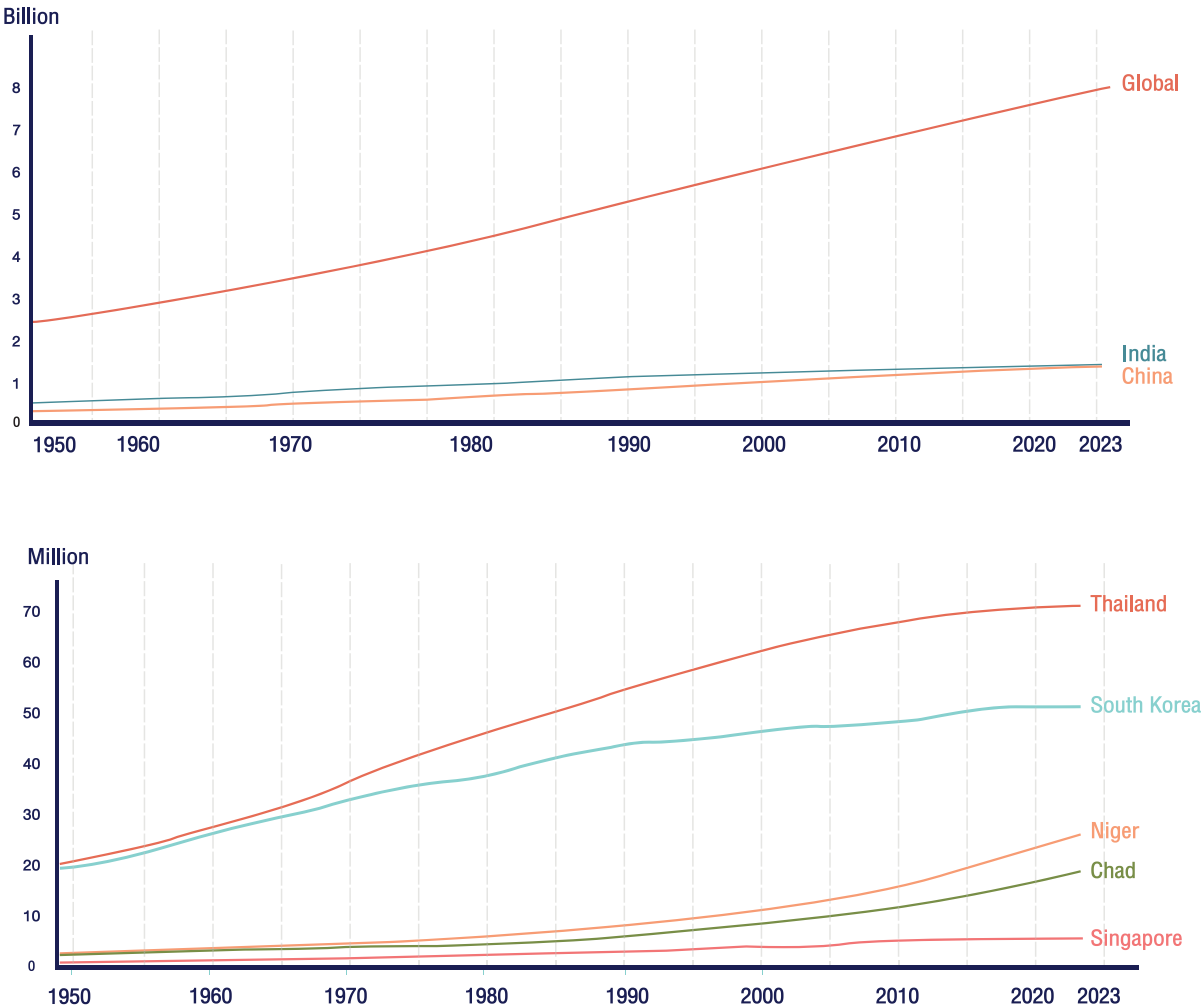


Figure 2: Trends in global and national population growth and some countries from 1950 to 2023
Source: Our World in Data¹⁶



A Downward Trend with No End in Sight A Reality We Must Accept



Declining birth Rates... What are the new generations thinking?

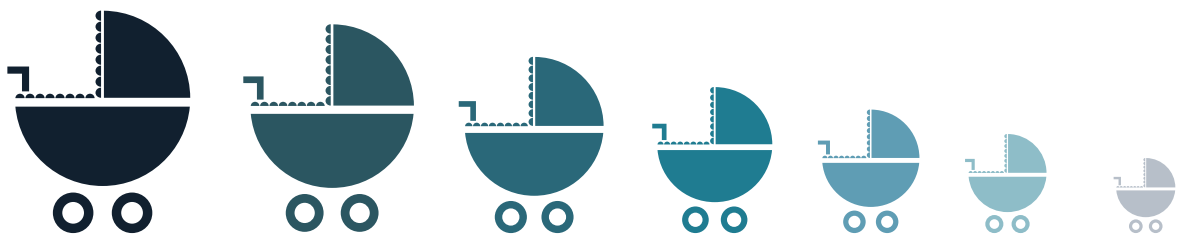
This question carries complex undertones and reflects how society has changed. What people really want to know is not just “what” but also have another question, do we even have to think about it?”

In traditional societies, growing up and starting a family at the right age was something one did not really have to think about. Older family members would take charge of arranging marriages for young people, and having children naturally followed as part of the package. If a couple did not have children at all, it was usually due to some physical inability on one side. Even in later generations, although elders no longer actively arranged matches, they would still frequently ask, “Got someone special yet?” or “Are you married yet?”—questions that subtly pushed young people toward settling down in line with traditional life expectations.

Today, however, marriage and childbearing have become deeply personal matters that few people dare to ask about directly. These decisions are now seen as the individual’s choice and personal space that others should not intrude upon. Dating, sex, marriage, and having children are now seen as independent experiences. Social change—along with advancements in contraception and family planning—has given younger generations more control and more options. And this is why young people today do “have to think” —long and hard—about whether or not to have children.

Now, many shifts across different dimensions of life have caused the younger generation to delay thinking about starting a family. Today, young adults may hesitate about whether to find a life partner, whether to marry once they do, whether to have children after marrying and, if they do want kids, how many. These decisions have become onerous life questions for the younger generation.

Contemplation and hesitation about having children among those with life partners raise another important question: Has the value of children—once seen as a source of labor to help parents with work, as something that “completes” married life, ensures that the family lineage continues, or strengthens the bond within a partnership—now changed?



For today's younger generation, there are many reasons why having children might not seem like the best option anymore. New factors, and even old ones that have shifted over time, have made the decision to have children far more complex than in the past.

Socio-economic change—especially the evolving roles of women—are key factors influencing the declining fertility rate. Women have achieved higher education, more freedom, greater gender and economic equality, and play an increasingly important role in contributing to family income. The availability of contraceptive methods has been a pivotal factor that has allowed women to control childbearing. Especially in Thailand, these socio-economic changes and ubiquitous access to modern birth control, have led to a decline in the TFR.

Initially, the length of time women spend in the education system reduces their reproductive years, as this period usually occurs when the body is most ready for childbearing. As women continue to pursue longer periods of education, their desire to extend their careers, and improve their socio-economic opportunities grows. As a result, the shift to a workforce-driven role for women delays marriage and childbearing decisions for a young couple. In other words, the greater the opportunity for career advancement, the higher the opportunity cost for both the potential husband and wife. This has rendered the decision to marry and have children increasingly delayed.

Additionally, the continuously rising cost of living is a significant factor that pressures couples to work together to make a living. The high cost of living is one of the main factors influencing the decision to have children because the expenses involved in raising a child, providing a good education, and ensuring healthcare have become much more “expensive.” This has led many families to feel that having children poses a financial challenge that may be difficult to manage. Moreover, the rising cost of housing is another factor contributing to this dilemma.^{17, 18} This factor negatively impacts fertility rates in many countries. When housing prices increase, it becomes difficult for single individuals to decide to marry, and even married couples without their own home often decide not to have children. Studies have shown that Generation Y views having children as a burden because it requires significant resources, including time, money, and physical energy. Therefore, having children takes away time and resources that were once used for personal purposes and redirects them towards raising children.¹⁹

Surveys conducted by banks and various sources have found that the cost of raising one child from birth to adulthood requires a significant amount of money and time. Starting with pregnancy, proper care must be given to the expectant mother, and regular prenatal check-ups are necessary. The cost of this at public hospitals is at least 1,500 to 2,000 baht per month, while those who choose private hospitals may have to pay up to 10 times more.²⁰ Sometimes, costs are presented as packages. Even the delivery costs are categorized into natural childbirth or cesarean section. For natural childbirth in public hospitals, the cost is between 5,000 and 15,000 baht, while private hospitals may charge between 30,000 and 90,000 baht.



source: edit by www.freepik.com



For a cesarean section, the cost in public hospitals ranges from 15,000 to 30,000 baht, while private hospitals can charge 1 to 5 times more.^{20,21} After that, there are expenses for equipment, clothing, vaccines, medical care if the child becomes ill, food, and supplements. When the child enters school, there will be educational expenses, which vary depending on the level of education and the family's income.

A survey conducted by *Thairath Money Poll* between August 5 and 30, 2024, on factors affecting financial planning and expenses for raising one child, involving 1,637 mothers living in Bangkok, its metropolitan area, and other provinces, revealed that 76.7% of mothers with an average income of less than 25,000 baht per month spent no more than 10,000 baht per month on hiring a babysitter before their child entered school. In this group, 78.4% of them paid no more than 30,000 baht per year for their child's primary school tuition and 86.7% spent no more than 3,000 baht per month on additional tutoring.

For mothers with an income of 25,000–50,000 baht per month, 52.7% of them hired a babysitter before their child entered school for no more than 10,000 baht per month while 53.4% paid no more than 30,000 baht per year for their child's primary school tuition and 72.3% spent no more than 3,000 baht per month on additional tutoring.

For mothers with an income of 50,000–100,000 baht per month, 46.4% spent no more than 10,000 baht per month on hiring a babysitter, 47.4% paid between 30,000 and 100,000 baht per year for their child's primary school tuition and 56.3% spent no more than 3,000 baht per month on additional tutoring.²²

Additionally, there is the opportunity cost, such as the time parents need to spend taking care of their children, which affects income and opportunities that may be lost if they reduce working outside the home to care for their children.

The financial burden creates difficulties in deciding to have children. Even though many countries have policies to support families with children (e.g., parental leave, child-rearing allowance, welfare benefits, educational support), Thailand still faces limitations in this area. These policies have not been developed sufficiently or comprehensively, making it difficult for many families to bear the additional burden of having children.

Interviews with those with experience revealed that **the decision to have children often depends more on emotions and feelings than on detailed financial planning.** The desire to have children and start a family comes from the emotional desire for a warm family or love for children, which becomes an important driving force. Overthinking the decision can become an obstacle. Focusing too much on economic readiness, career, and other conditions may lead to fear and hesitation, causing some to ultimately decide not to have children because they feel they will never be completely "ready."

"Whenever you have got it (having a kid), you are then ready" is the experience passed down from the previous generation to the new one, showing that true readiness comes from adaptation and action, not waiting for everything to be perfect. It requires courage and confidence to drive the process. A positive outlook and belief in one's own potential can make it easier to decide to have children, even if one is not fully prepared in every aspect. It is still possible to have children and raise them well.

The positive aspects of having children should be discussed more. For instance, having children can bring happiness to a family and make it lively. Even though raising children is tiring, the smile of a child can ease fatigue and bring warmth to family life. Children help complete family relationships and serve as an important life goal. However, this may come

at the expense of career success. Having children is an opportunity to prove one's ability to nurture and create a good environment for children, or it can be a way to continue the family's cultural traditions and customs, as well as strengthen connections within an extended family. Reflecting on the value of having children from a psychological and emotional perspective may encourage the new generation to find meaning in family life, and could lead them to decide to have children, at least in part. Ultimately, the decision depends on each individual's perspective and values.

Life balance: Achieving a life balance is another factor that influences the decision to have or not have children, and it is a term that is increasingly heard among young people. This applies to women in both Generation X (born between 1963 and 1983) and Generation Y (born between 1984 and 2003).²³ Those who are still single view having children as a sacrifice, especially the sacrifice of time for work and personal time. Women, in particular, tend to feel that the one making the sacrifice is usually the woman. Among single Generation Y, there is more concern about time compared to single Generation X. This might be because Generation Y women still feel that their lives are not as balanced as those of Generation X. On the other hand, single Generation X individuals tend to worry more about the cost of raising children, as they have received information regarding experiences of family members or friends who have children.²⁴

Moreover, today's society—marked by high volatility and fragility—has led many younger people to worry about future security and life's uncertainties. This has become one of the factors influencing decisions not to have children. Issues such as economic instability, environmental concerns, natural disasters, shifts in the labor market, and social insecurity have caused many to hesitate about parenthood. They fear their children may face adverse conditions that hinder healthy development, worry about their children's safety and well-being, and wish to shield them from pressure.

Freedom and individuality: Many members of the younger generation value their personal freedom and the pursuit of their own desires or dreams. Having children can feel like a "loss" of some of that freedom—such as

traveling at will, living life on their own terms, or exploring the meaning of life and understanding themselves—rather than following the life path society expects, i.e., what one should do, have, or be at a certain age. Choosing not to have children can therefore be a way to preserve the "value" of personal freedom.

Today's younger generation places strong emphasis on living freely, prioritizing self-care, and embracing self-love. Marriage and parenthood are no longer viewed as life's ultimate goals. Many feel that being child-free confers a better quality of life and more time for oneself. They also prioritize work and career advancement more highly than previous generations, leading many to delay or forgo starting a family in order to focus more fully on personal and professional growth.

However, this freedom often comes into conflict with societal traditions. In some cultures, societal expectations and beliefs about a woman's roles make it difficult for women to freely choose the path they want. A 2024 study by Filipa Salgado and Sara Isabel Magalhães highlights this tension.²⁵ That study examined the perceptions and experiences of Portuguese women who do not wish to have children, in a society that expects women to take on the role of mothers and caregivers. These women face social pressure and negative reactions—being perceived as anxious, unnatural, immature, deviant, mentally unstable, selfish, and not real women. However, the women who choose not to have children have developed a range of strategies to cope with these societal expectations. These include openly expressing their stance in support of a child-free life and quietly standing firm in their personal choice.²⁶

The traditional expectation that having children means having someone to rely on and care for you in old age has significantly declined. Nowadays, middle-income families are more confident in their ability to take care of themselves in old age, supported by certain government policies such as the Universal Health Care scheme, the senior allowance, extended retirement age, and others. These measures reinforce the idea that people today do not necessarily need to rely on their children for healthcare. As for non-health-related services, some believe that as long as they have sufficient retirement savings, there is no need to depend on their children financially.²⁷

Allocating limited resources: Choosing not to have children can be seen as a decision to “preserve” or “enhance” the value of one’s personal life. In contrast, choosing to have children often means redirecting certain resources toward raising them — a zero-sum game of sorts. Opting out of parenthood, however, is increasingly viewed as a way to allocate limited resources — economically, temporally, and environmentally — for maximum benefit, especially in an era where people prioritize living according to their own desires, face resource constraints, and are mindful of their impact on the planet.

Economic resources: Raising children involves substantial expenses from birth to adulthood, including food, education, healthcare, and entertainment. For the younger generation, choosing not to have children allows them to allocate financial resources toward areas that yield personal returns and financial stability — such as investments, professional skill development, travel, or retirement savings. Using resources this way enables greater freedom and long-term security in life planning.

Time allocation: Parenting demands significant time and dedication. Without children, individuals can devote more time to fulfilling or value-driven activities like traveling, hobbies, or developing new skills. Increased personal time also contributes to better emotional balance and daily vitality.



Physical and mental health: Raising a child requires energy, and presents psychological challenges, along with the pressure of securing a good future for the child. Choosing not to have children helps reduce these burdens and anxieties. Many in the younger generation, who place a high value on mental well-being, feel that not having children brings more personal happiness and emotional peace.

For those seeking meaning in life, not having children can allow them to channel their resources into self-development or into creating value through work, creative pursuits, or community engagement — without needing to divert those resources toward childrearing.

Nowadays, a growing number of young couples are content with living together or getting married without having children. This trend has given rise to a lifestyle known as “Dual Income, No Kids” or DINK — a term used to describe couples, whether heterosexual or LGBTQ+,²⁸ who prioritize working to earn income and build financial stability, but without having children—saving and accumulating wealth from the earnings of two people. In fact, the term “DINK” was first mentioned back in the 1980s. TIME magazine featured an article titled “Living: Here Come the DINKs” in 1987.²⁹ Even when the world faced a major economic recession during 2007-2009, people began to take interest in the term once again. In the current era, DINK has re-emerged as a significant social phenomenon, evolving into lifestyle variations such as DINKWAC (Dual Income, No Kids, With A Cat) and DINKWAD (Dual Income, No Kids, With A Dog).³⁰ A clear example often seen today is couples who both earn incomes, live together without having children, and instead choose to have a cat or a dog as companions.



Patriotic parents of South Korea in the era of the world's lowest birth rate

DK, a 35-year-old Seoul native with the tall frame and good looks reminiscent of a Korean drama lead, agreed to an interview via Zoom with the Thai Health Report team, speaking as a father of two — one boy and one girl — defying South Korea's record-low Total Fertility Rate (TFR) of 0.72, the lowest in the world.

DK turned on his camera with his 3-year-old son playfully squirming on his lap, refusing to go play with his mother in the back of the house despite repeated prompts. Eventually, DK gave in and let his son stay during the interview. His daughter, just over a year old, was with his wife in the back of the house.

DK began jokingly, explaining that in South Korea, people who have children — especially more than one — are often called “aegukja” (애국자), which means “patriot.” It's a term traditionally used to describe national heroes who rescue the country in times of war or crisis. The use of this word reveals the deep concern and tension surrounding the birth rate crisis in South Korea.

When asked whether he and his wife found it difficult to raise two children born just a few years apart —especially during a time of economic uncertainty and while both parents are working —DK replied, “It's not easy, but it's manageable.” With a tone as if he had been parenting for decades, he added, “Raising kids is never easy.” His demeanor was calm and mature, clearly embracing his role as a father.

Originally, DK was not particularly keen on having children — he fell into the “maybe, maybe not” group. But when he had a serious conversation with his wife about getting married shortly before the COVID-19 pandemic, she firmly insisted on having children — and more than one. DK explained that this might be because she comes from a very close-knit and loving family. She is extremely attached to her parents and younger brother, calling her parents, who live in another city, every day— sometimes multiple times a day. Before the interview, DK had asked her again why she felt so strongly about having kids. Her answer was simple: “It's natural. If you get married, you have to have children.”

Just three months after their wedding, his wife became pregnant. DK described how his entire life — both work and personal — had to shift dramatically. Every day, he made a point to leave work by 5 PM, even as his colleagues continued working, because it took about an hour to drive home. Once there, he would immediately jump in to help with childcare and housework. Before he knew it, it would be 9 PM — bedtime.

When their first child was born, DK was certain they would stop at one. But less than two years later, his wife brought up the idea of having another. To his own surprise, he felt okay with it. Over time, things had settled into a rhythm, and he found joy and fulfillment in spending time with his child. The idea of having another did not seem so overwhelming anymore — even though both sets of grandparents lived in other cities and could not help with the childcare. The only condition DK set was that they wait until their first child was at least three years old, so the older sibling could be somewhat independent.

DK shared how government assistance has been very helpful. After the birth of their child, he and his wife were able to request “Yugadoumi” (육아 도우미), which is similar to a nanny who also helps with household chores, for a period of three weeks. This support significantly eased the early stages of parental leave. DK explained that this helper is often a woman in her 50s to 60s, and the government covers most of the costs, with only a small portion left for the couple to pay. Additionally, there is a monthly subsidy for families with children, amounting to around 24,000 baht during the first year after the birth. Each city also provides local financial support, with smaller cities offering more in an effort to increase the population.

When asked how he plans to handle the future expenses as his children grow, DK acknowledged his concerns. While he did not have exact figures in mind, he expressed confidence that they would manage, even though he and his wife are not wealthy. He emphasized that they are not extravagant, spending only on necessities and making reasonable choices. They are not the type to follow luxury brands or dine out at expensive places.

When asked, “Do you plan to have a third child?” DK smiled, paused, took a deep breath, and replied, “Let’s see how things go with the second one... but it probably won’t be easy.” His main concern, he said, is that they would have to move to a larger apartment.

“What is important is the woman,” DK concluded, explaining that women bear the heavy burden of pregnancy and child-rearing. It is the woman who makes the decision, and she will be more likely to decide in favor of having more children if she feels confident that her husband will be supportive and share the responsibilities. He quickly added, “This isn’t just me trying to sound good — I truly think this way.” He also mentioned, “The government and local subsidies are helpful and reduce the burden, but I can guarantee that they’re not the reason people are having more children.”

Various policies that are still not working

Although various countries have made efforts to reverse the declining birth rates or at least slow down the rate of decline by implementing numerous policies aimed at supporting population growth, it seems that the phenomenon of low birth rates is showing signs of “policy defiance.”

Pro-natalist policies that various countries have implemented can be grouped into four main categories.



Policies related to early childhood care (childcare), which involve increasing the number of childcare facilities through public or private sector investments, as well as raising the standards and quality of these facilities



Parental leave policies, which initially applied only to mothers but later extended to fathers to help share the childcare burden



Financial support policies, such as direct cash transfers or tax deductions for families with children



Access to healthcare services related to pregnancy, childbirth, and medical care, especially fertility treatments

These policies reflect the fact that one of the main reasons people are reluctant to have children is the difficulty in finding trusted individuals to help with childcare during the pre-school years, especially since parents often have limited time due to work and cannot rear their child during the post-birth period or when the child is sick or unable to care for themselves. The escalating costs that accumulate until the child becomes an independent adult, which can take 15 to 20 years, also add to this reluctance.

However, analyzing and designing policies, particularly those aimed at boosting birth rates, is not a simple, straightforward task that can be packaged into easy-to-understand policies. It is a complex matter due to many interconnected factors. Each policy proposal requires an extensive legislative process to ensure that all parties agree and that the policy will be effective without causing harm to other sectors, since it affects the entire population. Once implemented, these policies also require significant budgets to achieve the desired outcomes.

For example, policies may target the general population or specific groups, such as low-income or middle-income families. Even if policies are written to apply equally to all, their effectiveness will vary across different groups. Moreover, policymakers need to consider whether the goal is to encourage having the first child to help couples overcome their fears and concerns (Fear zone, Safe zone), or to encourage continued childbearing throughout the reproductive years (Completed fertility). They must also consider the long-term sustainability of the policy and whether it will have lasting effects or only short-term results. Some policies may work well in the short-term due to the novelty of the experience or the absence of negative consequences in the initial phase, but over time, their effectiveness may wane or face strong opposition.

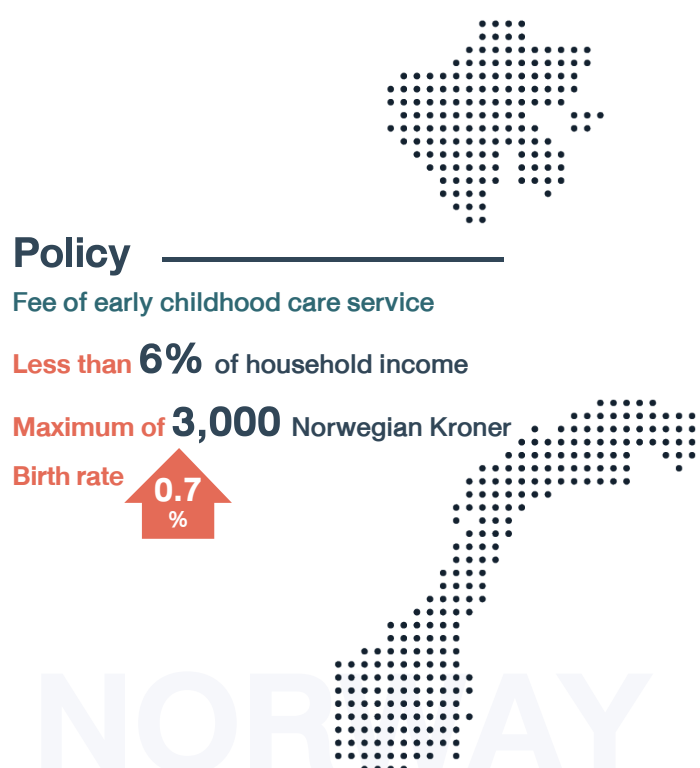
The group of Western countries were among the first to raise awareness about stimulating birth rates. Although there is no clear record of which country implemented pro-natalist policies first, the “*Code de la famille*” introduced by the French government in 1939 is considered one of the oldest pro-natalist policies. It provided financial support to mothers who had to leave their jobs to stay at home and care for their children, banned the sale of contraceptives (which was later lifted in 1967), and offered subsidies to parents with more than three children (*famille nombreuse*). Families with six children were eligible for double income, along with other benefits, such as tax reductions, discounted public transport fares, and pensions for mothers, among others. These policies were introduced to encourage people to have more children after France had faced a higher death rate than birth rate since the end of World War I.³¹ In fact, current pro-natalist policies are not much different from those implemented 85 years ago.

This anomaly was noted in a systematic review of the literature by Bergsvik, Fauske, and Hart (2021).³² That paper synthesized pro-natalist policies from Western countries, including research studies.³³ The portion that analyzed the outcomes of those policies found that the policies used in the past (and still in use today) have not been as effective as expected. They required significant investment and depended on the context of each country.

Policies for increasing and improving the quality of early childhood care centers

Support for parents to have children by providing childcare, especially during the pre-school years (under 3 years old), reflects the fact that in today’s society, finding a full-time parent at home to take care of children as in historical times is nearly nonexistent. This policy targets couples where both spouses need to leave home to work (dual-earners), either because economic pressure makes a single income insufficient, or because women themselves seek to have a more prominent role in the economy, career advancement and dignity, or all combined.

Norway has a policy that prevents families with children from paying more than 6% of their household income for early childhood care services, and limits payments to a maximum of 3,000 Norwegian kroner per month (about 250-300 euros). This policy also allows low-income families to access up to 20 hours of childcare per week for free, and if payment is required, it is set at a very low rate. Norway had continuously improved its policies on early childhood care during 1980 – 1990. In 2009, the country established a cap on childcare service fees, developed service quality standards, and, in 2015, introduced subsidies for low-income families for childcare services. Studies have shown that increasing the number, improving the quality, and expanding access to childcare services have contributed to a 0.7% increase in the birth rate in Norway.



In Germany in 1980-1990, the policy to expand early childhood care centers (*Kindertagesstätte* or *Kita*) was in place, especially in East Germany. Meanwhile, West Germany had a limited number of early childhood care centers, and many mothers still preferred to stay home to care for their children full-time. It was not until 2008 that the policy to expand childcare facilities became more widespread, ensuring that all children age 3 to 6 years were entitled to attend state-run daycare centers. This made it mandatory for all local governments to provide sufficient early childhood care services. In 2013, the policy expanded to include children age 1 year or older and, in 2018, a cap on childcare fees was introduced. In 2022, the *Gute-Kita-Gesetz* (Good Daycare Act) was implemented to improve the quality standards of daycare services. These developments in Germany increased the birth rate by about 0.3%.

Policy

Sufficient early childhood care services in all localities
Mandatory for all local governments

Birth rate

0.3
%

Policy

Fees based on parents' income and number of service hours

Birth rate

2.3
%

In Belgium, the Ministry of Family (*Ministerie van Gezin* in Dutch, *Ministère de la Famille* in French, and *Ministerium für Familie* in German), which has existed since 1946, places a strong emphasis on quality and equality in access to early childhood care services. Caregivers at daycare centers must be licensed by the Child and Family Agency (*Kind en Gezin*). The service fees are based on parents' income (income-related pricing policy), and vary depending on the number of hours and the child's age. Fees also differ based on the time of service, such as during or outside of school hours. Families with multiple children receive a discount.³³ Belgium's daycare policies increased the birth rate by 2.3%.

Additionally, the policy to increase affordable and equitable state-provided childcare services in Sweden, announced in 1998 and implemented in 2002, played a significant role in raising the birth rate for first children by 9.8% since 2000, even in the year before the policy was fully implemented. This highlights the significant impact of the policy's serious commitment. Reports also indicate that the birth rate increase was particularly noticeable among low-income households.³⁴

Policy

Increasing affordable state-provided childcare service

Birth rate

9.8
%

What policymakers need to be cautious about is that changes in other policies can have unexpected effects on birth rates. For example, the policy to delay the retirement age in Italy, allowing people age 60 to continue working, which was part of pension reforms between 1991 and 2001, resulted in many grandparents who used to help care for grandchildren no longer being available. This increased the demand for early childhood care services in Italy and led to delays in the plans of couples in Italy to have children.³⁵

Policies on extending maternity and parental leave

Policy

Extending maternity and parental leave

Birth rate

5.7
%



Austria, which announced its policy in 1989, extended maternity and parental leave from 12 months to 24 months for children born from July 1 onwards. Later, in 2002, the country introduced compensation for parents who took leave to care for their children (Kinderbetreuungsgeld or childcare allowance). In 2010, greater flexibility in leave options was introduced, allowing parents to choose between short-term leave with higher compensation or long-term leave with lower compensation. The leave period was extended from the previous 12 to 36 months. Further flexibility was developed in 2017 to promote equality between mothers and fathers in child-rearing responsibilities.³⁶ It was found that Austria's policy led to a 5.7% increase in the birth rate.

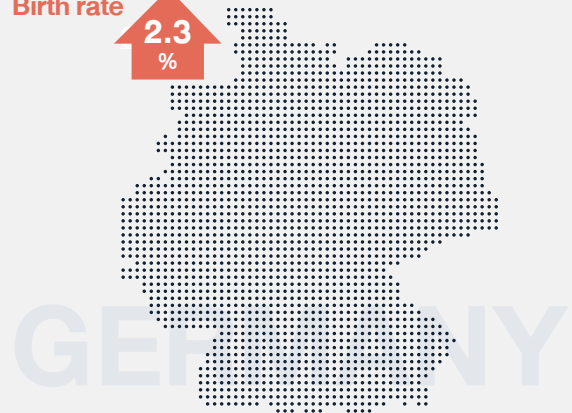
In Germany, the compensation for mothers on maternity leave was expanded, from a fixed rate of 13 euros per day for 24 months after childbirth, to full wage compensation based on their pre-birth monthly income for a duration of 12 months. When comparing the birth rates before and after this policy, no significant change was observed. Mothers with lower incomes were disadvantaged by this policy because the previous fixed-rate compensation provided them with higher financial support.

Policy

Expansion of compensation for maternity leave from a fixed rate of 13 euros/day to full wage compensation

Birth rate

2.3
%



Policy

Guaranteed employment and allowing to return to the same or equivalent position with same pay and benefits

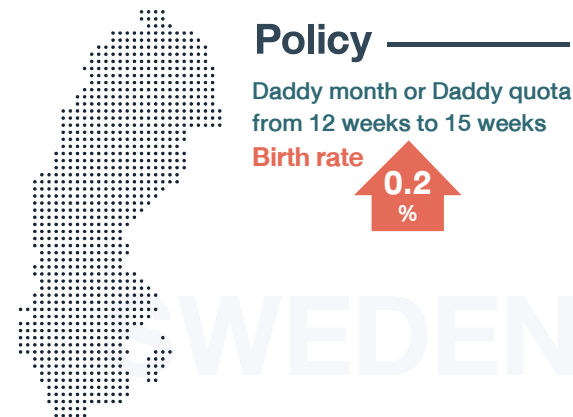
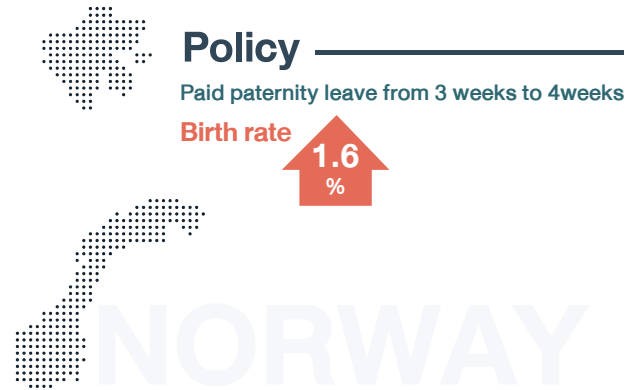
Birth rate

1.5
%



In the United States, the Family and Medical Leave Act (FMLA) was enacted in 2003 as a federal policy enforceable in all states. It grants 12 weeks of unpaid leave per year for the care of a newborn, adopted child, or a sick family member. While the leave is unpaid, employers are required to guarantee continued employment, allowing employees to return to the same or an equivalent position with the same pay and benefits. This policy was associated with an increase of approximately 1.5% in the birth rate of first children and about 0.6% for second children, with the most noticeable impact occurring shortly after the policy was introduced.

In Norway, a parental leave policy has been in place since 1977, initially available only to mothers. In 1993, the policy was expanded to allow fathers to take paternity leave (Paternity quota), with paid leave extended from 3 weeks to 4 weeks per year. This leave is non-transferable, meaning only fathers can use it and it cannot be transferred to the mother. The aim was to alleviate the disproportionate burden of child-rearing on mothers. The policy yielded only a modest effect, with the birth rate increasing by approximately 1.6%.³⁷



In Sweden, paternity leave was expanded under the policy known as “Pappamånader” (Daddy month or Daddy quota), which has existed since 1974. Sweden is recognized as a leader in implementing policies that support families and promote work-life balance. In 1995, the country extended paternity leave from 12 weeks per year to 15 weeks per year. However, studies found that the impact was minimal, with an increase in the birth rate of only about 0.2%, and the effect was noticeable only during the initial period after the policy was introduced, particularly among individuals with higher levels of education.³⁸

Additionally, in 2007, Spain introduced a policy granting fathers the right to take 13 days or 2 weeks of fully paid leave to care for their child. The wages during this leave are subsidized by the state through the social security system. However, to be eligible, fathers must be registered under the social security system and legally employed. Studies found that the birth rate actually declined by approximately 5%, which may be attributed to the increased opportunity cost for fathers.³⁹

Subsidy policies

The child-rearing subsidy in Quebec, Canada, is part of the Quebec Parental Insurance Plan (QPIP). In 1988, the province introduced an increase in the Allowance for Newborn Children (ANC), which studies found led to an increase in the birth rate of approximately 1.7%, particularly among families having a third child.⁴⁰ However, some studies that differentiate between short- and long-term data have found that the increase in birth rates tends to decline in the long term.⁴¹

As for the policy to increase child-rearing subsidies in Germany, announced in 1996 and known as “Erziehungsgeld” (child-raising allowance), it was found to have little effect on the birth rate of first children. However, it did have an impact on the birth rate of second children, particularly among high-income groups.⁴² Additionally, a study of the local government subsidy policy in the German state of Thuringia found that subsidies of at least around 150 euros per month, but not exceeding 300 euros per month, were provided. Families with more members received proportionally higher amounts. This subsidy was given to families who did not enroll their children under the age of two in state-run preschools.⁴³ This support had an impact on increasing the birth rate, particularly during the first four years after the policy was introduced, especially among groups more likely to raise their children at home—such as large families, low-income households, and immigrant parents. In 2007, Germany made a major reform to its child-rearing

subsidy policy, introducing “*Elterngeld*” (parental allowance), which provided compensation of up to 67% of a parent’s previous income before having a child, not exceeding 1,800 euros per month, for a duration of up to 12 months. If both parents shared this allowance, the duration could be extended to 14 months, to encourage shared responsibility in childcare.

In Spain, a subsidy policy introduced in 2007 provided a lump sum payment of up to 2,500 euros upon the birth of a child. This was given to mothers who had lived in the country for at least two years. It was found that this policy increased the birth rate by approximately 5% among the total sample group.

Policies on access to healthcare services

Reducing healthcare costs helps lower the expenses of child-rearing for parents. A synthesis of research on the reduction of various healthcare costs that impact birth rates found both positive effects, such as in the study by Schmidt in 2005⁴⁴ and 2007.⁴⁵ Analyzing U.S. Census data from 1985 to 1999 across 15 U.S. states, it was concluded that health insurance coverage for affordable infertility treatments in women nearing the end of their reproductive years helped increase the birth rate among white women age 35 years or older by approximately 32%. However, some studies, such as the one by Machado and Sanz-de-Galdeano in 2010, found no effect at all,⁴⁶ despite using data during 1979 to 1987 from various sources.

Leibowitz’s study in 1990, which was an experiment conducted in six cities in Washington, Massachusetts, and South Carolina with 2,216 participants, found that health insurance coverage that fully covered the medical expenses of children (Fully Covered Plan) increased the birth rate by approximately 29%. However, there are also experimental studies that suggest that, even when health insurance covers perinatal care, from pregnancy through to postnatal care, it may lead to a decrease in the birth rate, such as the study by Joyce et al.,⁴⁷ in 1998, using pregnancy data from 1987 to 1992 from the National Center for Health Statistics in the United States, among others.

Policies to stimulate an increase in the birth rate in East Asia

East Asia is the region of the world with the fastest decline in birth rates, so it is not surprising that countries in this region have continuously implemented various measures to stimulate birth rates.

After China abolished its one-child policy in 2016, the country has now adopted the “Three-Child Policy” (孩政策: Sānhái Zhèngcè). On May 31, 2021, China began offering subsidies to families with three children. Previously, families with more than one child had to pay additional fees and forfeit several state benefits. The goal of the new policy, by contrast, is to ease the burden and encourage more children. Additionally, there are measures to assist with the cost of children’s education, including low-interest loans, compensation for maternity leave, and child healthcare expenses. There are also policies aimed at gender equality, among others. The country allocates no less than 5% of its Gross Domestic Product (GDP) annually for these purposes, and local governments are allowed to adjust and add policies that are deemed necessary and suitable for their local contexts.⁴⁸

For South Korea, which currently has the lowest TFR in the world, a demographic national emergency was declared on June 19, 2024. The government called for cooperation from all sectors and urged every ministry to take comprehensive response to the situation.⁴⁹ South Korea has also announced the establishment of a new ministry to implement urgent and effective measures, temporarily called the Ministry of Population Strategy Planning, despite already having the Ministry of Gender Equality and Family. The minister of this new ministry will also serve as the Deputy Prime Minister for Social Affairs. This move comes after evaluations showed that previous measures have not been effective, including initiatives aimed at creating a work-life balance, increasing parental leave, reducing working hours for parents with children age 8 to 12 years, increasing paternity leave from 10 to 20 days, and providing leave during the wife’s pregnancy. Currently, only 6% of fathers use these benefits, with a goal to increase usage to 50%. The government has also raised maternity leave compensation from 1.5 million won

(around 40,000 baht) per month to 2.5 million won (around 66,000 baht) for the first three months. Additionally, subsidies for employers are being provided to reduce pressure on employees. Other measures include expanding childcare services from birth until the age of 11 and increasing the number of childcare workers, with consideration for bringing in foreign caregivers.⁵⁰

Despite the policies, budgets, and efforts mentioned, no country has reported an improvement in the trend of the TFR.

A low birth rate is not necessarily all bad

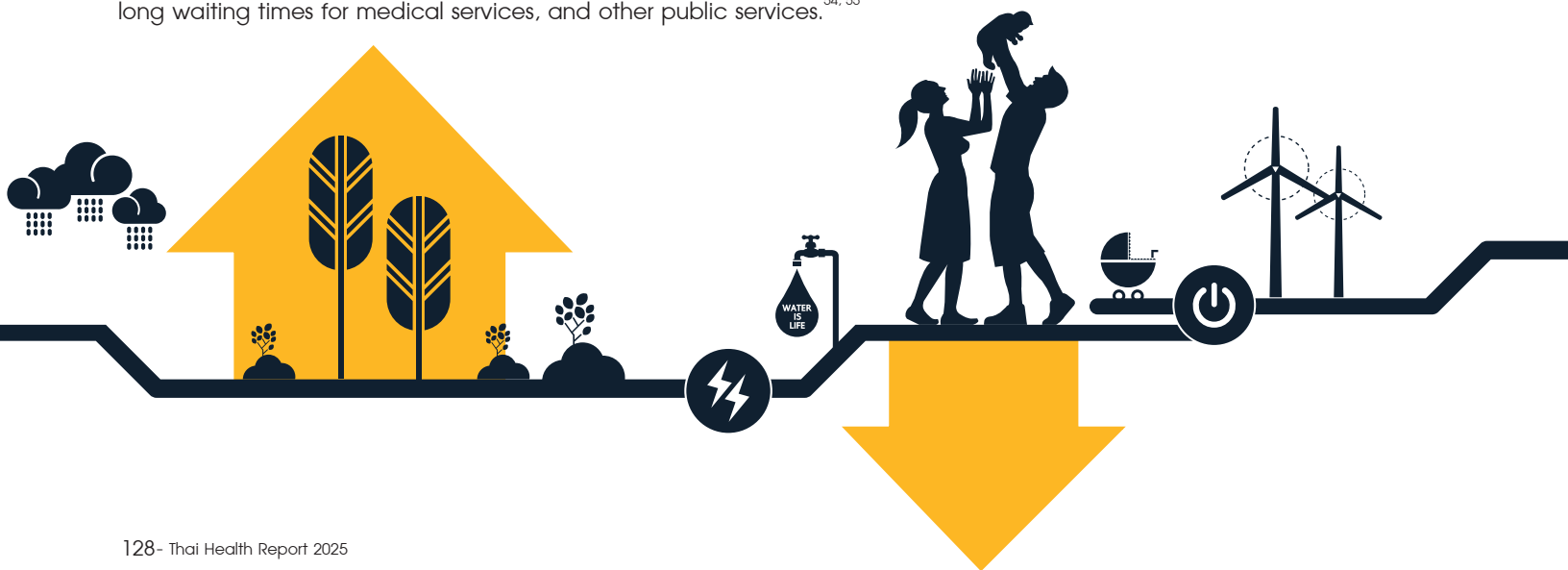
The situation of a low birth rate may cause concern, particularly regarding economic contraction, elderly care, and the instability of social security systems, leading many countries to accelerate the development of policies and mechanisms to stimulate higher birth rates as mentioned above.

That said, it should not be forgotten that, in the past, some countries had policies to control population numbers, with some acting very aggressively. This reflects the fact that a declining population is not necessarily a problem or a disastrous situation... there are indeed some benefits to a low birth rate.

First, a lower TFR reduces pressure on the environment, both in terms of reduced consumption and the use of resources, as well as the production of waste and pollution. According to a report by the Intergovernmental Panel on Climate Change (IPCC), in regions where the population has decreased, air and water quality have improved, deforestation has been reduced, and carbon and other greenhouse gas emissions have decreased, aligning with global efforts to address climate change^{51, 52} and revive bio-diversity.⁵³ This is beneficial to the ecosystem and promotes the sustainability of natural resources.

Second, it is beneficial for the allocation of various resources needed for living, such as land management for farming, housing, water sources, food sources, and other resources related to life development, including education, healthcare, transportation, and employment opportunities. Currently, there is intense competition for these resources, especially in densely populated areas where these resources are limited, and the efficiency in organizing and sharing them is lacking. This leads to certain groups being excluded and perpetuates inequality from generation to generation, causing the gap in social inequality to widen and become a fracture in society.

Third, it is beneficial to the quality of life of people in society. This can be seen as a consequence of the first two factors—improved health due to reduced environmental pollution and, if climate change improves, a decrease in risks from natural disasters caused by climate change. Moreover, the reduction in social competition benefits both physical and mental health. It provides individuals with “time” gained from not working excessively for the economic security of themselves and their families, as well as the relief from traveling in congested traffic, long waiting times for medical services, and other public services.^{54, 55}



Final thoughts:

Matters for urgent consideration

Although the policies to stimulate birth rates through various methods have not yet yielded clear results (or have only had short-term effects), and the outcomes remain relatively low, it cannot be denied that we still need to encourage higher birth rates and find ways to motivate people to have more children. However, in the end, whether or not we find a policy that works effectively, it is inevitable that we will continue to face a decline in the birth rate for a period of time, possibly long-term, unless we start experimenting with new policies that truly resonate with people of reproductive age. Even if we do find such a policy and implement it immediately, it will still take at least 20 years before the increasing number of newborns grows up to take on the responsibility of supporting and sustaining society.

In the meantime, society requires policies that must be implemented immediately to address the urgent impacts of the declining birth rate.

1

The use of robotics and artificial intelligence (AI) technology to replace the declining human resources, which is already being implemented in areas such as product manufacturing, services, and office operations, will become even more widespread due to the rapid development of AI technologies. However, it is crucial to focus on using AI to effectively and comprehensively care for the elderly, ensuring that technological disparities are minimized. The population of older Thais, which is rapidly increasing, will consist of individuals who have fewer children and are geographically distant from their children and relatives due to migration, as well as those with reduced social capital due to urbanization in Thai society.

These AI technologies should be aimed at enabling older persons to live independently for as long as possible, enhancing their vitality and health. This does not only refer to advanced and expensive technologies like robots, bionics, and prosthetics, which are more accessible to wealthier seniors. It also includes simple everyday assistive devices, such as tools to help lift objects from cars or assist with mobility, that are not overly expensive. The government must support the private sector in producing these devices at prices that elderly individuals with moderate to low incomes can afford. Moreover, there should be policies where the government collaborates with the private sector to care for the elderly, through forms of welfare, semi-welfare, and social responsibility activities.

2

Personal financial adaptation for retirement is to be planned and implemented earlier than previous generations in order to save enough for retirement, as income and resources from children will significantly decrease and, for some, may disappear entirely. It must also be considered that when one reaches an age where they can no longer work to earn income, the net cost of living will increase substantially.

On this matter, careful and rational spending and daily living as well as reducing luxury and excessive indulgence should be promoted. This will not only help ensure sufficient resources to have more children, but also provide enough funds for life during retirement.

3

Redefining old age will change society's attitude toward senior citizens and the aging social structure. Previously, people age 60 years or older were considered elderly, and expected to retire and depend on others. However, nowadays, people age 60 and even up to 70–75 years are still physically strong, energetic, and possess intelligence, experience, and skills, thanks to advancements in healthcare and education.

Changing this societal attitude involves not only altering the perception of those age 60 years and over, so they feel empowered and motivated to learn and develop their potential to continue working, but also changing the perception of others in society to foster acceptance and collaboration in appropriate roles. This will lead to the creation of a new labor force and an increase in economic output, resulting in a “3rd Demographic Dividend.”⁵⁶

4

The search for solutions to the social security system should be accelerated. The system was built on the concept of continuously increasing the number of contributors (Growth model) to ensure the stability of the system. However, the decline in birth rates has led to a reduction in the working-age population, thus decreasing the inflow of funds into the system. Meanwhile, the number of older Thais depending on subsidies from the system is increasing, and they are likely to live longer than before, resulting in higher outflows than inflows, which may cause the system to become congested or even “collapse.” This issue has been analyzed by institutions and agencies for some time, and it is clear that urgent reforms are needed. Specifically, the focus should be on “expanding” the contributors to the system, such as non-formal workers and freelancers, who are increasing in number and earning higher incomes, as well as addressing the outstanding payments, which amount to approximately 60–70 billion baht, mostly owed by the government.⁵⁷

5

Considering policies to attract talented individuals to live and work in Thailand is another solution. This policy has already been implemented, especially at the university level and by the Board of Investment (BOI), but it has primarily focused on exchange programs.⁵⁸ However, to make the policy more fruitful, it should focus on long-term residency, where individuals work and build families in Thailand. It should include policies and structures that encourage skilled working-age individuals to stay in the country, such as exchange students, full-time international students, faculty members, researchers, and younger skilled workers in various industries—especially those in sectors that align with the country's strategic goals—and skilled foreign labor.⁵⁹ Such a policy could also include “digital nomads,” a group of freelancers who live in countries they love and work digitally for employers from anywhere in the world. In rankings of cities and countries that are popular destinations for these migrants, Chiang Mai and provinces with beautiful islands and beaches, such as Trat, Surat Thani, Phuket, and Phang Nga in Thailand, are often ranked among the top.^{60,61}

These policies would be an immediate response to the declining birth rate, not in terms of stimulating birth rates and increasing the population, but in terms of the fact that society must adapt to a situation where fewer people are born for some time, which is unlikely to be short-term. How long this period will last depends on the success of the policies and the process of encouraging births, which at present... remains unclear.

Appendix

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10 Indicators “Thai Mental Health”

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10 Outstanding Health Situations

Amending the Alcohol Law: Monitoring Social and Health Impacts

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- 19 The Subcommittee on the Study of Tobacco and E-cigarettes from a Commercial Perspective in the Commerce and Intellectual Property Commission lists two members from the End Cigarette Smoke Thailand' as advisors: Mr. Asa Saligupta and Mr. MarisKarunyawat. The names of politicians supporting the legalization of e-cigarettes include Mr. Ekkapob Pianpises and Mr. Opas Almaseri, whose names also appear in other working groups.
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Medical Cannabis and Policy Confusion

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Thailand and the Day Gambling Becomes Legal: It May Not Be Worth the Cost

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"Blackchin Tilapia" and Dealing with Alien Species in Thailand

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 - 10 Article 4 of the Public Health Act B.E. 2535 defines "waste" as waste paper, waste cloth, waste food, waste goods, waste materials, plastic bag, food container, ash, animal dung or carcass, or any other thing swept away from road, marketplace, animal farm, or other places, and including infectious waste, toxic or hazardous waste from community.
 - 11 Ministry of Interior Notification on Waste Management B.E. 2567
 - 12 Ministerial Regulation on the Management of Toxic or Hazardous Waste from Communities B.E. 2563.
 - 13 Subordinate laws on hazardous waste management include: Ministry of Public Health Notification on Safe Landfill Sites and Measures to Prevent Health and Environmental Impacts, B.E. 2566; Ministry of Public Health Notification on Location and Size of Location for Burning Toxic or Hazardous Waste from Community and Lighting, and Sufficient Ventilation in Building for Work, B.E. 2566; Ministry of Public Health Notification on Prescribing Medication and Medical Supplies, Psychoactive Substances for Medical Purpose as Toxic or Hazardous Waste from Community, B.E. 2565; Ministry of Public Health Notification on Measure to Control Toxic or Hazardous Waste from Community, B.E. 2565; Ministry of Public Health Notification on Course and Training Period on Safe Management of Toxic or Hazardous Waste from Community for Responsible Officer, B.E. 2564; and Ministry of Public Health Notification on Course and Training Period on Safe Management of Toxic or Hazardous Waste from Community for Worker, B.E. 2564
 - 14 Subordinate laws on infectious waste management include: Ministry of Public Health Notification on Measure to Control Transporting Infectious Waste in order to Prevent Illegally Disposing Infectious Waste, B.E. 2565; Ministry of Public Health Notification on Criteria and Method of Testing Bio Standard after Disposal of Infectious Waste, B.E. 2565; Ministry of Public Health Notification on Prescribing Types of Waste or Source of Other Infectious Waste Identified as Infectious Waste, B.E. 2565; Ministry of Public Health Notification on Methods of Infectious Waste Disposal, B.E. 2564; Ministry of Public Health Notification on Identifying Wards for Patients with Severe Infection, B.E. 2563; Ministry of Public Health Notification on Identifying Qualification and Condition of Laboratory for Hazardous Infectious Agent; Ministry of Public Health Notification on Brand or Sign to Be Printed on Container for Infectious Waste, B.E. 2564; Ministry of Public Health Notification on Criteria and Condition on Transporting and Disposing Infectious Waste in Areas under Subdistrict Municipality and Subdistrict Administrative Organizations, B.E. 2558; Ministry of Public Health Notification on Prescribing Qualification of Retention Area for Infectious Waste Container; and Ministry of Public Health Notification on Training Course on Prevention and Dealing with Infection or Hazard from Infectious Waste.

The Complexity of State Measures in Managing Industrial Waste and Hazardous Garbage

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- 6 Article 97 of the Enhancement and Conservation of National Environmental Quality Act, B.E. 2535, stipulates that any person who commits an unlawful act or omission by whatever means resulting in the destruction, loss or damage to natural resources owned by the State or belonging to the public domain shall be liable to make compensation to the State representing the total value of natural resources destroyed, lost or damaged by such an unlawful act or omission.
- 7 Article 96 of the Enhancement and Conservation of National Environmental Quality Act, B.E. 2535, stipulates that if leakage or contamination caused by or originated from any point source of pollution is the cause of death, bodily harm or health injury of any person or has caused damage in any manner to the property of any private person or of the State, the owner or possessor of such point source shall be liable to pay compensation or damages therefor, regardless of whether such leakage or contamination is the result of a willful or negligent act of the owner or possessor thereof, except in case it can be proved that such pollution leakage or contamination is the result of (1) force majeure or war (2) an act done in compliance with the order of the Government or State authorities (3) an act or omission of the person who sustains injury or damage, or of any third party who is directly or indirectly responsible for the leakage or contamination. The compensation or damages to which the owner or possessor of the point source of pollution shall be liable according to the foregoing first paragraph shall mean to include all the expense actually incurred by the government service for the clean-up of pollution arisen from such leakage or contamination.

- 15 Pollution Control Department Notification on the Guidelines for Setting the Standard Rate for the Disposal of Toxic or Hazardous Waste from Communities for Local Administrative Organizations, B.E. 2566
- 16 Summary of guidelines for waste management by local administrative organizations
 - 1 * Local administrative organizations must issue regulations or by-laws on the methods for dumping toxic or hazardous waste from community in public areas or establish designated sites for disposal of toxin or hazardous waste from community in public areas for public benefit.
 - 2 * Local administrative organizations must oversee activities within their jurisdiction to ensure compliance with regulations for collecting, transporting, and disposing of hazardous waste from community
 - 3 * Local administrative organizations may delegate or allow private entities to manage hazardous waste, but must set times and routes as well as conditions and practices to comply with relevant laws, including appropriate times for collection and disposal and issuing waste tracking documents.
- 17 Article 18, paragraph two of the Hazardous Substance Act, B.E. 2535
- 18 Ministerial Regulation on the Division of Administrative Units in the Department of Industrial Works, Ministry of Industry, B.E. 2560.
- 19 Article 96 of the Enhancement and Conservation of National Environmental Quality Act, B.E. 2535, (cited): The compensation or damages to which the owner or possessor of the point source of pollution shall be liable according to the foregoing first paragraph shall mean to include all the expense actually incurred by the government service for the clean-up of pollution arisen from such leakage or contamination.
- 20 Article 97 of the Enhancement and Conservation of National Environmental Quality Act, B.E. 2535, (cited): Any person who commits an unlawful act or omission by whatever means resulting in the destruction, loss or damage to natural resources owned by the State or belonging to the public domain shall be liable to make compensation to the State representing the total value of natural resources destroyed, lost or damaged by such an unlawful act or omission.
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Living in Debt: A Major Problem for Thai Households

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these are unsecured loans. The proportion of this type of loan to total household debt has been steadily increasing, from 25.0% in Q1 of 2012 to 27.9%, or nearly one-third of all household debt.

- 6 Thailand Bankers Association, cited.
- 7 Policy Watch, cited.
- 8 Siam Commercial Bank, cited.
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- 10 Measures to solve debt for individuals include debt moratorium and long-term restructuring, consolidation of housing and other personal loans, easing repayment conditions, amending the Student Loan Fund Act to assist borrowers with judgments by negotiating debts with the Legal Execution Department and the Rights and Liberties Protection Department, lowering interest rates on teacher cooperative loans to no more than 5%, and improving salary deductions to ensure teachers are left with no less than 30% of their salary. Other reforms include improving hire-purchase contracts for fairness, macroprudential supervision, and consumer protection, as well as decisive action against informal lenders and promoting registration as formal creditors, offering fair debt settlement, and increasing access to loans through pico-finance or nano-finance schemes. Meanwhile, long-term income-boosting solutions for self-employed individuals include low-interest loan schemes like the "Re-open Hotels" project offering loans at 1.99% interest for the first two years, with a seven-year repayment period, or the revitalizing Thai tourism project offering loans to SMEs in the tourism sector at 3.99% interest for seven years, and the occupational project, offering loans at 3.99% interest for five years for unemployed individuals enrolling for vocational training. There are also pico-finance or nano-finance loans for farmers and community producers and the loan scheme for community business at 0.01% interest for three years for production transformation, development and marketing
- 11 Borrowers affected by COVID-19 are temporarily allowed to defer payments to reduce their financial burden, while SMEs will be supported by state-owned financial institutions through debt restructuring and payment deferrals. Teachers, civil servants, and those in credit card debt will receive assistance through three approaches: reducing interest rates to prevent excessive charges, consolidating all debts into one loan, and offering programs like the "Debt Clinic" to restructure loans, extending repayment periods to ten years and reducing interest rates from 16-25% to 3-5%. There are adjustments to the student loan repayment structure, reducing penalties, changing the order of debt payments, and removing guarantors. Car and motorcycle financing interest rates will be capped (new car loans at no more than 10% per annum, and motorcycle loans at no more than 23% per annum), with reductions in default interest and discounts for early settlement. Bad debt from state-owned banks will be transferred to Asset Management Companies (AMCs) formed in collaboration with state financial institutions.
- 12 The types of assistance available include (1) reducing installments for three years, with debtors paying 50%, 70%, and 90% of the original installment in the first, second, and third years, respectively, and all payments contributing to the principal balance; (2) a three-year interest moratorium, with the interest deferred being entirely forgiven if debtors meet the conditions throughout the three-year period.
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- 16 The Active (2023). *Landscape of household debt issues in Thailand and sustainable solutions*. <https://theactive.thaipbs.or.th/video/economy-20221207-2>

- 17 Sommarat Chantararat, Lattaporn Rattanawarak, and Chayanee Chawanote (2022, October 20). *The debt trap and the development of grassroots household economic finance*. <https://www.pier.or.th/abridged/2022/15/>

4 Outstanding Achievements to Promote the Health of the Thai People

Honoring Dr. Sanguan as a Statesman of Thai Public Health

- 1 National Health Security Office. (2024, January 19). *Remembering 16 years of "Dr. Sanguan," Prime Minister honors him as a "Statesman of Thai Public Health."* <https://www.nhso.go.th/news/4307>
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- 3 Suwit Wibulpolprasert (2019, June 10). *Dr. Sanguan Nittayarumphong, the father of universal health coverage*. Bangkokbiznews https://www.bangkokbiznews.com/social/837384#google_vignette

The Thai Rural Doctors Movement Receives the Ramon Magsaysay Award

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- 3 The Lancet. (2000). *Thailand's health care reform and rural doctor movement: An inspiration for other nations*.

Thailand's Methamphetamine Withdrawal Medication Wins I International Innovation Award

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Promoting a Mental Health and Psychiatry Fund to Support Mental Health Care for People

- 1 Hfocus. (2024, February 5). *Deputy Prime Minister "Somsak" pushes for the establishment of the 'Mental Health and Psychiatry Fund,' aiming to use assets seized from drug trafficking by the Narcotics Control Board (NCB)*. <https://www.hfocus.org/content/2024/02/29682>
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Feature Article

Birth rate freefall, how should we adjust and cope?

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- 2 Bricker, D., & Ibbitson, J. (2019). *Empty planet: the shock of global population decline*. Hachette UK.

- 3 Naysmith, C. (May 6, 2024). *Elon Musk Warns 'America is headed towards extinction' and urges people to 'have more children' to fight off 'Population Collapse'*. AOL. Retrieved on May 9, 2024 from <https://www.aol.com/finance/elon-musk-warns-america-headed-164957223.html>
- 4 The UnMusking Show (April 26, 2024). *Population Collapse*. YouTube. Retrieved on May 10, 2024 from <https://www.youtube.com/watch?v=llKGHraGgQ&t=50s>
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