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Preface

The Thai Health Report 2025 presents an analysis of mental health among the Thai population, organized into three main themes. The first section assesses the current mental health situation in Thailand, encompassing the overall status and its impacts, prevalent mental health problems, and the population's positive mental health. The second section examines causal and associated factors through six key indicators: domestic violence, society and social media, substance use, megatrends, mental health literacy, and service systems, including mental health screening. Finally, the third section addresses relevant policies and measures by presenting indicators related to mental health policy and legislation.

The report also chronicles the year's key developments. The "10 Outstanding Health Situations of 2025" section compiles and analyzes major news and events, offering a comprehensive overview of current affairs complementing these: 1) Amending the Alcohol Law: Monitoring Social and Health Impacts 2) E-cigarettes: An Aggressive Threat to Public Health 3) Medical Cannabis and Policy Confusion 4) Thailand and the Day Casinos Become Legal: It May Not Be Worth the Cost 5) Lessons Learned from 'The iCon': How to Avoid a Ponzi Scheme 6) Bus Accidents: Many Questions about Safety Standards 7) Flood Management in Northern Thailand: Reducing Disaster Risk 8) "Blackchin Tilapia" and Dealing with Alien Species in Thailand 9) The Complexity of State Measures in Managing Industrial Waste and Hazardous Garbage and 10) Living in Debt: A Major Problem for Thai Households. The "Four Outstanding Accomplisements" section showcases successes in medicine and public health. These include the honoring of Dr. Sanguan Nittayarumphong as a statesman of Thai public health, The Thai Rural Doctors Movement that received a Ramon Magsaysay Award, a Thai traditional medicine initiative that received an international innovation award, and the promotion of a mental and psychiatric health fund to support the well-being of people across all age groups. These narratives and their accompanying analyses provide compelling insights.

This year's special feature addresses the issue of declining birth rates, a significant challenge impacting Thailand's demographic, economic, and social structure. This trend stems from various factors, such as changing societal values, the high cost of child-rearing, and an unfavorable economic environment. The report compares Thailand's situation with that of other countries facing similar challenges. Regarding solutions, it discusses government policies, such as enhancing public health benefits for couples experiencing infertility and providing welfare support to incentivize childbirth. However, it notes a lack of concrete, comprehensive long-term measures. Furthermore, the article emphasizes the importance of planning for the impacts of an aging society and explores international approaches that Thailand could adapt to encourage decisions toward childbirth.

The Thai Health Report Team would like to express its gratitude to all readers who have consistently followed and utilized the report for academic research, strategic and policy planning, and the implementation of local initiatives. This ongoing engagement is a vital source of encouragement for our team, inspiring us to continually enhance future editions of the report.

We invite you to read the full report and explore more insightful articles on our website: www.thaihealthreport.com.

Thai Health Report Team

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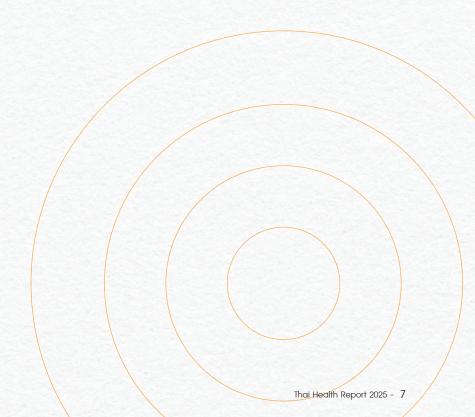
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Experts, Thai Health Report Working Group

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10 Indicators "Thai Mental Health"



10 Indicators

"Thai Mental Health"

Thai Health Report 2025 presents health indicators on "Mental Health of the Thai Population," to reflect the current situation, related factors, and policy development directions for Thailand on mental health issues. Mental health is a crucial component in fostering understanding and effectively addressing mental health problems.

Mental health is a key element in determining people's quality of life and happiness. Today, the rapid changes in the economy, society, and technology are profoundly impacting the mental health of Thai people-from individuals to families and communities.

Mental health is not only about the absence of mental illness; it also involves the ability to cope with stress, experience life satisfaction, and maintain positive relationships with others. Good mental health strengthens emotional resilience, promotes healthy relationships within families and communities, and enhances people's potential at all stages of life. Conversely, mental health issues lead to economic losses at both the individual and national levels, such as healthcare costs, loss of work productivity, and increased social burdens.

Thailand is facing mental health challenges due to rapid socio-economic changes, as well as the impacts of global crises. These factors have caused many Thais to experience stress, anxiety, and feelings of isolation.

In addition, pressures from the digital world such as social media addiction and fear of missing out (FOMO) have had negative effects on the mental health of people from all age groups.

The health indicators "Mental Health of the Thai Population" presented in this report provide key information in three main sections:

- Overall mental health situation (Indicators 1-3)
- Factors influencing mental health (Indicators 4-9)
- Relevant policies and measures (Indicator 10)
 Overall, the mental health situation in Thailand

remains a serious concern. As many as 13.4 million Thais have experienced mental health problems or psychiatric disorders, and the suicide rate in Thailand has shown an upward trend over the past decade. The consequences of mental health issues significantly affect the population's disability-adjusted life years, particularly among Thais aged 15-29, who are the most affected group.

The three most common mental health problems among Thais are anxiety disorders, depression, and psychiatric disorders. Among these, depression and dementia are of particular concern due to their clearly rising trends. For Thais aged 18-24, a group requiring special attention, there is an increased risk of both depression and stress.

In terms of the ability to cope with life's challenges, which reflects the positive mental health, Thailand ranks 3rd in happiness among ASEAN member countries. However, people age 45-59 are found to be the least happy age group in the country.



Regarding the factors and causes affecting the mental health of Thais, violence within families and society is a fundamental issue. In Thailand, there is a rising trend in the number of families experiencing violence.

In 2023, there were 2,311 reported cases of domestic violence, including physical, emotional, and sexual abuse. This does not account for the many other media-reported cases each year. Additionally, violence in schools, such as bullying among students, remains a concern.

Digital technology has become an integral part of daily life and significantly influences mental health, particularly regarding the growing concern of social media addiction. In Asia, one in three people are addicted to social media and experience FOMO.

Substance use is another major factor closely linked to mental health. Half of psychiatric patients have conditions that stem from the use of psychoactive substances, including alcohol and tobacco. Moreover, substance abuse leads to community-level problems such as noise disturbance, property crime, and violent conflict—all of which also negatively impact the mental health of community members.

Mega trend and rapid social change—from technological upheavals and structural shifts in society and the economy to climate change—also affect mental health. Technological advancements, for instance, increase the risk of job displacement, especially for more than three million people in the service sector. Additionally, natural disasters like major flooding in the Northern Region have caused stress levels in affected populations to triple.







Mental health literacy is a key to achieving good mental health. Although overall mental health literacy among Thais has improved—nearly one-third now have a high level of understanding—there are still widespread misconceptions. For example, nearly half of respondents do not recognize when they are overly stressed. Furthermore, issues in mental health services, particularly in screening systems, reveal that many people with mental health problems still lack access to appropriate care, and service centralization remains a persistent challenge in Thailand.

The final section, Indicator 10, addresses the current status of mental health policies and measures in Thailand. The country has made some progress, such as the enactment of a mental health law. However, gaps in service access and comprehensive data collection remain, requiring collaboration across all sectors.

Thai Health Report 2025 hopes that the health indicators on "Mental Health of the Thai Population" will help shed light on the mental health situation in Thai society and serve as a roadmap to improve the mental well-being of Thai people—enhancing their resilience and readiness to face future challenges and opportunities with confidence.



The Mental Health Situation and Its Impacts in Thailand

As many as 13.4 million

Thais have experienced mental health problems or psychiatric disorders at least once in their lifetime.

Mental health issues are a significant concern affecting a large number of Thais—impacting health, daily life, and the economy, especially among youth who are at high risk for mental health problems.

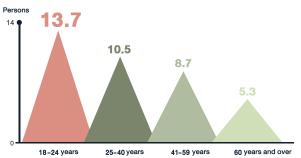
Mental health situation in Thailand

Mental health problems are closer to home than many might think. Recent data reveal that, in just the 12 months prior to the 2023 survey, 4.4 million Thais experienced mental health issues. The most concerning age group is persons aged 18-24, with the highest proportion of psychiatric disorders and mental health problems at 13.7%, compared to 5.3% among Thais aged 60 and over.

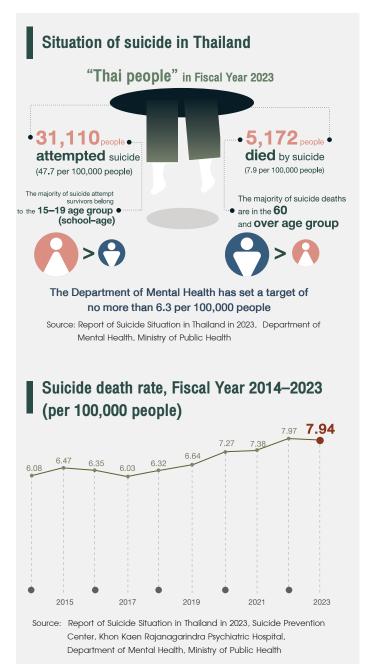


Source: The 2023 National Epidemiology Survey on Mental Health in Thailand, Department of Mental Health, Ministry of Public Health

Proportion of Thais with mental health problems in the past 12 months

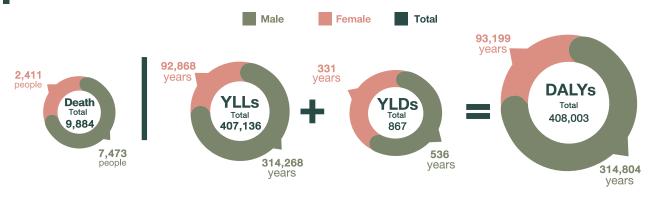


Source: The 2023 National Epidemiology Survey on Mental Health in Thailand,
Department of Mental Health, Ministry of Public Health



While suicide is the ultimate consequence of mental health issues, it also reflects the broader state of a population's mental well-being. Alarmingly, Thailand's suicide rate has been increasing over the past decade. In Fiscal Year 2023, there were 31,110 suicide attempts, equal to 47.7 per 100,000 people, or an average of 85 attempts per day. Meanwhile, 5,172 people died by suicide, at a rate of 7.9 per 100,000, or 14 deaths per day, which exceeds the Department of Mental Health's target of no more than 6.3 deaths per 100,000.

DALYs due to suicide



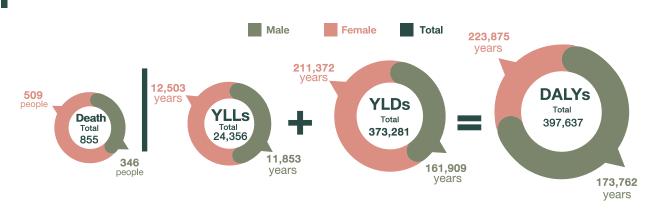
Source: Disability-adjusted Life Years: Report on Burden of Disease and Injury of Thai Population in 2019. International Health Policy Program

The impact of mental health issues goes beyond loss of life. It also exacerbates the disability-adjusted life years (DALYs) of the population. Self-harm alone accounted for 408,003 DALYs with males experiencing a higher loss rate than females. Additionally, psychiatric conditions-such as schizophrenia, depression, bipolar disorder, anxiety disorders, eating disorders, autism spectrum disorders, ADHD, conduct disorders, intellectual disability of unknown cause, and other mental disorders-resulted in a loss of 397,637 DALYs, with women bearing a larger share of this burden.

Disability-adjusted Life Years (DALY)

is a measure of the overall health status of a population, indicating the number of years lost due to "full health". It is composed of the Years of Life Lost (YLL) and the Years Lived with Disability (YLD).

HLY Lost due to Mental Health Disorders



 $Source: Disability-adjusted\ Life\ Years: Report\ on\ Burden\ of\ Disease\ and\ Injury\ of\ Thai\ Population\ in\ 2019.\ International\ Health\ Policy\ Program$

The age group 15-29 years is the most affected by the health impacts of mental health problems, with 3 out of the top 10 causes of DALYs in this group being related to mental health.

Note: Years of Life Lost due to Premature Mortality (YLL) refers to the years lost due to premature death.

Years of Life Lost due to Disability (YLD) refers to the years living with health impairments.

Disability-Adjusted Life-Years (DALY) refers to the total years lost due to disease and injury in a population, combining YLLs and YLDs.

Ranking of DALYs for Thais aged 15-29 in 2019, by gender and cause



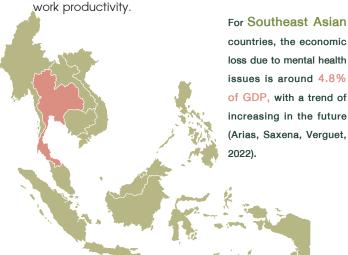
Source: Disability-adjusted Life Years: Report on Burden of Disease and Injury of Thai Population in 2019. International Health Policy Program

To sustainably address mental health issues, collaboration from all sectors is essential. This includes raising awareness in society, supporting access to quality mental health services for those in need, and promoting environments that fosters good mental well-being—all aimed at reducing the impact of mental health problems and building a stronger, more resilient society in the long term.

Mental health issues are closely linked to economic and social impacts—including the cost of healthcare, loss of labor productivity, and the potential risk of violence by individuals—all of which affect society as a whole.

Mental Health Impact on the Economy

Mental health issues lead to both direct and indirect costs, such as medical expenses, fees for consultations with doctors and other related professionals, and hospital stay costs. There are also hidden costs, such as lost income from having to take leave or reduced work productivity



On a macroeconomic level, mental health can affect the overall economy of a country, as the labor force and productivity decrease, adversely impacting the Gross Domestic Product (GDP).

Impact of Mental Health Issues on Society

 18% of individuals with mental health problems are unable to care for themselves and require a caregiver, leading to a loss of human resources.



22.8% of psychiatric patients

atients rimes,

have a history of violent crimes, such as murder, attempted murder, rape, and arson.



23.3% of patients at high risk of committing violence are being monitored.

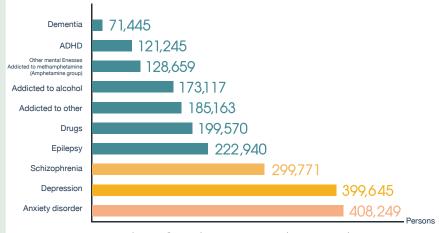
Source: 2023 Household Socio-Economic Survey, National Statistical Office, and Report of Patients Receiving Psychological Services in 2023 Fiscal Year, Health Data Center, Information and Communication Technology Center, Ministry of Public Health.

Mental Health Issues of Thais

In 2023, 400,000 Thais were diagnosed with depression and sought treatment, an increase of more than 1.7 times in less than a decade.

The number of individuals seeking psychiatric services in Thailand has continued to rise, reflecting mental health issues across various dimensions, such as high stress, depression risk, and suicide, especially among the 18-24 years age group, which is at high risk. It is essential for all parties to collaborate in monitoring, promoting (mental health), preventing (mental health problems), and providing appropriate care (for those with mental health issues).

Top 10 psychiatric disorders with the highest number of patients receiving services in 2023

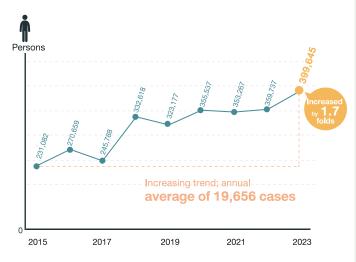


Note: A total of 2.9 million psychiatric patients received services in Fiscal Year 2023 Source: Statistics of significant psychological services, Department of Mental Health

Thais are facing increasingly prevalent mental health issues. Data from the Department of Mental Health between 2015 and 2023 shows a steady rise in individuals seeking mental health services. In 2023 alone, 2.9 million people received such services. The three most common conditions were anxiety disorders, depression, and schizophrenia.

Although the number of anxiety disorder patients has decreased, "depression" has continued to rise, increasing 1.7 times—from 231,082 people in 2015 to 399,645 in 2023. The highest-risk group is Thais aged 18-24 years, with a lifetime prevalence of depression at 6%, and women are twice as likely as men to be affected.

Patients with depression receiving services in 2015–2023



Source: Statistics of significant psychological services, Department of Mental Health

Prevalence of depression among Thais (960,000 Thais have experienced depression at some point in their lives) 3.0% 1.6% 0.9% Note: Lifetime prevalence means having experienced a disease at least once in a lifetime. Source: Prevalence of Mood Disorders: The 2023 National Epidemiology Survey on Mental Health in Thailand. Mental Health Data Center. Department of

Mental Health

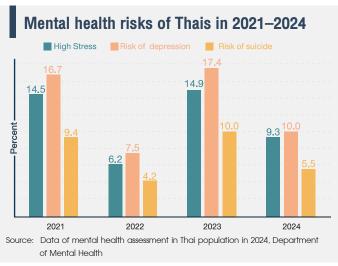
Patients with dementia receiving services in 2015–2023



Source: Statistics of significant psychological services, Department of Mental Health

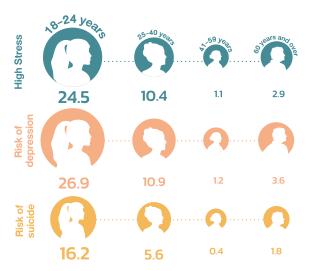
The Department of Mental Health has developed an online tool, "Mental Health Check In," to assess and screen for mental health risks. Data from 2021 to 2024 indicate that Thais are at high risk for stress, depression, and suicide, with variations depending on the context and circumstances of each year. In 2024, 9.3% of users were at high risk for stress, 10.0% at risk for depression, and 5.5% at risk for suicide. While these figures have decreased compared to 2023, continuous attention to the mental health of the population remains essential.

"Dementia" has also shown a sharp upward trend, with the number of patients increasing nearly tenfold—from 7,156 cases in 2015 to 71,445 in 2023. A key factor is Thailand's transition into a complete aged society, with more than 20% of the population being 60 and over—making this group particularly vulnerable to the disease.



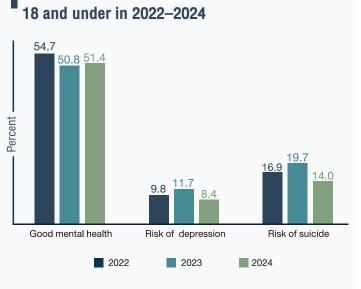
In 2024, the 18-24 years age group remains at high risk, with 24.5% at risk of high stress, 26.9% at risk of depression, and 16.2% at risk of suicide. Meanwhile, among children and adolescents under 18, only 51.4% have good mental health, while 8.4% are at risk of depression and 14.0% at risk of suicide.

Mental health risks by age group in 2024



Source: Data of mental health assessment in Thai population in 2024,

Department of Mental Health



Mental health of children and adolescents aged

Source: Data of mental health assessment in Thai population in 2024, Department of Mental Health

This data highlights the urgent need for proactive mental health promotion across all age groups, especially among vulnerable populations such as children, youth, and the elderly, who require appropriate and equitable mental health care.





Positive Mental Health Status of Thais

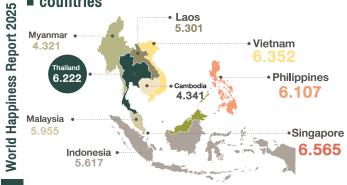
Thais in the near-elderly age group (45-59 years) have a

lower level of life satisfaction compared to other age groups.

The 2025 World Happiness Report shows that Thailand ranks 49th among 147 countries worldwide and 3rd in happiness among ASEAN countries (excluding Brunei), following Singapore and Vietnam. Compared with data in the 2024 Report, when analyzed by age group, Thai young people (under 30) are the happiest, while those in the late middle-age group (45-59 years) are the least happy. This trend differs from other countries in the region. One possible explanation is concerns and lack of preparedness for transitioning into old age, especially as Thailand becomes a complete aged society.

"Good mental health" does not mean merely the absence of mental illness, symptoms, or disorders, but also includes happiness, life satisfaction, and strong resilience. It means having the ability to cope with and effectively manage the various mental challenges that life presents.

Level of happiness" among ASEAN member countries



Note: Happiness level assessed from the life satisfaction scores in 3 years average Source: Helliwell, J. F., Layard, R., Sachs, J. D., De Neve, J.-E., Aknin, L. B., & Wang, S. (Eds.). (2024).

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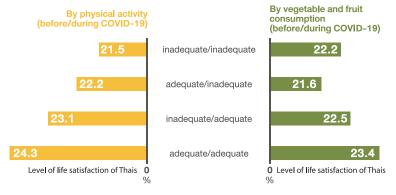
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	Singapore	Philippines	Vietnam	Thailand	Malaysia	Indonesia	Laos	Myanmar	Cambodia
Under 30 years (the young)		•	•	8	•	•			•
31-44 years (lower-middle)		3					3	•	3
45-59 years (upper-middle)	•						•		
60+ years (the old)			2		3				

Note: Age group with the "highest" (green) and "lowest" (red) levels of happiness in each country

Source: Summarized from the World Happiness Report 2024 in Helliwell, J. F., Layard, R., Sachs, J. D., De Neve, J.-E., Aknin, L. B., & Wang, S. (Eds.). 2024.

Level of life satisfaction of Thais in 2021 (during the COVID-19 epidemic)



Source: Phulkerd, S., Thapsuwan, S., Soottipong Gray, R., Chamratrithirong, A., Pattaravanich, U., Ung chusak, C., & Saonuam, P. 2023.

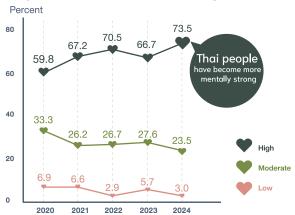
Life satisfaction is another indicator of positive mental health, reflecting how individuals assess their overall life compared to their expectations. Surveys conducted in 2019 and 2021 revealed a significant decline in life satisfaction among Thais due to the COVID-19 pandemic, with scores dropping from 25.5 to 22.4 points. Statistical analysis found that healthy behaviors, such as consuming fruits and vegetables and engaging in regular physical activity, are key factors promoting life satisfaction among Thais.

The 2024 survey found that Thais were most satisfied with their lives in three key areas: relationships with others, sense of safety, and work or education. The three lowest-ranked areas of satisfaction were physical health, quality of daily life, and mental health, respectively. Individuals who were divorced or widowed had the lowest life satisfaction, while those who were single, married, or living together reported the highest satisfaction compared to other statuses, such as being in a relationship or cohabiting without marriage.

Source: Results of the Mental Health Survey in Thai Society. Thailand Institute for Mental Health Sustainability (TIMS) 2025



Proportion of Thais classified by level of Resilience Quotient

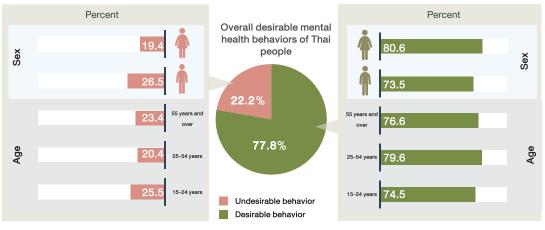


Source: Data of mental health assessment in Thai population, Department of Mental Health

The Resilience Quotient (RQ) is a mental health indicator developed by the Department of Mental Health of the Ministry of Public Health. It focuses on an individual's ability to recover and adapt after life crises, considering emotional endurance, emotional support from others, and problem-solving skills. Surveys conducted between 2020 and 2024 show an improving trend in resilience levels among Thais, with those having high resilience increasing from 59.8% in 2020 to 73.5% in 2024, while those with low resilience decreased from 6.9% to 3.0%.

Strengthening the mental health capacity of Thais through improved mental health literacy and positive behavioral development—such as physical and emotional self-care, effective problem-solving, and building social relationships—will help foster mental resilience and adaptability in the face of future changes. However, when it comes to desirable mental health behaviors, about one in five Thais (22.2%) still engage in undesirable behaviors. Women tend to have better mental health behaviors than men, while children and youth (aged 15-24 years) exhibit more undesirable behaviors than other age groups.

Desirable mental health behaviors of Thai people



Note: "Desirable mental health behaviors" are assessed based on 27 behavioral indicators across three dimensions: selfmanagement of mental health, relationship-building, and emotional support for oneself and others. Scores are categorized into two groups: Desirable behaviors (average scores in the high range: 3.67-5.00), and; Undesirable behaviors (average scores in the low to moderate range: 1.00-

Source: Research Report of the Project on Thai Mental Health and Quality of Life Survey in 2022, Division of Mental Health Promotion and Development,
Department of Mental Health



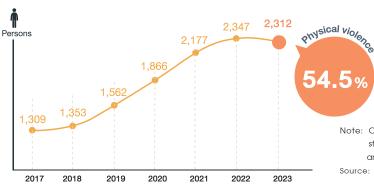
Violence in the Family and Society

More than 1 in 5 female students have seriously considered suicide.

Family is the foundation of mental health, and domestic violence is a major cause of mental health problems. Data from the Department of Women's Affairs and Family Development show that physical violence is the most common form of domestic abuse at 54.5%, followed by psychological violence at 36.3%, and sexual violence at 7.5%. This issue of violence is also reflected in the increasing number of media reports, which may have long-term impacts on mental health.

Data from the Department of Women's Affairs and Family Development indicates a rise in domestic violence, both from service users and reports in various media outlets. This reflects an urgent issue that requires immediate attention and intervention.

Number of domestic violence victims









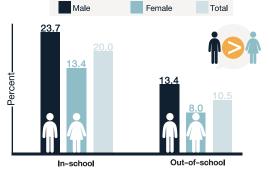
Note: Case sources include child and family shelters, courts, police stations, Damrongdhama Centers, foundations/associations, hospitals,

Source: Report on Assistance to Domestic Violence Victims, Fiscal Year 2017-2023, Operation Center of Department of Women's Affairs and Family Development, Ministry of Social Development and Human Security

Number of news reports on domestic violence 155 2021 2020 2021 2021 2022 2022 Suicide Assault Domestic sexual abuse Other domestic violence

Source: Situation of domestic violence in 2020-2021, Women and Men Progressive Movement Foundation

Proportion of students who have experienced bullying inside and outside school



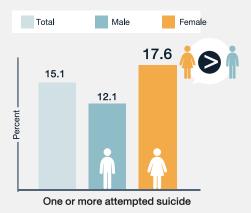
Source: Report of the Thailand Global School-based Student Health Survey, 2021, School Aged and Adolescent Health Subdivision, Bureau of Health Promotion, Department of Health, Ministry of Public Health

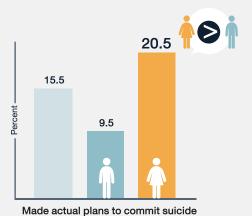
Children and adolescents are a particularly vulnerable group in terms of mental health. Although schools are spaces where children spend a large portion of their time, violence still occurs—such as bullying. A 2021 survey found that one in five Thai students had been bullied at school, and 10.5% had experienced bullying outside school. Male students were more likely to be affected than female students.

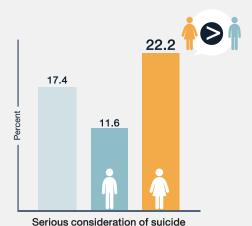
Note: The sample population included 5,661 students from grades 7 to 12 consisting of 2.504 male students and 3.621 female students from 59 schools, both public and private, nationwide,

When focusing specifically on mental health, female students were found to have significantly more issues than males. As many as 22.2% of female students had seriously contemplated suicide, 20.5% had planned suicide, and 17.6% had made at least one suicide attempt. These are serious issues that require urgent prevention and care.

Proportion of students who have thought about, planned, and attempted suicide







Note: The sample population included 5,661 students from grades 7 to 12 consisting of 2,504 male students and 3,621 female students from 59 schools, both public and private, nationwide.

Source: Report of the Thailand Global School-based Student Health Survey, 2021, School Aged and Adolescent Health Subdivision, Bureau of Health Promotion, Department of Health, Ministry of Public Health



Positive parenting helps build strong relationships between parents and children by emphasizing warm communication, encouragement, and empathy. This approach supports emotional and cognitive development, strengthens problem-solving skills, and fosters long-term mental well-being, self-confidence, and social competence. Positive parenting can reduce the likelihood of violence and help create a healthier society in the future.

A study titled "The Relationship of Factors Related to Positive Parenting Behaviors and Executive Function in Preschool-age Children, Chiang Rai Province" found that key factors—such as marital status, parental education, social support, and perceived benefits of positive parenting—significantly influenced parenting behaviors. These behaviors directly affected the development of children's executive function, with the perception of the benefits of positive parenting being particularly influential in enhancing children's thinking skills.

Source: Nathamon Seethikaew et al. (2022). The Relationship of Factors Related to Positive Parenting Behaviors and Executive Function in Pre school-age Children, Chiang Rai Province

Addressing the problem of substance abuse and mental health should go hand in hand, focusing on prevention, treatment, and creating safety within communities to reduce both individual and societal impacts in the long term.



1 in 3 Asians

is addicted to online social media.

In an era where digital technology has become a part of daily life, the ease of accessing information and communication has both positive and negative effects on our mental health.

Digital technology affects mental health

both directly—through the use of digital tools for health purposes—and in daily life through everyday digital usage. Most Thais use websites and applications related to social media and messaging in their daily lives. Beyond staying connected with friends and family (57.6%), a concerning reason for social media use is the fear of missing out (FOMO), which motivates 31.2% of users to stay constantly updated on trends and important events.

Potential threats to mental health by use of technology

Violence resulting from the use of technology

Incorrect health information

Misuse of information

Cyberbullying

Media content related to body image and inappropriate behaviors

Media addiction

Anxiety, stress

Cognitive development

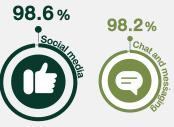
Mental disorders

Sleep

Source: Adapted from: Kickbusch, 2024

Excessive mobile phone use can lead to addiction, and negatively impact users. In Asia, the mobile phone addiction rate is as high as 31%, ranking second globally after Africa among continents. Adolescents and youth are particularly at risk of developing such addiction. The consequences include deteriorating family relationships, reduced academic and work performance, and declining overall health.

Proportion of Thais who used websites and various applications in the past month

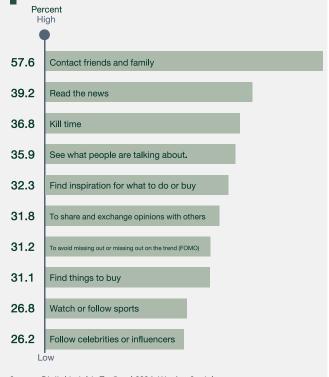






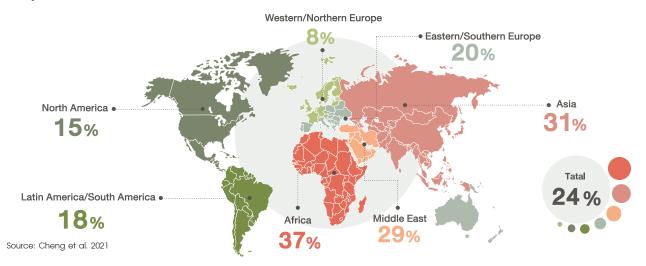
Source: Digital Insights Thailand 2024, We Are Social

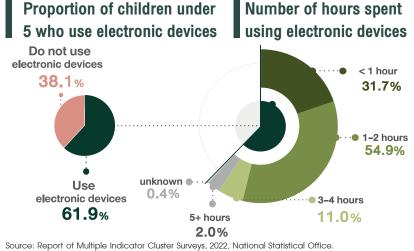
Reasons for using online social media



Source: Digital Insights Thailand 2024, We Are Social

Proportion of social media addiction





For young children under the age of five, strict screen time limits are still recommended. However, it is found that 61.9% of children in this age group use phones or a tablet, with more than half of which spending 1-2 hours a day on screens. Research indicates that extended screen time in young children is associated with increased aggressive behavior, emotional regulation issues, poorer peer relationships, and symptoms of attention deficit.

Social media serves as a platform for younger generations to express their identity and creativity.

In the Gen Y and Gen Z groups, 6.4% and 5.4%, respectively, create content in various formats such as videos, clips, or podcasts, providing an opportunity to express themselves. However, they must be cautious, as it can sometimes create pressure to present a perfect life, which may affect users' self-esteem.

Source: Survey on Behaviors of Internet Users in Thailand 2022, Electronic Transactions Development Agency

Social media as a tool for mental health surveillance

Data from social media posts can be used as a tool for monitoring mental health at the population level. Research indicates that posts on platforms like X (Twitter) or searches on Google are linked to the number of people seeking mental health treatment.

X (Twitter): Posts may reflect mental health issues through the language used, such as expressions of suicidal thoughts, fear, sadness, or disgust. These posts can potentially signal problems before the individual becomes fully aware of them.

Google: Searches are often made by individuals who have already begun to recognize their mental health issues. However, Google data may be misleading, as it can be influenced by news trends, current events, or searches conducted for other purposes.

Advocacy of appropriate digital media use is extremely important, along with creating a balance between the online world and real life, and strengthening individual and collective mental resilience.

Source: Tuarob, Noraset, and Tawichsri,2022



Use of Addictive Drugs

Half of inpatient psychiatric admissions are caused by the use of psychoactive substances, alcohol, and/or tobacco.

Substance abuse and mental health are closely related. Many psychiatric patients have conditions caused by the use of substances, particularly psychoactive drugs, stimulants, and alcohol. The use of these substances not only affects mental health but also increases the risk of violent behavior in certain groups.

A survey found that over six million Thais have used at least one type of addictive substance in the past 12 months, and 1.3 million people are classified as alcohol dependent. This is a significant issue affecting physical health, mental health, and society.

The most commonly used substances in Thailand include kratom and cannabis, both for recreational and medical purposes.

Among all substances, cannabis poses the highest risk for violent behavior, with psychiatric patients who use cannabis having a 5% risk of engaging in violent actions, which is considered high compared to other substances.

Did you know? Among Thai people...



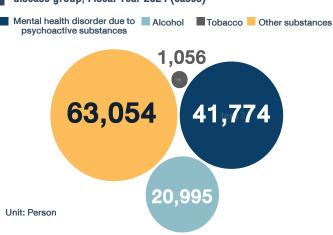
Note: Prevalence over the past 12 months

Source: The 2023 National Epidemiology Survey on Mental Health in Thailand,

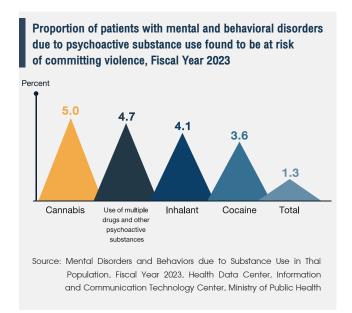
Department of Mental Health

Psychiatric patients, whose condition was caused by substance abuse, particularly those with severe mental health symptoms and a risk of violent behavior, are more likely to harm themselves or others, become delusional, or have thoughts of harming others, which may lead to serious criminal cases within communities. These patients require close monitoring and care to reduce the chance of relapse

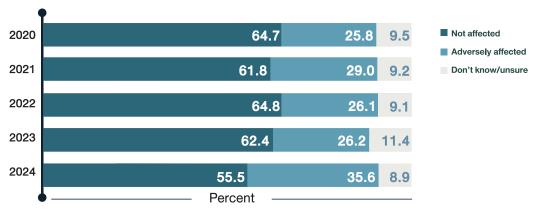
Number of inpatient psychiatric admissions classified by disease group, Fiscal Year 2024 (cases)



Source: Mental and Behavioral Disorders due to Psychoactive Substance Use, Fiscal Year 2024, Health Data Center, Information and Communication Technology Center, Ministry of Public Health



Proportion of the population reporting being affected by drug use issues, 2020-2024



Source: Survey on Public Opinions on Implementation of the Drug Prevention and Suppression Action Plan, 2020-2024, National Statistical Office.

Top 3 issues related to drug use causing distress in the community/village



Remarks: Multiple response allowed

Source: Survey on Public Opinions on Implementation of the Drug Prevention and Suppression Action Plan, 2024, National Statistical Office

Substance abuse not only affects individuals but also creates problems in communities. In 2024, reports of community distress due to substance abuse increased to 35.6%. The most common issues include noise disturbance, property crime, and fighting.

Teenagers who use e-cigarettes are at risk of depression



Nicotine found in e-cigarettes is toxic to the brain, especially in children and adolescents whose brains are still developing. Nicotine can cause inflammation in brain cells in areas related to mood regulation and depression.

Source: The 6th National Health Examination Survey (2019—2020), Health Systems Research Institute

Addressing the problem of substance abuse and mental health should go hand in hand, focusing on prevention, treatment, and creating safety within communities to reduce both individual and societal impacts in the long term.



Megatrends and Mental Health

Megatrends have long-term impacts on the economy, society, environment, and mental health.

Megatrends, such as advanced technology, changes in social and demographic structure, economic transformation, urban growth, and climate change have long-term impacts across economic, social, environmental, and mental health dimensions.

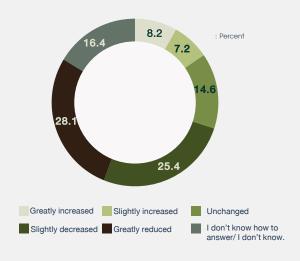
The rapid growth of digital technology has promoted the economy and alleviated work burdens, but has also increased the risk of unemployment, particularly in the service sector, where over 3 million workers face job insecurity, leading to career-related anxiety.

Risk of unemployment and the number of workers expected to be affected

Occupation	Risk (%)	Labor Force Expected to be Affected (Persons)
Lawmakers, civil servants, managers	38	486,162
Professionals	42	551,996
Technical workers	54	587,276
Service workers, salespeople in shops and markets	57	3,285,656
Agricultural and fisheries workers	57	2,755,300
Business workers	58	1,468,133
Basic occupations	62	1,581,264
Factory machinery operators	68	1,589,534
Clerical workers, officers	73	685,410
Total	54	12,990,731

Source: Nuarpear Lekfuangfu and Voraprapa Nakavachara, 2019

Changes in the acceptance of sexual diversity (LGBTIQ+) over the past 5 years



In terms of socio-cultural diversity, challenge remains an issue, with the LGBTIQ+ community continuing to face high levels of prejudice and harassment. Youth in this group are mocked at a rate of 75%, with 58% experiencing offline sexual harassment and 53% online harassment. This has a significant impact on mental health, with 71% experiencing depression, 78% feeling anxiety, 58% having suicidal thoughts, and 25% engaging in self-harm. While more than half of the LGBTIQ+ community feels that overall prejudice in society has decreased, 8.2% report a significant increase.

Note: Inquiries were made from the LGBTIQ+ group, whereby: L (Lesbian) referring to women who are attracted to other women; G (Gay) referring to men who are at tracted to other men; B (Bisexual) referring to individuals attracted to both men and women; T (Transgender) referring to individuals whose gender identity does not align with their assigned sex at birth; I (Intersex) referring to individuals whose sex characteristics do not fit typical definitions of male or female; Q (Queer and Questioning) referring to individuals who do not define themselves within traditional gender or sexual categories. The + in LGBTQI+ signifies other sexual orientations beyond those listed above.

Source: Mental Health of LGBTIQ+ Communities in the Thailand 2024, Institute for Population and Social Research, Mahidol University

Percentage of children and youth with diverse sexuality who experienced bullying in the past year



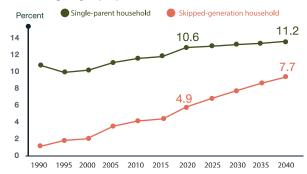
Percentage of children and youth with diverse sexuality who received mental health impacts in the past year



Source: Report on Mental Health and Well-being of Children and Youth with Diverse SOGIESC in Thailand, Save the Children (Thailand)

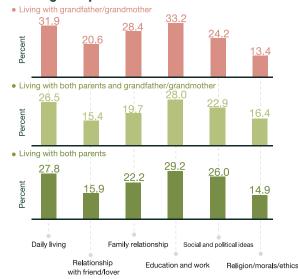
Demographic shifts are another megatrend that many countries around the world are facing. The aging society is affecting family structures and creating generational gaps, leading to conflicts, especially in education and employment.

Proportion of incomplete households in the working-age population



Source: Thai Families in the Future: B.E. 2040, Institute for Population and Social Research, Mahidol University

Proportion of youth with conflicting views with grandparents



Note: This refers to responses indicating a significant to very high level of conflict Source: Thai Youth Survey (2022), Kid for Kids

Top 10 countries most at risk from climate change



Source: Thai Health Report 2023. Feature Article. Thai Health Report 2023 (p. 103) Institute for Population and Social Research, Mahidol University

Proportion of population experiencing high stress in northern Thailand due to the 2024 flooding



Source: Mental Health Assessment in Thai Population, Department of Mental Health

Environmental crises and disasters not only impact physical health but also mental health. For example, the severe flooding in northern Thailand in September 2024 caused residents in areas such as Chiang Rai and Phayao to experience a threefold increase in stress levels.



To mitigate the impacts of megatrends and create long-term stability, it is necessary to develop digital skills for the workforce, promote gender equality, adapt work patterns to suit all age groups, and develop sustainable disaster preparedness plans.





Mental Health Literacy

Almost 1 in 3

Thais have the highest level of mental health literacy.

Mental health literacy is the key to good mental health. Overall, Thai people have improved mental health literacy, but there are still misconceptions and stigma, as well as gaps in knowledge regarding access to services.

Mental health literacy refers to the ability to understand, interpret, and use information about mental health to care for oneself and others appropriately. It is a key component of good mental health, as it helps individuals manage stress, recognize abnormal symptoms, and seek timely care.

Characteristics of individuals with mental health literacy

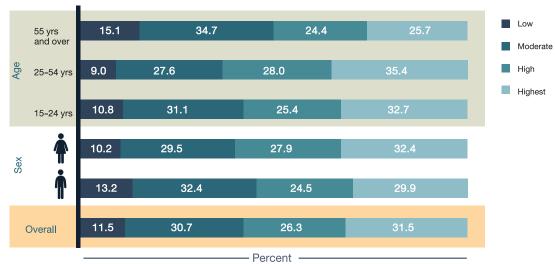
- 1. Access Ability to find mental health information
- 2. Understanding Knowledge and understanding of mental health issues, factors, and causes
- 3. Interaction/Inquiry...... Awareness and recognition of the importance of mental health
- 4. Decision-making Choosing options that positively impact one's mental health
- 5. Behavioral adjustment....... Understanding and implementing self-care practices to maintain mental health
- 6. Sharing Ability to explain and help others understand how to adjust mental health

Source: Guidelines for Enhancing Mental Health Literacy, 2024, Department of Mental Health.

behaviors

When analyzed by age group, older Thais tend to find it much more difficult to search for and understand mental health information compared to teenagers and youth. However, their ability to manage stress is not significantly different from other age groups.

Proportion of the Thai population by level of mental health literacy



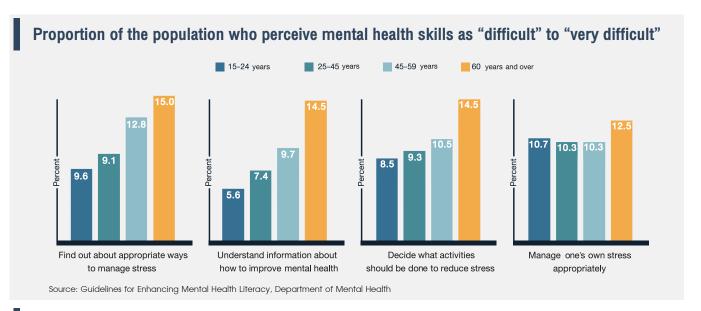
Source: Thai Mental Health and Quality of Life Survey 2022, Department of Mental Health

A 2022 survey found that 31.5% of Thais have the highest level of mental health literacy, but 11.5% have low mental health literacy, particularly among those aged 55 years or older, and among men. However, there are significant challenges, such as the fact that nearly half of Thais do not always realize when they are experiencing excessive stress, and about one-third do not know where to seek advice or treatment for mental health problems.

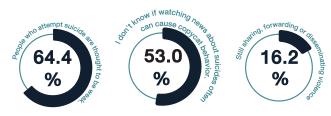
Proportion of the population exhibiting desirable mental health behaviors



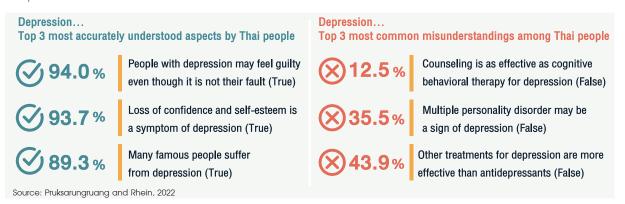
Source: Survey on Desirable Mental Health Behaviors 2018, Department of Mental Health



Proportion of people who still hold misunderstandings or stigmatizing attitudes toward mental health issues



Source: Guidelines for Enhancing Mental Health Literacy, Department of Mental Health Regarding misconceptions about mental health, about two-thirds of Thais still view those attempting suicide as weak, reflecting antiquated societal stigma. As for knowledge about depression, Thai people have a good understanding of symptoms such as feelings of guilt or lack of confidence without reason, but lack knowledge about appropriate and effective treatment methods.



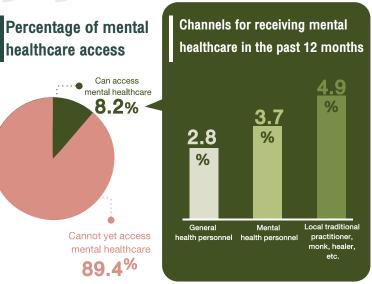
Promoting mental health literacy is essential, particularly in providing knowledge about how to access services and reduce stigma, so that everyone can sustainably care for their own and their community's mental health.



Mental Health Service and Screening

Nearly 40% of child and adolescent psychiatrists in Thailand are concentrated in Bangkok.

In 2024, there were 4.4million outpatient visits for psychiatric care. However, the actual number of Thais experiencing mental health issues may be significantly higher, as access to mental health services is still not widespread across the country. Additionally, the number of mental health professionals remains low compared to international standards and the global average.

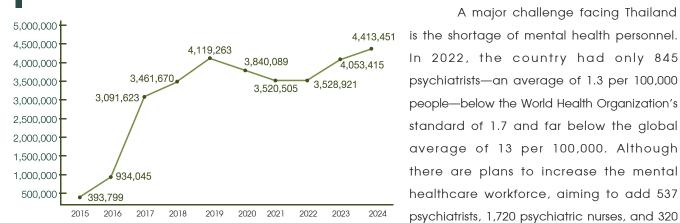


Access to mental health services in Thailand remains limited. In 2023, only 10.6% of the population accessed any form of mental health service, with most seeking help from alternative therapists, followed by mental health professionals and general healthcare providers.

Source: The 2023 National Epidemiology Survey on Mental Health in Thailand, Department of Mental Health

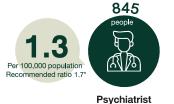
A major challenge facing Thailand

Number of outpatient psychiatric patients receiving services, Fiscal Year 2015 - 2024



Source: Number of Outpatient Psychiatric Patients Receiving Services, Fiscal Year 2015-2024, Health Data Center, Information and Communication Technology Center, Ministry of Public

Psychiatric personnel in Thailand, 2022



1.037

4,064 Per 100,000 population Recommended ratio 5.1

clinical psychologists and psychiatric social

workers each, the projected numbers are still

unlikely to meet the demand.

Psychologist (clinical)

Psychology nurse

Source: Thailand's Social Outlook of Q1/2024, National Statistical Office and Thailand Fails to Produce Sufficient Supporting Personnel as Planned, 101Pub.

^{*}World Health Organization standards

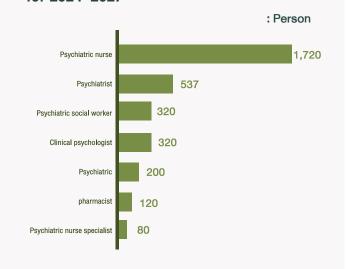
^{**} Middle to high-income countries, from the Mental Health Atlas 2020

Number of psychiatrists per 100,000 population by country

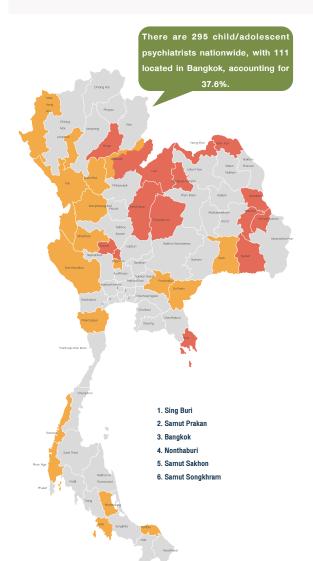


Source: Mental Health Atlas 2020, World Health Organization

Mental Health Workforce Production Plan for 2024–2027



Source: Mental Health Development Policy, Fiscal Year 2024, Department of Mental Health



Source: List of healthcare facilities with psychiatric services in Thailand, Child and Adolescent Psychiatric Society of Thailand, Psychiatric Association of Thailand and Department of Mental Health Children and youth are a particularly concerning group, as they experience higher rates of mental health issues compared to other age groups. Yet, there are only 295 child and adolescent psychitrists in Thailand, 111 of whom are based in Bangkok. Indeed, 18 provinces have no child psychiatrists at all, and another 15 have only one, creating a major gap in access for those in remote areas. Increasing the number of school counselors, in-house psychologists, and online counseling services are approaches that align closely with the needs of young people.

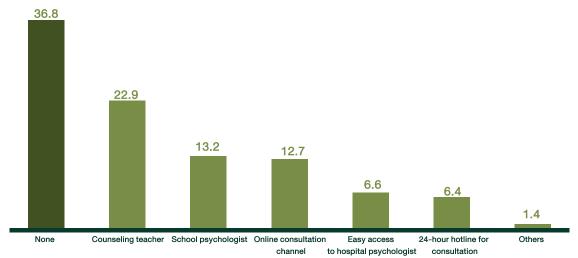
18 provinces with no child/adolescent psychiatrist

1. Chainat	2. Chaiyaphum	3. Trat	4. Bueng Kan	
5. Pattani	6. Phang Nga	7. Phetchabun	8. Phrae	
9. Mukdahan	10. Yasothon	11. Ranong	12. Loei	
13. Sisaket	14. Satun	15. Singburi	16. Nong Khai	
17. Nong Bua Lar	mphu	18. Amnat Charoen		

15 provinces with only a single child/adolescent psychiatrist

1. Krabi	2. Kanchanaburi	3. Kamphaeng Phet
4. Tak	5. Prachin Buri	6. Phatthalung
7. Phetchaburi	8. Mae Hong Son	9. Lopburi
10. Lamphun	11. Sa Kaeo	12. Sukhothai
13. Ana Thona	14. Uttaradit	

The mental health support/assistance that Thai children need



Source: Thai Children's Mental Health Survey 2024, Rocket Media Lab

Thais continue to rely on alternative means of managing mental health issues, such as traditional healers or monks, reflecting a culturally-rooted approach to mental well-being. Nevertheless, improving the formal mental health service system remains essential to ensure that all population groups can access appropriate care equitably and comprehensively.

"

Spiritual Practices and Fortune Tellers: A Source: of Emotional Support for Thai People



Visiting a psychologist or psychiatrist can sometimes seem like a big deal or even embarrassing for many people. This leads many to choose alternative methods to alleviate and manage their mental health issues, such as consulting a fortune teller, relying on superstition, or seeking out spiritual beings.



The trend of "Mutelu" or spiritual practices has become a popular way for younger generations to cope with stress and anxiety. While practicing "Mutelu" may not address the root causes of problems, it has emotional benefits by providing a sense of comfort that someone or something is there to support us. This can help alleviate stress and anxiety temporarily.

Similarly, consulting a fortune teller provides emotional support, but we can elevate the role of fortune tellers by equipping them with additional mental health counseling skills. Research from Thammasat University found that the quality of services provided by fortune tellers significantly improved when they underwent training, and clients reported feeling that their problems had lessened after receiving services.

These channels play an important role for Thai people in managing mental health issues, offering initial relief to the people.

Source: The Potential, 2022 and Pangsapa, 2022

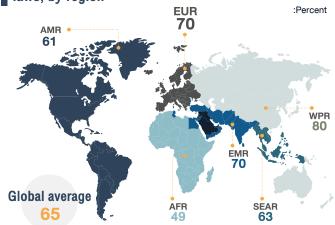


Mental Health Policies and Measures

Mental health issues are a significant challenge that Thailand is currently facing. Having policies and measures in place to address the growing demand for mental health services is therefore a key issue. While Thailand has made progress in some areas, there are still challenges that need to be addressed in order to provide more comprehensive and equitable mental health services.

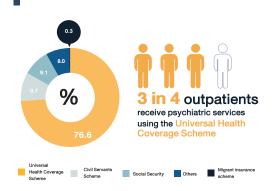
In terms of legislation, the existence of specific mental health laws reflects the importance of mental health issues in the country. In 2020, 65% of World separate mental health laws, and Thailand is one of them. The Mental Health Act, B.E. 2551 (Amendment Version, B.E. 2562) emphasizes the protection of the rights of individuals with mental health issues and promotes their access to appropriate care. Additionally, Thailand has specific mental health development plans, such as the National Mental Health Development Plan No. 1 (2018-2037) and the National Health Statute No. 3, B.E. 2565, which include mental health as one Note: WHO members are divided into 6 regions: Africa (AFR), the Americas (AMR), Eastern of the key goals.

Proportion of countries with separate mental health laws, by region



Mediterranean (EMR), Europe (EUR), South-East Asia (SEAR), and Western Pacific (WPR) Source: Mental Health Atlas 2020, World Health Organization

Number of psychiatric outpatients receiving services in Fiscal Year 2024, categorized by health insurance system



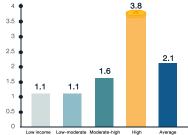
Source: Number of psychiatric outpatients receiving services in Fiscal Year 2024, Health Data Center, Information and Communication Technology Center, Ministry of Public Health

Regarding health insurance rights in Thailand, such as Social Security, the Universal Health Coverage Scheme, and Civil Servant Medical Benefit Scheme, these systems cover the treatment of mental health disorders, such as depression. Specifically, three out of four outpatients who receive psychiatric services use the Universal Health Coverage Scheme, while the Civil Servants Medical Benefit Scheme and Social Security cover the remaining cases. Although access to services is widespread, there is still a need to consider the allocation of budget for mental health services. Currently, the Department of Mental Health receives 1.8% of the Ministry of Public Health budget, while actual mental health expenditures are higher due to the budget allocated through the health security system covering psychiatric treatments.

Proportion of mental health expenditure to total health expenditure, categorized by country income level

In Thailand, the Department of Mental Health receives 1.8% of the Ministry of Public Health budget*

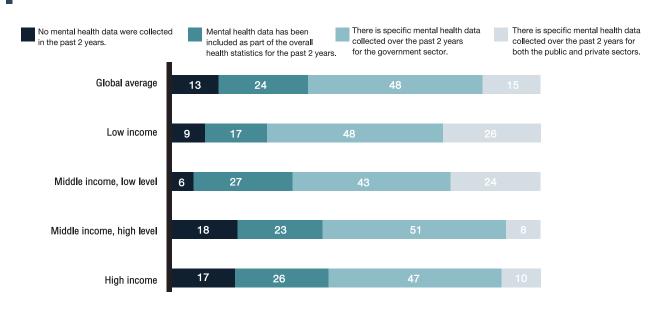
Source: Mental Health Atlas 2020, World Health Organization



*Actual spending on mental health in the country is higher because it does not include the budget from the health security system that covers psychiatric treatment.

Information and research are crucial for driving mental health policies and services. Although Thailand has reported mental health data at least in the past two years, it lacks data from the growing private sector and, importantly, it lacks statistics on the mental health of children under 15 years, such as depression and self-harm. Mental health issues can occur before the age of 15, and other countries, such as the UK and the US, have begun collecting mental health data from children as young as 5-6 years old. Thailand should consider adopting this approach to enhance coverage and build a more effective database.

Collection of mental health data in countries, categorized by country income level



Source: Mental Health Atlas 2020, World Health Organization.

Mental health statistics in Thailand still lack data on children and adolescents

Currently, the Health Data Center, Ministry of Public Health collects statistics on depression and self-harm among the population aged 15 years or older.

However, it has been found that children can also suffer from depression and show symptoms as early as 11 years old.

Collecting data on children could help identify issues early and provide timely assistance. In the UK, mental health data is collected for children starting at the age of 5 years.



Source: Summary from "Seeing the Numbers, Not the Heart: Mental Health Statistics in Thailand that Need to Be Reviewed," Kid for Kids

The development of the mental health system in Thailand requires cooperation between the government, the private sector, and civil society to enhance access to services that cover all age groups, as well as to increase funding and improve data collection accuracy. Investment in this area will not only help reduce the mental health problems of the population but also promote the overall well-being of Thai society in the long term.

Format for Citation Thai Health Project. 2025. Title of article. Thai Health 2025 (page number of article). Nakhon Pathom: Institute for Population and Social Research, Mahidol University. **Example for Citation** Thai Health Project. 2025. Amending the Alcohol Law: Monitoring Social and Health Impacts. Thai Health 2025 (pages 36-42). Nakhon Pathom: Institute for Population and Social Research, Mahidol University

10 Outstanding Health Situations



Amending the Alcohol Law: Monitoring Social and Health Impacts



Since alcohol consumption can lead to many forms of loss, drinkers must strive to not cause harm to their families and society. Alcohol producers and sellers must also be aware of and take responsibility for the social damage. However, not everyone is fully aware of the potential impacts. Therefore, the state must intervene to prevent alcoholic beverages from being accessible to children and youth, and implement effective measures to reduce road accidents caused by alcohol consumption.

Introduction

In recent years, there have been periodic adjustments to Thailand's alcohol-related regulations. For example, service hours for nightlife venues have been extended in four pilot provinces—Bangkok, Chiang Mai, Phuket, and Chonburi—allowing the sale of alcoholic beverages until 4 a.m. (However, if the venue is a semi-restaurant bar, alcohol sales are allowed only until midnight). In addition, there have been discussions about revising laws concerning the permitted hours for alcohol sales, based on proposals from the Thai Alcohol Beverage Business Association (TABBA). Subsequently, the government and various organizations proposed five draft versions of the Alcoholic Beverage Control Act. Moreover, the House of Representatives' committee reviewing the amendments to the Alcoholic Beverage Control Act agreed in principle on the following points:

Repealing the long-standing Revolutionary
Council Announcement No. 253, which
has been in use for over 51 years and
specifies prohibited hours for alcohol sale
and consumption

- 2 Increasing penalties for those who sell alcohol to individuals under the age of 20 or to those who are intoxicated to the point of losing self-control
- 3 Lifting restrictions on certain locations where alcohol consumption and sales are currently prohibited, to promote economic benefit, especially in the tourism sector
- Transitioning from a near-total ban on alcohol advertising to a more relaxed, partial-ban approach

In addition, the Pheu Thai Party proposed amendments to the Excise Tax Act, or the so-called "Community Liquor Law for Grassroots Economy," by revising Section 153 to support legal access to production licenses for community enterprises, farmers' institutions, and small and medium-sized enterprises (SMEs). The House of Representatives passed the draft amendment to the Excise Tax Act on January 15, 2025. If approved by the Senate, it will take effect within 180 days.¹

Efforts to amend various alcohol-related laws have faced widespread opposition from health advocacy networks. The International Health Policy Program (IHPP) has raised concerns, stating that alcoholic beverages are addictive substances and carcinogenst. There has been serious excess mortality from alcohol-related cancers such as liver cancer, lung cancer, and colorectal cancer. The President of the Stop Drink Network also argued that the best public policy is to have laws that control risk factors and prevent hazardous industries from operating freely.

This article compiles the current developments, analyzes the impacts of the proposed legal amendments, and offers perspectives on how to mitigate the health consequences.

The World Health Organization and Guidelines for Alcohol Control

Alcoholic beverages have a significant social influence on people around the world. The alcoholic beverage industry continues to grow, and certainly contributes to the economies and employment of various countries around the world — both directly and indirectly. On the other hand, alcohol is also a major cause of death for many people. According to data from the World Health Organization (WHO), alcohol consumption is responsible for as many as 2.6 million deaths annually worldwide. It is also a leading cause of disability, and impacts the health of millions. Overall, the harmful use of alcohol accounts for 4.7% of the global disease burden.²

Thus, the WHO places great importance on controlling alcohol consumption and recommends that each country implement measures to prevent and reduce harmful levels of alcohol drinking.³ For example:

- 1 Taxation and pricing of alcoholic beverages: This can help reduce drinking behavior among certain consumer groups.
- Regulation of advertising and sales promotion: Aimed at mitigating the impacts of marketing, particularly on youth, as current marketing employs increasingly sophisticated advertising and promotional techniques. These include linking alcohol brands to sports and cultural events, using social media, and employing cross-border marketing messages that are difficult to control and often target underage individuals and children.
- 3 Restricting access to alcoholic beverages: This includes setting minimum legal purchasing ages, controlling the days and hours of retail sales, regulating methods of sale, and requiring a licensing system for alcohol sales.
- Deterrent measures to reduce the risk and severity of drunk-driving-related accidents: These include stricter legal penalties, alcohol checkpoint enforcement, and promoting the availability of public transportation throughout the operating hours of entertainment venues and alcohol retailers.

Thailand has implemented various measures to control and reduce alcohol consumption. These include *pricing measures* such as taxation under the Excise Tax Act B.E. 2560, and *other measures* under the Alcoholic Beverage Control Act B.E. 2551, such as a ban on advertising, restrictions on places where alcohol can be sold or consumed, and regulations on the days and hours of sale. In addition, there are *preventive and punitive measures related to drunk-driving accidents*, which fall under the Land Traffic Act (No. 12) B.E. 2562, among others.

The Dynamics of 'Alcohol Policy and Governance' in Thailand

The alcoholic beverage industry in Thailand originated from traditional home-brewed liquor made by fermenting rice or sugar for household consumption. Later, the state enacted the Liquor Act, C.E. 1148 (B.E. 2329), prohibiting citizens from distilling alcohol without permission. The intent behind this law was to generate revenue for the state. In enforcing the law, the government granted private entities the right to bid for monopolies over the production, distribution, and tax collection of liquor, as well as the responsibility for suppressing illegal alcohol production on behalf of the state.4 In 1950, the Thai government enacted the Liquor Act B.E. 2493 as a legal mechanism to control the production, importation, and sale of alcoholic beverages. In addition to prohibiting home-based liquor production, the law also stipulated that "...No person shall bring more than 1 liter of liquor into the Kingdom unless granted a permit by an excise official ..."⁵ Those who were licensed to produce liquor for sale were required to pay taxes before transporting the liquor out of the factory, according to rates specified by ministerial regulations. Similarly, those who imported liquor into the country must pay liquor tax by affixing tax stamps to the liquor containers, in accordance with the rates set by the same regulations. However, the Liquor Act B.E. 2493 was subsequently repealed and replaced by the Excise Tax Act B.E. 2560.

In 1959, the government adopted a policy allowing private entities to engage in liquor production. Between 1960 and 1999, the state permitted private companies to bid for the right to operate the Bang Yi Khan Distillery. Then, in 2000, the government implemented a policy to liberalize the production and sale of liquor, leading to increased investment in the establishment of new distilleries. Beer production in Thailand also began, often as joint ventures between Thai companies and multinational corporations. This resulted in the growth of the alcoholic beverage industry and a corresponding rise in alcohol consumption, which in turn led to increasing public health issues.

In 2008, the government enacted the Alcoholic Beverage Control Act B.E. 2551 (2008) to establish various measures for regulating alcoholic beverages, including treatment and rehabilitation for alcohol dependence. The aim was to reduce the social and economic impacts, promote public health awareness of alcohol-related harm, and prevent children and youth from easily accessing alcoholic beverages.⁶

Nonetheless, even though the Alcoholic Beverage Control Act has been in effect for nearly two decades, problems related to alcohol consumption—especially drunk-driving accidents and youth access to alcohol—have not shown the expected decline. This has prompted various sectors to push for a review of the existing law, leading to the proposal of a new draft Alcoholic Beverage Control Act (Amendment No. ...) B.E. ...

At the same time, there have been efforts by alcohol industry stakeholders, business operators, and some politicians to advocate for a liberal alcohol policy, urging the government to ease restrictions on the alcohol business and allow greater freedom in marketing. As a result, five different versions of the draft Alcoholic Beverage Control Act were submitted to the House of Representatives on March 27, 2024. These include:

The draft proposed by the Thai Cabinet: Abolish the time restriction on alcohol sales that previously prohibited sales between 2 p.m. and 5 p.m. by repealing Revolutionary Council Announcement No. 253 (B.E. 2515); Relax certain location-based restrictions on the sale and consumption of alcoholic beverages, allowing exceptions in government premises specifically designated as shops, clubs, or other areas as specified by ministerial announcement with the advice of the committee; Clarify advertising regulations by adding clearer provisions, including new prohibitions to prevent sponsorship or support of individuals, groups, government agencies, or private organizations; Include provisions for the treatment and rehabilitation of individuals addicted to or experiencing problems from alcohol consumption; and Revise penalties by converting criminal penalties into administrative fines, and increase fines for those who violate rules on sales and advertising.

The draft proposed by Mr. Teerapat Kahawong and 92,978 eligible voters: Amend provisions on locations where alcohol sales and consumption are regulated to be more comprehensive, and empower provincial authorities to determine specific details regarding distance requirements from such controlled areas; Introduce new sales prohibitions including banning the sale of alcoholic beverages to pregnant women and individuals with alcohol addiction, and prohibit anyone from employing, hiring, or allowing persons under the age of 18 to sell or distribute alcoholic beverages; Increase responsibilities of alcohol vendors, such as requiring them to verify identification (e.g., ID card or equivalent documentation) before a sale, and to sell alcohol only in accordance with regulations, methods, and conditions specified by the Minister upon the advice of the Control Committee.; Ban online sales of alcoholic beverages, except for wholesale transactions by licensed sellers under the Excise Tax law, which are not accessible to the general public; Strengthen advertising regulations, prohibiting all alcohol-related advertisements or marketing communications unless prior permission is granted by the authorized official; Add provisions for civil liability, allowing for lawsuits to claim damages caused by individuals who consumed alcohol and subsequently operated a vehicle; and Increase penalties, especially monetary fines and the revocation of alcohol sales licenses under the Excise Tax law for those violating alcohol control regulations.

The draft proposed by Mr. Charoen Charoenchai and 10,942 eligible voters: Amend the regulations, criteria, methods, and conditions regarding packaging, labeling, and warning messages for alcoholic beverages that are produced or imported; Ease restrictions on alcohol sale locations by prohibiting sales only in educational institutions under the National Education Act, except in designated areas such as shops or clubs within higher education institutions; Relax restrictions on days and hours of alcohol sales, allowing for exceptions or conditions to be specified to mitigate negative impacts on businesses and the tourism sector; Revise advertising regulations by prohibiting false or misleading claims in alcohol advertisements; Reduce penalties for violations related to packaging, labeling, and warning messages for domestically produced or imported alcoholic beverages—from imprisonment of one year, a fine of up to 100,000 baht, or both, to imprisonment of six months and a fine of up to 10,000 baht, or both; and Reduce penalties for violations of advertising prohibitions—from imprisonment of one year and a fine of up to 500,000 baht, or both, to imprisonment of one year and a fine of up to 100,000 baht, or both.

The draft proposed by Mr. Taopiphop Limjittrakorn and his group: Amend the regulations, criteria, methods, and conditions related to packaging, labeling, and warning messages for alcoholic beverages that are produced or imported; Ease restrictions on the locations for sale and consumption of alcoholic beverages by stipulating that the sale and consumption are prohibited within educational institutions as defined by the National Education Act, except in designated areas such as shops or clubs within higher education institutions; Remove restrictions on the days and hours during which alcoholic beverages can be sold; Revise the regulations on sales methods by prohibiting the sale of alcoholic beverages through vending machines that cannot verify the buyer's identity; and Amend the advertising regulations to prohibit producers or sellers from advertising alcoholic beverages or displaying their names or trademarks to individuals under the age of 20.

The draft proposed by Mr. Chanin Rungthanakiat and his group: Relax restrictions on locations for the sale and consumption of alcoholic beverages by stipulating that the sale and consumption are prohibited in government premises, except for designated club areas or in cases where banquets, entertainment events, sports competitions, or festive events are held with permission from the responsible authority. Sale and consumption are also prohibited in public parks owned by the government, except under similar permitted events; Ease regulations on the days and hours of alcohol sales to reduce the impact on business and the tourism sector; Revise regulations on sales methods by prohibiting the sale of alcoholic beverages through vending machines that cannot verify the identity of the buyer; and Amend advertising regulations by prohibiting all forms of alcoholic beverage advertising and publicity, except for providing factual information and knowledge that promotes positive social outcomes, in accordance with the criteria, methods, and conditions specified by the Minister.



Dr. Chatrchai Tuongratanaphan, a retail expert, analyzed the draft Alcoholic Beverage Control Act, stating that it is an attempt to ease restrictions on small alcohol producers, allowing small and local brands to compete fairly with large companies. Additionally, it is related to supporting Thailand's tourism and service sectors. The Thailand Development Research Institute (TDRI) produced a report on the review of policies and measures on alcohol control to promote a balance between social and economic development in Thailandfor sustainable growth in 2024. The report highlights that alcohol consumption can lead to various losses. Therefore, alcohol consumers should strive to avoid harming their families or society, and they must remain mindful to avoid causing issues for others. Producers and sellers must be aware of and take responsibility for social harm caused by its products. However, not everyone is aware of the potential consequences, especially children and youth.

Therefore, the state must intervene to prevent alcohol from being accessible to minors and implement effective measures to reduce road accidents.8

Amending the Alcohol Law: Monitoring Social and Health **Impacts**

Efforts to amend the draft Alcoholic Beverage Control Act to relax regulations on the alcohol industry, sales, and advertising (particularly from political parties) have raised significant concerns among health and youth networks. For example, the Centre for Alcohol Studies (CAS), the Thai Health Promotion Foundation (ThaiHealth), and partner networks have mobilized to continuously call for all parties to consider the health and social impacts. Assoc. Prof. Dr. Polthep Vichitkunakorn, from the Faculty of Medicine at Prince of Songkla University and Deputy Director of CAS, stated that CAS and its network partners issued demands to all political parties and politicians involved in the review of the new Alcoholic Beverage Control Act draft on November 15, 2024, as follows: 9

- 1 All Thai citizens have the right to live free from the harmful effects of alcohol. Enacting laws that lead to harm is a violation of rights.
- 2 No interference or manipulation should be allowed from the alcohol industry or business groups with direct or indirect interests.
- 3 Selling alcohol to minors or intoxicated individuals, or repeatedly violating the law for commercial benefit, should lead to administrative penalties such as closure or a ban on alcohol sales, and repeat offenses should result in the revocation of licenses.
- 4 Integration between the Alcoholic Beverage Control Act and the Excise Tax Act should be implemented to control licensing, suspension of licenses, and sales conditions to support alcohol control, not merely for the convenience of business operators.
- 6 A master plan to gradually increase taxes should be developed to reduce consumption.
- 6 Revisions to the Alcoholic Beverage Control Act should aim to reduce the control over the days, times, places of sale, and consumption, as well as advertising. The Control Committee should have the authority to set exceptions and decentralize decision-making to provincial control committees to prevent risks that may arise from granting permission.
- 7 The revision of the Alcoholic Beverage Control Act should include a risk assessment of impacts by academic agencies and be thoroughly considered.

Ms. Chollapas Piapramong, from the YSDN Thailand youth network and a representative of the victims of drunk driving and those affected by alcohol consumption, as well as women's and family networks, expressed concerns about the proposed amendments to the new Alcoholic Beverage Control Act. She stated that the changes, aimed at boosting the economy by relaxing alcohol control measures, could lead to increased prevalence of excess alcohol consumption. Her concerns are as follows:¹⁰

- Expanding alcohol sales and consumption areas in government offices sends a message that promotes drinking behavior, potentially leading to imitation behaviors among children and youth.
- 2 Extending alcohol sales hours, such as the pilot program to extend opening hours in five areas (which has been in place for almost a year), has not yet been evaluated for its impact.
- The law should be more effective in enforcing the ban on alcohol sales to individuals under age 20 years and intoxicated individuals, ensuring clear regulations and strict law enforcement.

On November 18, 2024, Mr. Wisarn Techathirawat, Chairman of the Special Committee for the Review of the Alcoholic Beverage Control Act (Draft) B.E. ..., announced that the progress of the task was 70-80%, with a review of the key issues underway.¹¹ This includes the decentralization of power, allowing provincial alcohol control committees to have more authority to manage their areas, including zoning and restrictions specific to each area. It also involves appointing a representative from the Children and Youth Council as a member of both provincial and Bangkok committees, and including the Chief Executives of the Provincial Administrative Organizations in the committees. The focus is on fostering participation in decisions regarding zoning areas and increasing penalties for those who sell alcohol to minors and intoxicated individuals, as well as enhancing the accountability of sellers. One of the points that all parties agree on is controlling access to alcohol for children, youth, and vulnerable groups, and increasing penalties for sellers of alcohol to those groups. However, there are still several issues that have not been agreed upon, such as the removal of restrictions on the days and times alcohol can be sold, as well as changes to regulations on alcohol advertising. Many parties remain concerned that easing access to alcohol could lead to health-related consequences, and this issue needs further discussion to find a common solution.

Nevertheless, the drafting of the new Alcoholic Beverage Control Act is not yet completed and is still under review for amendments. Even though some regulations have been tightened and some penalties have been made more severe, the most significant challenge remains, i.e., once the law is enacted, its enforcement must be effective and efficient, not merely a "paper tiger." This is because all sectors expect that the amendment of this law will strike a balance between the economy, society, and health. It should promote economic growth, particularly in the tourism sector, while also addressing social and health problems, especially by preventing access to alcohol for children and youth at an early age. Additionally, it should help reduce health-related costs for vulnerable groups, such as pregnant women and those with

chronic alcohol dependency.

Recommendations

Although the amendment of the new Alcoholic Beverage Control Act may have both positive and negative impacts, there are other conditions that can help reduce the social and health problems caused by alcohol consumption. These include surveillance to prevent harmful access to alcohol, as well as preventing and monitoring the issue of drinking and driving, which must be carried out alongside alcohol control measures. However, relying solely on government officials or the police will not be effective, as there is a lack of resources in terms of manpower and budget. Collaboration with community and/or local networks, which are closer to the people in the locality, such as village heads, volunteers, and local civil society organizations, will be essential for effective monitoring and prevention of various problems. As an example, in Finland, the government has implemented the Local Alcohol Policy Project, a community-level collaboration program where the state works with local partners including health experts, police, schools, local media, alcohol licensees, restaurants, retailers, local government organizations, parents, and civil society organizations. This collaboration is responsible for monitoring, surveillance, and enforcing laws to prevent the sale of alcohol to minors and increasing awareness of the issues. Local media is supported to raise awareness about the harmful effects of alcohol in the community. Similarly, in the United States, the Community Preventive Service Task Force (CPSTF) has been established to oversee health problems and improve the quality of life for the community population. It monitors retail compliance with laws prohibiting the sale of alcohol to minors and coordinates with local law enforcement agencies if legal violations occur, aiming to reduce underage drinking.

Therefore, to ensure the effective regulation of alcohol in Thailand, in addition to carefully crafting laws to control alcohol, the government should implement other policies or measures that work alongside the enforcement of alcohol control laws. This should involve collaboration with local community partners, such as village heads, sub-district administrative organizations, community volunteers, police officers, schoolteachers, educational institutions, and civil society organizations within the community. The goal is to raise awareness among youth and the public about the harmful effects of alcohol, assist in monitoring and preventing youth access to alcohol, as well as protecting vulnerable groups, such as pregnant women and individuals with chronic alcohol dependence. If violations occur at retail outlets, they should be reported to local authorities to ensure legal enforcement. Additionally, community checkpoints should be established to monitor and prevent drunk driving, in order to reduce the risks of accidents caused by impaired driving, which could lead to potentially immeasurable damage.

Summary

Thailand has periodically adjusted regulations related to alcohol to allow community and local alcoholic beverages, as well as small-scale operators, to conduct business. This includes relaxing restrictions to allow stores to operate for longer hours to support the service and tourism sectors. However, the health impacts of these policies have not been systematically evaluated.

Currently, five draft versions of the Alcoholic Beverage Control Act, B.E., are being considered to decentralize power to provincial alcohol control committees, adjust penalties for lawbreakers, and relax requirements regarding the duration of alcohol sales, service locations, advertising, and marketing. These changes may have social and health impacts. Civil society and health networks have called for respect for the legitimate rights of the public to live free from the harmful effects of alcohol, arguing that laws that cause harm infringe upon these rights. They also advocate for a comprehensive risk assessment of the impacts of legal amendments.

In addition to revising the laws, the government and stakeholders should study lessons from abroad and focus on building collaboration with local or community networks to raise awareness among youth about the effects of alcohol. They should work together to monitor and prevent access to alcohol for vulnerable groups, as well as watch for and prevent drunk driving, to reduce the potential harms that may arise.

E-cigarettes:





If we want to control drugs, should we allow drug dealers to get involved in designing the policy measures?

99

Introduction

The 3rd Meeting of the National Health Commission (NHC) for 2024, held on June 7, 2024, approved a specific resolution from Thailand's Health Assembly on the issue of protecting children and youth from e-cigarettes. The resolution comprises five key measures:

- Develop and carry out knowledge management
- Raise awareness among children, youth, and the public about the dangers and addictiveness of e-cigarettes
- Monitor and enforce laws controlling e-cigarettes
- 4 Strengthen the capacity of networks and partners to support preventive and control measures
- 6 Reaffirm policies and measures to prevent and suppress the spread of e-cigarettes

However, there have been political efforts to revise e-cigarette control laws. The Parliamentary Ad Hoc Committee on the Study of Laws and Regulatory Measures for E-cigarettes in Thailand is considering submitting proposals to the House of Representatives, urging the executive branch to amend the law in one of three ways:

- Comprehensively criminalize e-cigarettes by amending existing laws—including notifications of Ministry of Commerce and Consumer Protection Commission's orders—to ensure strict enforcement. This would include creating a new Act to classify e-cigarettes as entirely illegal: banning production, importation, sales, possession, advertising, communication, and even use:
- Regulate heated tobacco products or heat-not-burn tobacco under the law by amending the Ministry of Commerce's notifications and the Consumer Protection Commission's orders, classifying them as tobacco under the Excise Tax Act and making them taxable:
- 3 Regulate both e-cigarettes and heated tobacco products under the law through legal amendments, with strict control measures in place.

This article provides an overview of the current situation regarding e-cigarettes in Thailand, their impact on youth, the legislative efforts to address the issue, viewpoints from various stakeholders, and policy recommendations for e-cigarette control—both at the policy level and through practical solutions at the local and community levels.

The Spread of E-Cigarette Use in Thailand

According to a 2021 survey by the National Statistical Office, 0.1% of the Thai population aged 15 years or older used e-cigarettes—equivalent to 78,742 individuals. Among them, 24,050 were youth aged 15-24. A follow-up survey in 2022, conducted under the "Smoke-Free Local Administrative Organizations" project by the Action on Smoking and Health Foundation Thailand, focused on people aged 15 years or older. It found that the e-cigarette use rate had risen to 1.2%, representing 709,677 people. Of these, 269,553 were youth aged 15-24. This reflects a nearly tenfold increase in e-cigarette use within just one year.¹

The spread of e-cigarettes among children and youth is partly driven by the "online media." According to a report on e-cigarette marketing surveillance in online media during January-February 2024 by Kanittha Thaikla, it was found that 309 accounts were illegally selling e-cigarettes online, in violation of the law, with 605 related posts detected.² The majority of e-cigarette sales were conducted by retail sellers (54.4%), followed by wholesalers/agents (44.7%), and product reviewers (1%). Among the platforms used, Platform X (Twitter) was the most popular at 29.1%, followed by Facebook (26.9%), Instagram (17.5%), websites (15.2%), LINE (7.4%), TikTok (3.6%), and YouTube (0.3%).

The marketing strategies for e-cigarettes through online platforms focus on creating product awareness, retaining customers through free delivery, giveaways, promotions, and discounts, all the way to home delivery with cash-on-delivery payment options. The most promoted product was the e-cigarette device itself (89.3%), followed by ready-to-use e-cigarette kits (6.3%), and empty devices (4.0%). Marketing trends for e-cigarette products are increasingly tailored to fit the lifestyles and preferences of younger generations, for example, through e-cigarette vending machines.³

E-cigarettes have health impacts across multiple bodily systems, including the cardiovascular system, respiratory system, lungs, nervous system and brain. E-cigarettes also affect the mental health of children and adolescents, as well as fetal development during pregnancy. In terms of social impacts, e-cigarettes can act as a gateway to traditional cigarette smoking, and may potentially lead to the use of other drugs as well.⁴ The problem of e-cigarette use among youth is not unique to Thailand. Yet, the United Kingdom is often cited by e-cigarette advocates as an example of a country that has been able to successfully manage e-cigarette use through regulatory control.⁵ However, the facts reveal a different story. According to a report from the National Health Service (NHS) in the United Kingdom, between March and October 2024, there were 280 hospital admissions related to e-cigarette use, including 51 children. Data from 2020 to 2024 show that the number of children hospitalized due to e-cigarette use has increased fivefold within just five years.°

Number and Smoking Rate of Thai Population Aged 15 Years and Over

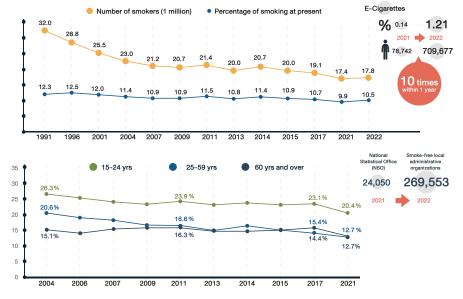


Figure 1: Number of smokers of e-cigarettes in Thailand: 2021-2022 Source: Tobacco Control Research and Knowledge Management Center (2025)

This phenomenon reflects an undeniable truth: "Having a law to regulate e-cigarettes may not guarantee the protection of children and youth." Even in a developed country like the UK, challenges remain in enforcing such laws. Hence, the question arises whether Thailand, where political manipulation to legalise e-cigarettes is highly criticised, would be able to effectively control them. All parties must consider Thailand's social context, culture, and law enforcement mechanisms, as the policy shift on e-cigarettes may not necessarily prevent their spread among children and youth.

E-cigarette Regulation in Thailand

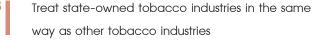
Thailand first encountered "e-cigarettes" around 2007 and began implementing a ban on e-cigarette imports in 2008. Dr. Hatai Chitanon, Chairman of the Thai Health Promotion Institute under the National Health Foundation, made a policy recommendation to the then Minister of Public Health, Mr. Chaiya Sasomsap. Dr. Hatai suggested that the Department of Disease Control and the Food and Drug Administration (FDA) consider the ban on the import and sale of e-cigarettes, urging the Ministry of Public Health (MOPH) to take a firm stance on banning e-cigarette imports. Band of the cigarette imports.

In 2014, during the government of the National Council for Peace and Order (NCPO), health sector advocates pushed for a policy to ban the import of e-cigarettes. This led to the issuance of a Ministry of Commerce Announcement B.E. 2557, on Declaring Hookahs, E-hookahs, and E-cigarettes as Prohibited Items for Import into the Kingdom of Thailand. In early 2015, the Consumer Protection Commission issued Order No. 9/2015, prohibiting the import, sale, and service of e-cigarettes, based on the powers granted by the Consumer Protection Act, B.E. 2522 (1979). Later, in 2024, it was replaced by a new order called the Committee on Product and Service Safety, No. 24/2024. This new order prohibited the production, sale, or service of hookahs, e-hookahs, e-cigarettes, and e-cigarette liquids. The order was based on Article 29/9, paragraph 2 of the Consumer Protection Act, B.E. 2522, amended by the Consumer Protection Act (No. 4), B.E. 2562 (2019), which serves as the primary "regulation" controlling e-cigarettes in Thailand. According to the definitions in these two orders, e-cigarettes include both Electronic Cigarettes (E-Cigarettes) and Heated Tobacco Products (HTP). Additionally, there are two other laws regulating the possession of e-cigarettes: The Customs Act, B.E. 2560 (2017), and measures controlling the use of e-cigarettes in public under the Tobacco Product Control Act, B.E. 2560 (2017).

Regarding the prevention of interference in Thailand's e-cigarette policies, Thailand is obligated to comply with the guidelines outlined in Article 5.3 of the WHO Framework Convention on Tobacco Control (FCTC). Thailand is a party to the convention, and there are eight key recommendations to prevent interference from the tobacco industry and other stakeholders in public health policies, as follows: ¹⁰

- Raise awareness about the dangers and addictive power of tobacco products, and highlight the risks of tobacco industry interference in public health policies related to tobacco control
- 2 Implement measures to limit contact with the tobacco industry and ensure that any such contact is transparent
- Reject any cooperation with the tobacco industry, including non-binding agreements or agreements that cannot be practically implemented, as well as any activities the tobacco industry is involved in, promotes, or participates in, whether directly or indirectly
- 4 Avoid conflicts of interest
- 5 Ensure that information received from the tobacco industry is transparent and accurate
- Do not accept or establish regulations that the tobacco industry claims are activities showing corporate social responsibility, including those promoted under the "Corporate Social Responsibility" policy

"End Cigarette Smoke Thailand" appeals to Ombudsman to investigate e-cigarette ban



Laws to Regulate E-cigarettes through **Online Platforms**

The advertising or promotion of e-cigarettes on online platforms may be considered an offense under the Computer Crime Act (No. 2), B.E. 2560, Article 14 (1), which states: "Anyone who commits the following offenses shall be subject to imprisonment for up to five years, a fine of up to one hundred thousand baht, or both: (1) by fraud or deceit, bringing into the computer system any computer data that is distorted or falsified, whether in whole or in part, or any computer data that is false in a manner that could potentially harm the public, other than actions involving defamation under the Criminal Code," The term "fraud" is defined in Article 1(1) of the Criminal Code as "seeking benefits that are not lawfully due to oneself or others." The term "not lawfully due" in this context refers to the Export and Import of Goods Act, B.E. 2522 and the Consumer Protection Act, B.E. 2522. In practice, authorities may use sting operations to purchase e-cigarettes from online sellers as part of legal proceedings, along with filing a petition with the court to shut down websites promoting such sales.

Politics of E-cigarettes in Thailand

Although Thailand is obligated to adhere to international guidelines to prevent interference in e-cigarette policies, in practice, there are strong supporters of e-cigarette use in the country, such as a group named "End Cigarette Smoke Thailand (ECST)," which has been criticized for its ties to major tobacco companies. 11 This may conflict with Article 4 of the World Health Organization's guidelines, which advise avoiding conflicts of interest, as tobacco companies may support organizations as a front. The ECST group has actively lobbied to change the policy regarding e-cigarettes.



Source: www.matichon.co.th/publicize/news_1132236

In 2018, ECST submitted a petition to Mr. Kamontham Vasboonma, Director of the Legal and Litigation Office at the Ombudsman's Office, requesting an investigation into the e-cigarette ban. They argued that the ban violated the right to access less harmful products and failed to incorporate new scientific evidence to assist the public. 12 Eventually, the Ombudsman's Office dismissed the complaint regarding e-cigarettes in 2023, as they felt the issue had already been raised through multiple channels.

In 2019, a complaint was filed with the Ministry of Commerce, requesting a review of the e-cigarette import ban. This led to the establishment of a working group by the Department of Foreign Trade, Ministry of Commerce, to reconsider the measures regulating the import of e-cigarettes, under the Department Order No. 316/2018. The working group assigned the Tobacco Control Research and Knowledge Management Center (TCRC) to be part of the team and study the impacts of e-cigarettes. Ultimately, the working group decided to maintain the ban on e-cigarette imports following a meeting on January 23, 2020, which led to dissatisfaction among the ECST group. 13

On January 13, 2022, representatives from the ECST group met with Mr. Chaiwut Thanakmanusorn, the Minister of Digital Economy and Society, to file a complaint about the public's distress regarding e-cigarettes. During the meeting, Mr. Chaiwut, the Minister at that time, expressed his support for the push to legalize e-cigarettes. 14 A working committee was established to find a legal process for driving the initiative forward. 15 The committee has taken action to push for this issue, such as sending a letter to the National Tobacco Products Control Committee (NTPC) requesting a review of the decision to ban e-cigarettes.¹⁶ ECST has also visited various educational institutions to generate support for making e-cigarettes legal, such as Siam University¹⁷ and Thammasat University,¹⁸ among others. Although Mr. Chaiwut did not get re-elected as an MP for the Palang Pracharath Party, he continued to serve on the special committee to study the laws and regulations controlling e-cigarettes in Thailand.

Additionally, there are reports that the ECST group has continued to play a role in policy-making through parliamentary mechanisms, with representatives securing positions on various sub-committees related to the amendment of laws regarding e-cigarettes, especially the Subcommittee on Tobacco and E-cigarettes from a Commercial Perspective, 19,20,21,222 the Commerce and Intellectual Property Commission, the Subcommittee for Studying Factors Affecting the Health System and Monitoring the Enforcement of Public Health Laws, 23,24,25,26 the Ad Hoc Committee for Studying Laws and Regulatory Measures on E-Cigarettes in Thailand, as well as other related parliamentary committees. Yet, this movement has seen minimal participation from the health sector—both governmental and civil society organizations—despite their direct involvement in tobacco control, especially in matters concerning e-cigarettes.

Within the Ad Hoc Committee for Studying Laws and Regulatory Measures on E-Cigarettes in Thailand, Mr. Asa Saligupta and Mr. Maris Karunyawat from the ECST group held positions as committee members (both served as advisors in the Subcommittee on Tobacco and E-cigarettes from a Commercial Perspective). Mr. Chaiwut, the former Minister of Digital Economy and Society, also served as a committee member. Mr. Opas Almaseri and Mr. Tossaporn Thongsiri acted as committee spokespersons (both also served on the Subcommittee on Tobacco and E-cigarettes from a Commercial Perspective). This Ad Hoc Committee also established a subcommittee specifically to study legal measures to regulate e-cigarette use in Thailand. The findings were presented to the full committee, outlining three proposed approaches as follows:

- Designate the use of e-cigarettes as clearly illegal, with two possible approaches. The first approach involves amending existing laws—such as announcements by the Ministry of Commerce and directives from the Consumer Protection Commission—to clarify and extend legal coverage to include possession and production, ensuring strict enforcement. The second approach proposes the enactment of a new law at the level of an Act that comprehensively defines e-cigarettes as illegal, encompassing all relevant principles and measures. This would include bans on production, importation, sales, advertising, communication, and even use.
- Regulate heated tobacco products (HTP)—also known as "Heat-Not-Burn Tobacco"—by amending the Ministry of Commerce's announcements and directives from the Consumer Protection Commission, and by enacting new legislation. This would classify HTP as tobacco under the Excise Tax Act, thereby allowing regulation in areas such as control, accessibility, advertising, and communication under the legal framework for tobacco products.
- 3 Subject both e-cigarettes and HTP to legal regulation, ensuring that both product categories fall under comprehensive legal control.²⁷

Later, the ad hoc committee issued a statement saying that "the majority opinion supports the legalization of e-cigarettes, with a focus on strict regulation to protect youth and reduce long-term health issues, while also emphasizing transparency in their work and freedom from any interference."

Movements of Health Networks / Civil Society Organizations

In response to the imminent legal amendments that may lift the ban on e-cigarettes, health networks have actively opposed this development through various forms of advocacy. These efforts include driving the issue through the mechanisms of the National Health Assembly, pushing through professional health organizations, as well as engaging with other networks such as those in the education sector to mitigate health impacts—especially on youth. The key efforts are as follows:

Advocacy through the National Health Assembly: The National Health Commission Office (NHCO) has established the Committee for Developing Public Policy on the Issue of E-cigarette Control.²⁹ This advocacy is being carried out through the issue-based mechanism of the National Health Assembly, which has developed a policy framework aimed at protecting children and youth from e-cigarettes. The efforts align with the approval of the National Tobacco Products Control Committee (NTPC) under the "Measures for the Prevention and Control of the Spread of E-cigarettes in Thailand." This framework consists of five key measures: (1) Developing and managing knowledge; (2) Raising awareness of the dangers and addictive nature of e-cigarettes among children, youth, and the general public; (3) Monitoring and enforcing laws on e-cigarette control; (4) Enhancing the capacity of partner networks to support prevention and control efforts; and (5) Reaffirming policies and measures to prevent and suppress the spread of e-cigarettes, taking into account Thailand's commitments under the World Health Organization Framework Convention on Tobacco Control (WHO FCTC).³⁰

Advocacy through professional health organizations: Thailand has a wide network of professional health organizations—including those in the fields of medicine, dentistry, pharmacy, nursing, medical technology, and public health—all of which have joined forces in line with the World Health Organization's 2005 recommendation. This recommendation states that health professionals are in a unique position to play a key role in tobacco control due to their ability to influence social norms and educate children and adolescents about the dangers of tobacco use and secondhand smoke exposure. Health professionals can also play an active role in shaping tobacco control policies, particularly by promoting the WHO FCTC, supporting smoke-free workplaces, advocating for increased tobacco taxes, and providing smoking cessation services.³¹

6 Advocacy through partner networks and other mechanisms: One notable initiative includes the amendment of ministerial regulations. On January 7, 2025, the Cabinet approved in principle the draft Ministerial Regulation on Student Conduct (Amendment No. ...), B.E. as proposed by the Ministry of Education. This amendment updates the 2005 Ministerial Regulation on Student Conduct by adding new prohibited behaviors and expanding the list of harmful substances to include electronic cigarettes (e-cigarettes), electronic hookahs (e-hookahs), and other psychoactive substances as defined under the relevant laws on narcotic and psychotropic substances. Additionally, the Prime Minister endorsed all three proposals submitted by the National Student Council—one of which specifically calls for measures to protect everyone from exposure to e-cigarettes. This marks a positive step forward in the effort to protect Thai children and youth from the dangers of electronic cigarettes.

Viewpoints and Recommendations

As the marketing of electronic cigarettes is now targeting children and youth — the future of the nation — and it is well known that e-cigarettes negatively impact both health systems and social issues, Thailand should seriously consider the first approach proposed by the Ad Hoc Committee on the Study of Laws and Regulatory Measures for E-cigarettes in Thailand. This approach recommends making the use of e-cigarettes explicitly illegal. Thailand should also act in accordance with Article 5.3 of the WHO FCTC, which calls for the protection of public health policy from interference by the tobacco industry. This is crucial to prevent the tobacco industry and related parties from influencing e-cigarette policy — a challenge Thailand is currently facing.

All sectors should call on political and legislative bodies to maintain the existing laws that ban the import and sale of e-cigarettes to safeguard the health of children and youth, and to prioritize the nation's future over tax revenues. Relevant law enforcement agencies must also step up enforcement efforts — with seriousness, consistency, and without corruption — while fostering public understanding about the dangers of e-cigarettes. Additionally, there must be collective action to prevent smoking, including e-cigarette use, from becoming a social norm among youth, to protect both individual and public health.

To effectively address the spread of e-cigarettes, health alliances, civil society, and all relevant sectors must collaborate in monitoring and exposing the marketing strategies used by e-cigarette sellers that target youth. Vigilance is also needed against policy interference by e-cigarette advocacy networks operating through organizations, individuals, and media. Society must be informed, and a strong coalition of public allies must be built to protect children and youth from the dangers of e-cigarettes.

Summary

The issue of the spread of e-cigarettes in Thailand is a significant public health and social problem. The root causes of the e-cigarette epidemic stem from two major issues: the enforcement of laws and the interference of pro-e-cigarette groups who are attempting to influence the country's e-cigarette control policies through legal mechanisms and political channels. Therefore, it is crucial that all relevant agencies, along with health networks and civil society, adopt a clear policy stance that e-cigarettes should be illegal, and work together to drive the policy framework to protect children and youth from e-cigarettes, as agreed upon by the National Health Assembly. This must be done before the spread of e-cigarettes undermines the quality of life of Thai children and youth, the nation's future, to an irreparable extent.

Medical Cannabis

and Policy Confusion

Cannabis is not an ordinary commodity; it is a narcotic substance with potential danger to the brain, mind, body, and society —especially among children and youth. This is especially true when cannabis is being used as an ingredient in snacks, beverages, and food. Therefore, it is necessary to have comprehensive and clear laws to regulate the sale and advertisement of cannabis products, along with strict enforcement of those regulations.



The current Thai government (under Paetongtarn Shinawatra) delivered its policy statement to Parliament on September 12, 2024, stating that "...The government will focus on developing the care and wellness economy and medical services (Medical Hub)." One aspect of this policy is "...The use of cannabis for medical purposes to create added economic value and to control social impacts through legislation." At present, several draft cannabis and hemp bills have been proposed, including versions from the Bhumjaithai Party, the Network of Thai Cannabis Future, and the business sector. As for the version from the Ministry of Public Health (MOPH), during the tenure of Dr. Cholnan Srikaew as Minister of Public Health, the Department of Thai Traditional and Alternative Medicine had completed a draft bill and its public hearing. The MOPH was also preparing to submit the draft for Cabinet consideration, aiming for it to serve as the principal draft for deliberation in the House of Representatives.

This article presents a discussion on the development of cannabis policy, the impacts of cannabis-related policies, and perspectives from various stakeholders, along with policy recommendations to mitigate emerging public health impacts.



Cannabis and Policy Confusion

Thailand decriminalized cannabis by removing it from the narcotics list on June 9, 2022, during the administration of Prime Minister Prayut Chan-o-cha, in accordance with the MOPH's Announcement on Identifying Controlled Substances under Category 5, B.E. 2565. This move made Thailand the first country in Southeast Asia to delist cannabis as a narcotic. The Narcotics Control Board approved the partial decriminalization of cannabis and hemp, allowing certain uses without classifying them as narcotics — provided that the extracts contained no more than 0.2% THC and include CBD, thereby enabling medical applications. The Board also promoted cannabis and hemp as economic crops while maintaining control over production and implementing measures to prevent misuse. However, there was still no comprehensive legislation in the form of an Act to regulate cannabis use. Existing regulations were limited to ministerial regulations issued by the MOPH, which prohibited use among individuals under age 20 years, pregnant women, and breastfeeding mothers. Although there had been efforts to introduce a Cannabis and Hemp Control Act, conflicting policies among coalition parties had stalled the legislative process.

After Thailand removed cannabis from the narcotics list in 2022, networks of doctors, academics, and civil society groups raised concerns about the resulting health impacts. In 2024, these groups issued an open letter to the Chair and the Narcotic Prevention and Suppression Board on Narcotic Drug Control, highlighting the problems arising from cannabis liberalization, and advocating for its reclassification as a narcotic. They presented data showing that, following the delisting, the number of patients receiving treatment for cannabis toxicity increased by 6-7 times, cannabis addiction cases rose by 2-5 times, cases of cannabis-induced psychosis increased by 3-5 times, and the healthcare costs related to cannabis use rose fivefold. This position (of concern about legalized cannabis) was aligned with the policy of then-Prime Minister Srettha Thavisin's administration, which ordered a revision of the MOPH's announcement to permit the use of cannabis strictly for medical and health-related purposes only, and called for cannabis to be reclassified as a dangerous narcotic.

Subsequently, on July 5, 2024, the Narcotics Control Board convened to consider the draft MOPH announcement regarding the classification of narcotic substances under Category 5, proposing that cannabis and hemp be reclassified as narcotics under the Narcotics Act. The majority of the board agreed that, while cannabis has medical and research value, they opposed its use for recreational purposes. The meeting's resolution was to be submitted to the Minister of Public Health, followed by consideration by the Office of the Narcotics Control Board (ONCB), and then issued as a ministerial regulation.² However, Deputy Prime Minister and Minister of the Interior Anutin Charnvirakul opposed the policy, arguing instead for the enactment of a Cannabis and Hemp Act to establish regulatory guidelines without reclassifying cannabis as a dangerous narcotic. This political opposition stalled the attempt to revise the ministerial regulation. Later, a change in government occurred when Ms. Paetongtarn Shinawatra became Prime Minister on August 18, 2024. The Paetongtarn administration approved the approach of regulating cannabis and hemp through discrete legislation, without reclassifying them as narcotics.



Cannabis and Impacts on Health and Society

Cannabis is a plant that is widely recognized for its medical benefits. Cannabis has been recognized for its potential in the development of medicinal formulations, such as treatments for multiple sclerosis. Additionally, cannabis extracts have been used in the treatment of neuropsychiatric symptoms and to address loss of appetite in cancer patients, among other medical applications. As a result, several countries—including Canada, Israel, the Netherlands, the United Kingdom, Switzerland, and certain states in the United States—allow the cultivation of cannabis for medical purposes.

However, Thailand's decision to decriminalize cannabis and hemp in mid-2022 occurred without the implementation of a comprehensive regulatory framework, resulting in a legal vacuum. Cannabis flower buds began to be openly sold, and public consumption became common. Reports emerged of youth using cannabis, and one was dead due to cannabis overdose just five days after decriminalization. Additionally, numerous patients experienced adverse health effects related to cannabis use. 4 According to data from July 26, 2022, by the Centre for Addiction Studies (CADS) in collaboration with the Faculty of Medicine, Chulalongkorn University, it was found that cannabis smoking among youth had doubled.⁵ Meanwhile, the only regulation in place at the time was the Act on the Maintenance of the Cleanliness and Orderliness of the Country, B.E. 2535 (1992), which was used only to control nuisances in public areas. Additionally, several countries had issued warnings to Thai citizens, prohibiting the importation of "cannabis/marijuana and hemp" into their countries, as some countries impose the death penalty for such offenses.

Source: modify from www.freepik.com

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As a result of the potential impacts, a temporary solution was implemented with the issuance of an MOPH announcement on November 23, 2022, designating cannabis as a controlled herb. This decree prohibited the sale to individuals under 20 years of age, as well as to pregnant women or breastfeeding mothers. It also banned the use of cannabis in public spaces through smoking. However, since this decree was only a ministerial announcement, it was considered a subordinate regulation under the authority of the MOPH, and did not receive serious cooperation from other agencies.

In 2024, the Network of Doctors, Academics, and Civil Society Against Narcotics published data showing that the overall number of outpatients treated for cannabis addiction per year increased from 16,643 cases in 2019 to 32,634 cases in 2023—a two-fold increase. The number of inpatients treated for cannabis addiction rose from 1,137 cases in 2019 to 5,924 cases in 2023, or a five-fold increase. Meanwhile, the number of outpatients treated for cannabis-induced psychosis grew from 6,585 cases in 2019 to 20,502 cases in 2023—an increase of three-fold. Inpatient cases for cannabis-induced psychosis rose from 742 cases in 2019 to 3,989 cases in 2023, which is a five-fold increase. Additionally, the cost of treating patients before cannabis was decriminalized (2019-2021) amounted to approximately 3.2-3.8 billion baht per year. After the decriminalization (2022-2023), treatment costs surged to 15-21 billion baht per year—an increase of up to fivefold.

A research project titled Evaluation and Monitoring of the Social and Health Impacts of Cannabis Policy was conducted by Dr. Sawitri Assanangkornchai from the Faculty of Medicine, Prince of Songkhla University. That study found that the sale of cannabis had become increasingly widespread, with the number of cannabis retail points rising from 5,600 in August 2023 to 7,747 in April 2024—most of them located in Bangkok, Nonthaburi, and Phuket.

In addition, cannabis and cannabis-related products were being sold and advertised through online channels such as Twitter, Facebook, and LINE, as well as on platforms like Shopee and Lazada. These products included cannabis, consumption accessories, and even cannabis-infused brownies. Before 2022, the prevalence of cannabis use among the general population in Thailand was consistently below 5%. However, in 2022, it rose to 24.9% and, in 2023-2024, the average remained around 20%.

News on the life - threatening impacts of cannabis
ผู้ป่วยได้รับผลกระทบจากกัญชา
เข้ารักษา รพ.สำนักการแพทย์ กทม.

รพ.เจริญกรุงประชารักษ์
เสียชีวิต
อาการแน่นหน้าอกหลังเสพกัญชา
หัวใจล้มเหลา และกาวะหัวใจหยุคเค้นเฉียบพลัน
Source: www.youtube.com/watch?vrv=Mhd1psstz2l

Regarding cannabis use among adults, adolescents, and youth, the study found that 60% of users consumed cannabis for recreational purposes, 34% for relaxation and sleep aid, and only 6% for medical purposes. Among youth, cannabis use before 2022 was as high as 3.1%. In 2023, 11.8% of high school students, 47.6% of out-of-school youth, and 17.1% of bachelor's degree students reported using cannabis. The leading reason for cannabis initiation among youth remained in curiosity. Furthermore, the data indicated a trend showing that cannabis was not being used as a substitute for other drugs, but rather in conjunction with substances such as alcohol, tobacco, and kratom.

Dr. Sawitri therefore proposed the following: "It is necessary to have comprehensive and clear legislation to regulate the sale and advertising of cannabis products similar to the laws governing tobacco and alcoholic beverages, along with strict enforcement. Additionally, accurate information and education should be provided to raise public awareness that cannabis is not an ordinary commodity, but a narcotic substance that is potentially harmful to the brain, mind, body, and society -especially among children and youth, which is particularly concerning due to its use as an ingredient in snacks, beverages, and food. It is essential to prevent and restrict access to all types of cannabis products."

In addition to health impacts, there were also concerns about the social consequences of cannabis use. Cannabis use has been linked to reduced work efficiency among users, family disruption, and disturbances to others, including neighbors. It has contributed to increased community conflict due to unpleasant odor and smoke, and has also been associated with a rise in traffic accidents and criminal cases. Cannabis has also created challenges for various public officials. These issues were highlighted during the public seminar titled "Where Is Thai Cannabis Headed?" organized by the Thailand Development Research Institute (TDRI) in collaboration with the National Research Council of Thailand (NRCT). A survey conducted among 1,017 Thais age 18 years or older found that approximately one in four had experienced negative impacts from others' inappropriate cannabis use. Meanwhile, individuals who used cannabis themselves reported various adverse effects, such as financial problems, reduced self-control, impaired decision-making ability, reduced driving skill, and a heightened likelihood of experimenting with other drugs, which in turn poses additional risks.

Legal Developments

There have been efforts to push forward a draft Cannabis and Hemp Bill following the delisting of these plants from the narcotics schedule. Although, in principle, a regulatory law for cannabis and hemp should have been enacted beforehand, the Bhumjaithai Party submitted the draft bill for its first reading in the House of Representatives on June 8, 2022. 13 Just one day before the official delisting of cannabis, the draft bill was found to lack coverage on several important issues. As a result, during the committee review stage, the content was expanded from the originally proposed 45 Articles to 94 Articles. 14 The bill was clarified to explicitly include smoking under the definition of consumption, which was not specified in the original draft. Additionally, the number of penal provisions was increased from 3 to 17 Articles. Penalties were introduced for selling cannabis to minors under the age of 20, with a maximum imprisonment of 3 years and a fine of up to 300,000 baht. In cases of illegal importation from abroad, the penalty could be up to 5 years in prison and a fine of up to 500,000 baht. If the imported cannabis is then sold to minors, the penalty would be doubled. 15 However, the draft bill that was under review by the committee would regulate smoking by limiting it to designated areas and prohibiting smoking in public spaces and other locations, except in specifically designated areas or private residences. This means that under this draft law, cannabis smoking would still be permitted with conditions. As a result, the Democrat Party disagreed with the draft and requested that the committee withdraw the bill, arguing that it does not

contain provisions to regulate recreational use. However, the committee refused to withdraw the draft bill. ¹⁶ As a result, when the draft bill was presented to the House of Representatives, there were five instances of the session being adjourned during the review of the bill. This was due to objections from the Democrat Party and some opposition parties, from December 2022 to February 2023. Ultimately, on February 28, 2023, the bill was unable to proceed, leading to its rejection. ¹⁷

After the election and the formation of the government under the leadership of Prime Minister Srettha Thavisin, the Bhumjaithai Party, as a coalition partner, moved forward by proposing the cannabis and hemp bill to the House of Representatives. 18 This is in contrast to the Pheu Thai Party, which had campaigned consistently against the policy of cannabis liberalization.¹⁹ In an interview at that time, PM Srettha stated that the use of cannabis would be restricted to medical purposes only; however thousands of cannabis retail stores had already opened across the country.²⁰ In addition, PM Srettha also gave a policy directive to the MOPH to amend the ministerial regulations, returning cannabis to a Category 5 narcotic, and to expedite the issuance of ministerial regulations allowing cannabis to be used solely for medical and health purposes.²¹ During the period from June 11 to 25, 2024, the Thai Food and Drug Administration (FDA) received public feedback on the draft MOPH announcement regarding the classification of cannabis and hemp as narcotics in Category 5. The proposal aimed to return cannabis flowers and hemp to the narcotics list under

Category 5. Approximately 100,000 people provided feedback, with no less than 80% agreeing to reclassify cannabis as a narcotic once again.²²

Draft MOPH announcement regarding the classification of narcotics in Category 5, as revised in 2024.²³ The draft MOPH announcement stipulated that cannabis (Cannabis), plants from the Cannabis genus, and substances or materials derived from cannabis plants, such as resin, as well as hemp, would be classified as narcotics in Category 5, except for the bark, stalk, fibers, branches, roots, leaves without flowers, and extracts containing no more than 0.2% THC, as well as cannabis seeds, which would not be considered narcotics. This means that the flowers of both cannabis and hemp would be classified as narcotics in Category 5.24 The target was to have the ministerial regulations come into effect starting from January 1, 2025. The MOPH submitted the draft ministerial announcement to the Office of the Narcotics Control Board (ONCB) on July 12, 2024. However, after the government transitioned from PM Srettha to PM Paetongtarn Shinawatra, the ONCB suspended its review to wait for clarity from the new government. Subsequently, the Paetonatarn administration decided to proceed with the draft Cannabis-Hemp Act instead of reverting the plants to narcotics.

On October 30, 2024, Dr. Thewan Thanirat, Deputy Director-General of the Department of Thai Traditional Medicine and Alternative Medicine, revealed that the department had completed the draft Cannabis-Hemp Act and submitted it to the Secretariat of the Cabinet for review and revision. Afterward, it would be presented to the Cabinet for consideration and forwarded to various agencies for further consultation. The draft would then be sent to the Cabinet for legal review before being sent back to the Cabinet and presented to the House of Representatives for further consideration. The entire process was expected to be completed within a year. ²⁶



Summary of Key Points in the New Cannabis-Hemp Draft Bill

The draft Cannabis and Hemp Bill by the Department of Thai Traditional Medicine and Alternative Medicine, MOPH, will be used as the main draft for Cabinet consideration and approval, and will then be proposed to the House of Representatives.²⁷ This draft law has already undergone consultations with various agencies and consists of 77 articles, compared to the original draft from the Bhumjaithai Party, which had 94 articles. The main objectives of the law are:

1 The use of flower buds is for medical purposes

- only
- 2 Cannabis is to be used for research and studies
 3 Any products derived from flower buds that have been approved by the FDA and are not related to this law can only be used for consumption. Additionally, under this law, use of cannabis or hemp parts such as roots, branches, leaves, and the cannabis plant be for other purposes, such as clothing, are not identified. As for permission requests, these will be addressed separately in future ministerial regulations.

Key content of the draft law: A Cannabis and Hemp Committee shall be established, chaired by the Minister of Public Health. The committee shall have the authority and duty to propose policies and strategies regarding the control and promotion of cannabis, hemp, and their extracts, as well as the protection of public health, to the Cabinet for consideration and approval. It shall also determine measures to promote research, development, and use of cannabis, hemp, and their extracts in medicine, agriculture, industry, commerce, and other beneficial purposes. Cultivation of cannabis or hemp requires a license, and for large-scale cultivation, the area must not exceed 400 rai.

Key Prohibitions under the Draft Law

- Advertising or marketing communication related to cannabis or hemp flowers, resin, extracts, or devices and equipment associated with smoking cannabis is prohibited.
- The sale of cannabis, hemp, or extracts for consumption—whether for commercial purposes or given away with or without compensation or any other benefit—is prohibited for individuals under the age of 20, pregnant women, breastfeeding women, and anyother persons as designated by ministerial announcement. This prohibition must be displayed at the point of sale or through other distribution channels, including consumption warnings.
- 3 Prohibition of the sale of cannabis through vending machines, electronic methods, giveaways, promotions, exchanges for other goods, or offers of rights to attend competitions, performances, services, sweepstakes, prize drawings, or any other benefits as incentives.
- The sale of cannabis is prohibited in temples or places of religious ceremonies, educational institutions, dormitories, public parks, zoos, amusement parks, and other locations as specified by the minister.
- Driving a vehicle while under the influence of cannabis or hemp is prohibited.
- 6 Consumption of cannabis, hemp, or extracts is prohibited unless for the following purposes:
 - Treatment, cure, or alleviation of human illnesses, disease prevention, or use in humans to improve health or bodily functions
 - Study, analysis, or research conducted by state agencies responsible for research for medical or pharmaceutical purposes
 - Use in herbal products, medicine, food, or cosmetics

The Stance of Various Parties toward the Draft Cannabis and Hemp Act

Although the new draft law provides greater clarity—such as removing location-based conditions for cannabis smoking found in the previous version and introducing new provisions under Article 46 that limit consumption strictly to purposes of treatment, medical research, and use in herbal products—it still does not explicitly or clearly prohibit cannabis smoking. Furthermore, violations involving cannabis use outside the legally permitted purposes are subject to a fine of up to 60,000 baht under Article 67, but no imprisonment is imposed. In addition, the draft law still allows the sale of cannabis, albeit under certain conditions—such as prohibiting its sale for consumption to individuals under the age of 20. This means that if the new law reaffirms that cannabis flowers can only be used for medical purposes, cannabis shops that currently operate as designated spaces for public recreational use would immediately become illegal businesses. In response, the Bhumjaithai Party believes that the draft law could negatively impact cannabis retail shops and supports allowing cannabis entrepreneurs to continue operating by seeking licenses to convert cannabis-smoking venues into clinics that provide consultation and permit smoking for those with legitimate medical needs. The matter will be further deliberated during parliamentary and committee discussions.

Mr. Panthep Puapongpan, Dean of the Eastern Medicine College, Rangsit University, ²⁸ proposed five conditions in response to the new draft law that would classify "cannabis flowers, resin, and extracts" as narcotics:

- Cannabis flowers, resin, and extracts should be reinstated as narcotics under certain conditions—those who comply with the law must be protected, while those who violate it, such as shops illegally importing products, selling to children or youth, or operating without a license or in breach of regulations, must face penalties under the Narcotics Code. These measures should be enforceable immediately, without waiting for January 1, 2025.
- 2 Medical freedom must be granted across all professions, without the previous restrictions. Physicians of all specialties should be allowed to prescribe cannabis freely, with responsibility and follow-up, as each profession is already regulated by its own professional council.

- Patients with prescriptions from any medical profession must have access to cannabis. Cannabis shops would not need to shut down but should instead adapt to become regulated herbal dispensaries serving patients with valid prescriptions from any licensed medical practitioner.
- Confidence must be built among investors and business operators. Products containing "cannabis flowers, resin, or extracts" must comply with relevant laws, including the Herbal Products Act, the Food Act, the Drug Act, and the Cosmetics Act.
- A study committee composed of all stakeholders should be established to resolve ongoing academic disagreements, in order to improve the regulatory framework or to expedite the passage of the Cannabis and Hemp Act in the House of Representatives in parallel.

Civil society networks have taken a clear stance that cannabis and hemp should be used for medical purposes only, and they have continued to mobilize around this issue. On July 30, 2024, a group of 67 individuals—including doctors, academics, and members of the public from various educational institutions, as well as former executives of drug control agencies—issued a statement and policy analysis titled "A Comparative Analysis of Cannabis Policy Options: To Reclassify or Not to Reclassify Cannabis as a Narcotic." The statement outlined the following two policy options for cannabis:

Control cannabis through a dedicated cannabis law without reclassifying it as a narcotic. This option would take approximately two years to pass through both the House of Representatives and the Senate, meaning that a cannabis law would only come into effect by the end of 2026. During this period, Thailand would remain in a state "where recreational cannabis use is effectively allowed," potentially for several more years. The projected consequences are substantial—for example, there would be an estimated 95,148 outpatient and 21,048 inpatient cannabis addiction cases annually, representing a 6-fold and 15-fold increase, respectively. Additionally, 54,048 outpatient and 29,052 inpatient cases of cannabis-induced psychosis would be expected per year, an increase of 7 and 29 fold, respectively. In other words, if recreational cannabis use is allowed to continue until 2026, the number of addiction and psychosis cases linked to cannabis could increase by 6 to 29 times compared to the period before cannabis was decriminalized in 2022.

2 Immediately reclassify cannabis as a narcotic and expedite the enactment of a cannabis-specific law. Under this option, cannabis would once again fall under the control of the Narcotics Code, which prohibits recreational use, but still allows medical use. The number of patients in all four groups mentioned above would likely return to pre-2022 levels, before cannabis was removed from the narcotics list, once the new cannabis law is passed and comes into force through both houses of Parliament.

Recommendations for Mitigating the Impact of Cannabis-Related Issues

The new draft law should address real issues currently affecting society in a targeted and effective manner. The several years during which cannabis has existed in a legal vacuum have provided sufficient lessons for lawmakers to consider the wide-ranging impacts, rather than focusing solely on protecting the interests of specific groups. However, the proposal from civil society to temporarily reclassify cannabis as a narcotic—until the Cannabis and Hemp Bill is finalized—could have repercussions for cannabis entrepreneurs and farmers. As such, remedial measures could be introduced to mitigate these impacts. A key interim solution is for relevant agencies, from the ministerial level downward, to use subordinate legislation to address current problems. For instance, the MOPH has issued a ministerial regulation classifying cannabis as a controlled herbal substance and restricting sales to certain groups. The current problem, however, is the lack of regulation over unauthorized retail shops and street vendors. Local authorities should exercise their powers to impose and enforce such controls. Additionally, the online sale of cannabis remains an issue, and relevant agencies—such as the Ministry of Digital Economy and Society—should take action to regulate this area as well.

In addition to the recommendations from academics, public education campaigns—especially those targeting youth—are also a crucial part of reducing the impact of cannabis-related issues. Health agencies such as the Thai Health Promotion Foundation (ThaiHealth) play an important role in this effort. The Foundation has launched the project "Smart Kids Know Cannabis" which aims to support and empower youth leaders to carry out creative activities that raise awareness and understanding of the harms of cannabis within schools and communities. Initiatives like this should be expanded and supported further as a way to build protective awareness—similar to anti-smoking campaigns. Another important aspect is how society perceives cannabis. It is essential to shape public understanding of cannabis as a legal drug, similar to tobacco, rather than promoting the idea that it is a 100% herb. In fact, tobacco has stricter regulations than cannabis products, including restrictions on public sales and requirements for packaging and labeling—such as graphic health warnings designed to deter use. Meanwhile, cannabis, despite posing potentially more severe health risks, lacks comparable controls. This lack of regulation is one of the reasons cannabis has become so easily accessible to young people—much like e-cigarettes.

Summary

It is evident that removing cannabis from the narcotics list without any accompanying legislation has created a legal vacuum that, over time, has generated more problems for society than the benefits it was meant to deliver. This situation is often described as "fastening the first button wrong," now requiring efforts to unbutton completely and start again properly. The key solution lies in collaboration among government agencies, lawmakers, and politicians involved in the legislative process. There should be a joint committee to find a way forward during this legal limbo while the new law is being drafted. This collaboration should include: the government, which sets policy direction; the legislative branch, which is responsible for passing laws; and civil society, which reflects the real-world impact and lessons learned from past missteps—ensuring that the new legislation is robust and well-informed.

Thailand and the Day Casinos Become Legal: It May Not Be Worth the Cost



While legalizing casinos may attract investment and generate significant revenue for the state, it could worsen income inequality, exacerbate household debt, create problems related to gambling addiction, and foster the growth of illegal businesses associated with gambling and money laundering.

Introduction

On January 13, 2025, Thailand's Prime Minister Paetongtarn Shinawatra announced the results of the Cabinet meeting, stating that the meeting had approved in principle the draft Entertainment Complex Business Act, as proposed by the Ministry of Finance. The objective is to boost domestic tourism, promote domestic investment, and address the issue of illegal gambling.¹

The so-called entertainment complex business is, in fact, a "casino complex," which includes hotels, restaurants, luxury brand shops, amusement parks, and various entertainment activities—similar to those found in Las Vegas and Macau. Although Jirayu Huangsap, spokesperson for the Prime Minister's Office, added in a statement that the casino portion would account for only 10%, the rest would consist of entertainment and tourism facilities capable of attracting large numbers of visitors and tourists to international conferences, world-class exhibitions, and concerts, as well as for recreation, e.g., water parks, and amusement parks.

However, Pakorn Nilprapunt, Secretary-General of the Office of the Council of State, expressed the view that the government's legislative principles should be based on government policy. Yet, the draft law proposed by the Ministry of Finance was primarily written based on observations made by the House of Representatives' committee, focusing solely on the entertainment complex concept. This is narrower than the government's broader policy, which emphasizes "man-made destinations"—large-scale resorts like those found abroad, featuring golf courses, entertainment venues, family accommodations, water parks, and amusement parks for children.

Thailand and Its Encirclement by Casinos in Neighboring Countries

Anyone who has recently had the chance to travel to the Thai-Myanmar border area at Mae Sot District in Tak Province will see, on the Thai side, traditional villages lined up in the typical lifestyle of rural communities. But when looking across the Moei River to the Myanmar side, one will see clusters of large buildings brightly lit at night across the entire area—known as "Shwe Kokko," a city and entertainment complex funded by Chinese investors. It houses hotels, casinos, sports facilities, and infrastructure. More importantly, it has become one of the world's largest hubs for transnational crime, posing a looming threat right at Thailand's doorstep. In addition to Shwe Kokko in the west, Thailand's eastern border is also lined with numerous casinos in Cambodia—such as in Poipet, located on the border with Aranyaprathet District, Sa Kaeo Province; and in Koh Kong Province, adjacent to Trat Province. In the northeast, across



the border in Laos, there is a casino in Savannakhet, opposite Mukdahan Province, which is popular among Thai gamblers who cross via the Second Thai-Lao Friendship Bridge. In the north, near Chiang Rai's Golden Triangle border area, there is also a large casino in Bokeo, Laos. Moreover, the town of Tachileik in Myanmar, opposite Mae Sai District in Chiang Rai, also hosts a casino. Another major casino is located in Mong La, in Shan State, near the Chinese and Thai borders. This area is a gambling hub situated in a special administrative zone where Myanmar's laws are more lenient.

The proliferation of casinos surrounding Thailand from all directions has led to a massive outflow of Thai gamblers traveling to neighboring countries. According to the Center for Research on Gambling Prevention and Mitigation (2023), it estimated that in 2022-2023, Thai gamblers spent a total of 150 to 200 billion baht per year on gambling in neighboring countries.

On the political front, there have been ongoing efforts to explore solutions to illegal gambling and the feasibility of opening legal casinos in Thailand. Ultimately, on March 28, 2024, the House of Representatives approved the study report by the ad-hoc committee tasked with considering the establishment of entertainment complexes as a means to address illegal gambling and to promote the country's economic interests.³

The resolution by the House of Representatives prompted 99 academics to issue a joint statement opposing the move. They argued that, from an economic standpoint, gambling is not considered a productive economic activity. From a medical perspective, prolonged exposure to a gambling environment and participation in fast-paced betting can overstimulate emotional responses, leading to excessive gambling behavior and, ultimately, addiction. Legally, gambling activities can serve as a conduit for money laundering from illegal businesses and can also become a source: of illicit income for corrupt government officials or politicians.⁴

It is evident that the policy on casinos is one that involves intense ideological and interest-based battles among various groups in society, and may have both wide-ranging positive and negative impacts. This article discusses the pros and cons of casinos, summarizes lessons from legalized casinos in neighboring countries, and reflects on the policy perspectives of different stakeholders, with the aim of encouraging Thai citizens to participate in shaping policy based on adequate information for informed decision-making.

The Draft Act on Entertainment Complex

Going back to 2015, Police General Somyot Poompanmuang, who was then the National Police Chief, publicly supported the idea of the government opening legal casinos to address the problem of illegal gambling. However, the proposal was rejected by Prime Minister General Prayut Chan-o-cha, who did not agree with the concept. However, political movements have continued to periodically push for the legalization of casinos. This eventually led to the establishment of an ad-hoc committee to study the opening of entertainment complexes. The committee's report was later approved by a parliamentary vote. In 2024, the Pheu Thai-led government, headed by Ms. Paetongtarn Shinawatra, brought the policy on entertainment complexes forward as an urgent agenda item. The government argued that bringing the untaxed and underground economy -estimated to be worth more than 50% of the country's GDP-into the formal tax system would enable the state to allocate this revenue toward education, healthcare, public infrastructure, and subsidies for basic living expenses.⁶

Subsequently, the Ministry of Finance submitted the draft legislation to legalize entertainment complexes for Cabinet consideration, leading to the Cabinet's resolution approving, in principle, the draft Entertainment Complex Business Act on January 13, 2025. Prior to this, the Cabinet had also approved a draft Royal Decree on Designation of Areas for Service Establishment Permission in Rayong Province (No...) B.E. —covering 2,662 rai within the Eastern Aviation City (EECa) in Ban Chang District. It was claimed that a public hearing had been conducted, with the majority of participants reportedly supporting the project.⁷ It is expected that this area may become one of the target locations for an entertainment complex.

Under the key provisions of the draft Act on Entertainment Complex Business, the definition of an entertainment complex⁸ is provided in Article 3, which specifies that it is a facility that combines various types of entertainment establishments within a single area, such as shopping malls, hotels, sports arenas, amusement parks, restaurants, nightclubs, and One Tambon One Product (OTOP) zones, among others. It must include at least four types of businesses and may also feature additional services as determined by the policy committee, alongside a casino. A policy committee consisting of nine members will be responsible for determining the number of licenses and the areas where these entertainment complexes can operate, as well as the criteria, methods, conditions for providing credit to gamblers, and other regulations as stipulated by the law.9

The operational guidelines are as follows: 10

- 1 The license holder must be a company or a public company registered in Thailand with a paid-up capital of more than 10 billion baht.
- 2 The license is valid for 30 years and can be renewed for periods not exceeding 10 years at a time.
- 3 For casino services, there is a list of prohibited individuals who are not allowed to enter, such as those under 20 years old or individuals banned by the relevant authorities.
- The location and the number of licenses are determined by the Royal Decree.
- **5** The proportion of the casino area within the entertainment complex and the ratio of Thai and foreign employees are defined by the policy committee.
- **6** Online gambling is prohibited (i.e., there is no connecting system or link that allows individuals outside the casino to gamble).
- 7 It is prohibited to solicit, advertise, promote, or conduct marketing activities related to the casino unless permitted by conditions set by the management committee.

The types of businesses permitted, as outlined in the annex of the Act, include ten categories: shopping malls, hotels, restaurants, nightclubs, discotheques, pubs or bars, sports venues, yachts and cruising clubs, gaming venues, swimming pools and water parks, amusement parks, areas for promoting Thai culture and One Tambon One Product (OTOP) goods, and other businesses as specified by the policy committee.

The ceiling for fees is as follows: Application fee of 100,000 baht per application; First-time license of 5 billion baht per license and 1 billion baht annually; License renewal of 5 billion baht per license and 1 billion baht annually; Substitute license of 100,000 baht per license; and Casino entry fee for Thai citizens of 5,000 baht per visit. The Office for the Regulation of Entertainment Complex Business will receive income from subsidies, various fees, and the entry fees from Thai citizens. After deducting expenses, the remaining revenue will be remitted to the national treasury.

Lessons Learned from the Casino Business in Some of Thailand's Neighbors

Several Asian countries have allowed the establishment of casinos, including Singapore, the Philippines, Cambodia, Laos, and Macau. Some countries have successfully managed their casinos and benefited from them, while others have faced failures in policy and management, leading to significant social and economic issues. A comparative study of the casino policies in these locations could help Thailand learn from their strengths and weaknesses, enabling the adjustment of Thailand's casino policies to reduce negative impacts.





Macau, Hong Kong



- I Singapore is an excellent example of effective casino management. The government has permitted only two casinos, Marina Bay Sands and Resorts World Sentosa, both operated by global companies. Singapore's policy focuses on strict regulation to prevent social problems (e.g., excessive gambling) and to promote the use of casinos as a tool to attract high-quality tourists. Singapore's strengths include modern infrastructure, high security, and the integration of casinos with other tourist attractions such as shopping malls and luxury hotels.¹¹
- Macau is known as the "Las Vegas of Asia" due to being the largest gambling hub in the world. Macau has a liberalized gambling policy that attracts foreign investors, particularly from casino companies in the United States and Hong Kong. The strengths of Macau include its long history in the casino industry and its status as a Special Administrative Region of the People's Republic of China, which allows it to legally operate gambling establishments.¹²
- 3 The Philippines has a policy of promoting casinos through the creation of Entertainment City in Manila, a large-scale project that combines casinos, hotels, and other entertainment venues. The strengths of the Philippines include low labor costs and the variety of tourist activities that can attract visitors throughout the year. 13
- Cambodia allows the free establishment of casinos in special economic zones, such as in the city of Pailin and along the Thailand-Cambodia border, particularly in Poipet, which is a major gambling tourism destination. However, the lack of strict regulation has led to social problems ¹⁴ such as money laundering, human trafficking, and illegal gambling. Additionally, most of the revenue from casinos does not benefit the general population but instead falls into the hands of business and political elites. Cambodia's weaknesses lie in the lack of sufficient infrastructure and a weak legal system, which make it difficult to manage the social and economic impacts effectively.
- 5 Laos has casinos in special economic zones, such as Savannakhet and Boten, which attract gamblers from neighboring countries like Thailand and Vietnam. However, Laos' policy lacks clarity and there is no systematic regulation, leading to problems like excessive gambling among the local population and legal violations, such as illegal gambling and corruption.¹⁵ Moreover, most of the revenue from casinos has not been used to sustainably develop the country but has instead served the personal interests of those in power.

For Thailand, learning from the casino experience of its neighbors offers insight into how allowing casinos can bring both benefits and drawbacks, depending on government policies and management. Based on the experience of countries like Singapore and the Philippines, and the territory of Macau (which have successfully regulated casinos and used them as tools to stimulate the economy and tourism), Thailand could also gain similar benefits if it establishes and enforces effective controls. In terms of revenue and employment, casinos can contribute to tourism income and tax revenue for the government, as well as generate jobs in the service and tourism sectors. Regarding tourism development, casinos can attract international visitors, especially from China and ASEAN countries. In terms of investment, legalizing casinos may appeal to foreign investors, and promote the development of special economic zones such as border towns or tourist districts.

On the other hand, poorly designed or managed policies could lead to significant negative impacts. For example, there are the adverse social issues related to casinos. Gambling may lead to addiction, debt, and crime if not strictly regulated. There is also the risk of abetting corruption. Casino operations could be exploited for personal gain by politicians and influential figures if transparency is lacking. There are potential cultural impacts which Thailand would want to avoid. Casinos conflict with Thai religious and cultural values, which emphasize moderation and simplicity. Therefore, if Thailand aims to successfully legalize casinos, the country must focus on strict regulation. The government must implement clear laws and measures to prevent social problems and corruption, ensure that benefits and revenue from casinos are distributed to support national and community development sustainably, and prioritize public participation by gathering inputs from all sectors before making any decisions.

Information from the Study: What Does Thai Society Stand to Gain and Lose from Legalized Casinos?

The report from the ad hoc committee on studying the establishment of entertainment complexes highlights several positive impacts. It notes that entertainment venues can reduce local unemployment due to increased job opportunities. They also potentially decrease reliance on illegal gambling, which in turn helps lower crime and suicide rates. The report cites Singapore as a case study, where entertainment resorts attracted over 300 billion baht in foreign investment, creating more than 20,000 high-paying jobs, boosting tourism revenue by over 47%, and increasibg the country's GDP by around 2%, or approximately 240 billion baht.

Paopoom Rojanasakul, Deputy Minister of Finance, stated that five major international corporations have expressed interest in investing in integrated entertainment complexes and casinos in Thailand. These include Las Vegas Sands Corporation, Wynn Resorts, Caesars Entertainment, and Hard Rock Café—all U.S.-based companies—as well as MGM China Holdings Limited, headquartered in Macau. On the Thai side, at least four local business groups have shown investment interest:

1) U-Tapao International Aviation Co., Ltd. (UTA); 2) CP;

3) The Mall; and 4) The Royal Turf Club of Thailand under the Royal Patronage which has proposed a project titled "The Royal Siam Haven," with an investment value of over 200 billion baht.

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The Center for Economic and Business Forecasting at the University of the Thai Chamber of Commerce conducted a survey on the economic impact of establishing entertainment complexes on the Thai economy and found that: ¹⁷ It is estimated that each entertainment

complex could attract no less than 100 billion baht in foreign investment, increase tourism revenue and income for entertainment businesses, as well as generate employment and boost government revenue. On the other hand, the negative impacts include increased income inequality, with wealth concentrated among casino operators and capitalists, a rise in household debt, gambling addiction issues, and the acceleration of illegal businesses associated with gambling.

Another major concern related to the emergence of casinos is transnational crime and illegal businesses that often accompany casino operations. In Myanmar, there are reportedly 15 casinos spread across various cities, operating under the guise of legal gambling establishments. However, many of them are actually run by "gray" Chinese investment groups (i.e., fugitives from China) who are involved in illegal activities, including call center scams and online gambling rings. In Laos, news reports have revealed that the Kings Romans empire, founded by a Chinese businessman named Zhao Wei, has become a hub for transnational crime, with one of its core businesses being drug trafficking. 18

Academic Symposium: Is It Time for Casinos in Thailand? Looking at the Present, Dreaming of the Future $\,$



Source: www.youtube.com/watch?v=fDHr9AeAgnw

The report from the Center for Gambling Studies, Faculty of Economics, Chulalongkorn University (2023) states that: 19 Although large-scale casinos can create significant employment opportunities and stimulate tourism, in reality, the primary actors in casino investment and the main beneficiaries are Chinese capital groups. Gambling businesses are often intertwined with influential figures and other "gray" businesses. example, in Laos, the Golden Triangle area is under the influence of Zhao Wei, who is behind various gray enterprises in the ASEAN region. In Cambodia, areas like Poipet and Sihanoukville have become hubs for Chinese transnational crime syndicates. These include scams luring people into illegal work, online investment fraud, human trafficking, and prostitution. The Center for Gambling Studies has suggested that cracking down on illegal gambling and gray businesses in Thailand is more necessary and urgent than legalizing casinos. If gray Chinese capital is allowed to expand under the legal framework of casino legalization, Thailand could become the next base for transnational organized crime.

Civil Society Opposes Casinos in Thailand

On March 28, 2024, a network of civil society groups from 16 Thai provinces submitted a letter to the House of Representatives' Committee on Entertainment Complex, expressing concern that the establishment of entertainment complexes and casinos should be carried out with caution and strict regulation. The civil society network conducted a survey with a sample of 2,716 people, and found that 85.6% opposed having a casino in their province or near their community. Meanwhile, 88.9% did not trust that the government would be able to control illegal businesses associated with gambling venues. These findings align with data from a survey on the establishment of entertainment complexes conducted by the Center for Economic and Business Forecasting at the University of the Thai Chamber of Commerce, which found that the highest proportion of respondents—41.6%—were opposed to such developments, while the highest proportion in favor of opening entertainment complexes was 2.7%.

The academic sector organized a seminar on the topic "Is it time for a casino in Thailand? Looking at the present, dreaming of the future" in April 2024. Asst. Prof. Dr. Chidtawan Chanakul from the Faculty of Economics, Kasetsart University, stated that legalizing casinos may provide a short-term economic boost, but that boost is unrelated to long-term economic growth. She also noted that the government's promotion of this policy by citing the case of Singapore does not take into account the differences in law enforcement. Singapore ranks number one in the world for law enforcement with a score of 9.0, while Thailand only scores 5.5, highlighting a significant disparity. Dr. Mathurada Suwannapho, a medical doctor, mentioned that the World Health Organization has classified gambling addiction as a disease, with 2 out of 10 gamblers needing medical treatment because they cannot escape this cycle of addiction. Currently, the Thai Ministry of Public Health (MOPH) has provided medication for gambling addiction, with over 100,000 people accessing the service. Therefore, introducing a legal casino to address illegal gambling is seen as a significant challenge.

Assoc. Prof. Dr. Nualnoi Treerat, Director of the Center for Gambling Studies, suggested that, if Thailand were to have a legal casino, the country would need to first develop a solid infrastructure to support it.²³ There must be a system to support individuals affected by gambling addiction or those impacted by it, as well as a system to monitor and prevent excessive use of the service, particularly among vulnerable groups. Additionally, there must be a system for gathering public opinion, especially in areas where the government permits the establishment of a casino. Community forums should be organized to allow local residents the opportunity to understand and debate the advantages and disadvantages of having a casino nearby. Furthermore, before allowing the legalization of casinos, the government must ensure that casinos are not linked to criminal organizations, both domestic and international. A reliable regulatory body for overseeing gambling activities must also be established.²⁴ For example, in Singapore, there is an agency called the Casino Regulatory Authority of Singapore (CRA), which is responsible

for overseeing the gambling industry in Singapore. The CRA monitors illegal activities in casinos, handles complaints, conducts investigations, and resolves disputes between players and operators. It also allocates 17% of the revenue to a fund for mitigating the impacts of gambling, which is managed by the National Council on Problem Gambling (NCPG). The NCPG is made up of experts such as psychologists, social workers, lawyers, and social scientists, who work to educate the public about the risks of gambling and provide a comprehensive system of counseling and treatment services.

Looking back at Thailand, the government already has mechanisms in place to reduce the impacts of gambling, but they are insufficient. There is a lack of a central agency responsible for overseeing these efforts, as well as a shortage of personnel and budget to carry out this work. If the legalization of casinos were to be approved, it would be necessary to allocate revenue from the business into a fund to mitigate the impact of gambling. That said, focusing solely on revenue for the government is not the right approach at this time, as Thailand lacks sufficient data to analyze the economic and social costs to guide the decision on whether to legalize gambling.

Summary

Although the entertainment complex industry has immense value and can generate significant income for Thailand and its government, it also brings with it several potential, adverse social impacts, such as gambling addiction among the public, the spread of drugs in entertainment venues, money laundering by illegal businesses, mental health issues in society, the loss of ecosystems due to the construction of large entertainment complexes, and the ensuing household debt problems. The lessons from casinos in Thailand's neighbors may serve as a cautionary tale for Thailand to reconsider whether it should risk the expansion of gray capital groups that come with casinos, and the problems of transnational crime, which could potentially harm Thailand's tourism industry in the long-term. However, if the government is determined to proceed with legalizing casinos, it is essential to follow the recommendations outlined in the Study on Entertainment Complexes, including collaborating with academic institutions to thoroughly study the impacts of such developments, establishing a reliable and independent regulatory body for gambling activities with transparency (as seen in Singapore), creating a fund to mitigate the effects of gambling, educating the public about the risks, launching programs/activities to reduce risks for individuals vulnerable to gambling (e.g., those with mental health issues, youth, the elderly), and establishing a comprehensive system for counseling and treatment services.





5 Lessons Learned from

"The iCon': How to Avoid a Ponzi Scheme

66

The damage caused by Ponzi schemes stems from the trap of the word "wealth." However, looking beyond the personal errors driven by greed, this problem also arises from the laxity of the law and the agencies responsible for monitoring and preventing the expansion of Ponzi schemes, which lead to widespread damages.



Introduction

On October 5, 2024, a popular television program on Thai Channel 3 received a complaint from victims regarding an investment issue with The iCon Group, which quickly became major news across all media outlets. Later, on October 10, 2024, a group of people visited the Consumer Protection Police Division (CPPD) to file a formal complaint against The iCon Group Co., Ltd. and its associates. The case involved individuals who had signed up as sales representatives and were encouraged to invest money, with a focus on fundraising, emphasizing recruitment into a network rather than actual product sales. This led all media outlets to expose the incident, and reflect on similar cases that had previously been ruled by the courts as Ponzi schemes. On October 16, 2024, police from the Central Investigation Bureau (CIB) arrested 18 suspects from The iCon Group, including Mr. Warathaphon Waratyaworrakul ('Boss Paul') and several other well-known celebrities. The charges included fraud and deceit, as well as the unlawful or deceptive introduction of false information into a computer system that could potentially harm the public. Subsequently, the

Department of Special Investigation took over the case and pressed charges against the suspects under the royal decree governing Ponzi schemes and the Direct Sales Act.

The damage caused by Ponzi schemes is not a new issue in Thailand; it has been ongoing for some time. A common factor among the victims in many such cases is the trap of the word "wealth," which serves as a lure that anyone can fall for. However, looking beyond the personal errors driven by greed, this problem also arises from the laxity of the law and the agencies responsible for monitoring, warning, and preventing the expansion of Ponzi schemes, which lead to widespread damages, as seen in the case of The iCon Group. This case involved 368,257 individuals within the network, amounting to approximately 11,102,182,500 baht in damages. This article summarizes and discusses network businesses and Ponzi schemes, legal issues, consumer protection, and suggestions for creating a proper understanding to prevent consumers from falling victim to network Ponzi schemes.

Damages from The iCon Group

Report to the police

5,648 cases

Value of damages

1,611 million baht

Asset seizure

225 million baht

Source: Modify from Facebook page เคลียร์ ขัด ขัด

The Scandalous Case of the iCon Group: Which Crimes Were Committed?

The iCon Group is a network business that experienced significant success and rapid growth since its establishment in 2018. In just 5-6 years, the business grew to have over 300,000 network members and a business value exceeding 10 billion baht. What made The iCon Group stand out from its competitors was

- ① Use of celebrity power, bringing many famous entertainment figures as presenters and brand ambassadors
- Network marketing, using a network marketing system that allowed products to reach consumers quickly through distributors
- 3 A wide variety of products, including dietary supplements, cosmetics, and everyday consumer goods
- Building a strong brand by focusing on a modern and credible image

However, as time passed, the business, which lacked transparency and good governance, began to face problems. Several thousand victims came forward, accusing The iCon Group of the following:

- Fraud, as they invested in the business without receiving the returns as promised
- 2 Enticing investment with false information about returns and risks to convince people to invest
- 3 Creating a pyramid marketing system, which is an illegal business model

On October 17, 2024, investigators from the CPPD brought the suspects from The iCon Group to request detention in court on charges of jointly defrauding the public under the Criminal Code, Articles 341 and 343, as well as committing fraud or deception by entering false

Products under The iCon Group



Source: www.thairath.co.th/money/economics/thai_economics/2819129

or distorted computer data, whether wholly or partly, in a manner that is likely to cause damage to the public, under the Computer-Related Crime Act, B.E. 2550 (2007), and its Amendment (No. 2), B.E. 2560 (2017), Article 14 (1), in conjunction with Criminal Code, Article 83.³

On October 24, 2024, the Department of Special Investigation (DSI) announced that it had taken on the case of The iCon Group as a special case, believing that the executives of The iCon Group and its network were involved in a joint criminal act. They allegedly used funds obtained from defrauding the public into investing in the business to transfer or alter a large amount of property, which is linked to the underlying criminal activity under the Anti-Money Laundering Act, B.E. 2542 (1999). Upon investigation, assets worth several hundred million baht were found, with credible evidence suggesting they were acquired during the commission of a crime. ⁴ The DSI found that there was the transfer, receipt, or alteration of assets obtained from the criminal act of defrauding the public. This constitutes a criminal offense of money laundering, which is listed under the offenses in the Special Case Investigation Act, B.E. 2547 (2004) and its Amendments. Therefore, the DSI accepted this case as a special criminal case.⁵ On November 11, 2024, the Special Investigation team, case number 119/2567, filed additional charges against the suspects, who at that time numbered 18 individuals and one juristic person. The charges included violations of the Emergency Decree on Borrowings Which Are Regarded as Public Cheating and Fraud, B.E. 2527 (1984), Articles 4 and 5, and the Direct Sale and Direct Marketing Act, B.E. 2545 (2002), Articles 19 and 20.6

Summary: The 18 individuals and one juristic person have been accused of public fraud, violations of the Computer-Related Crime Act, violations of the Direct Sale and Direct Marketing Act, and money laundering offenses. The DSI has identified the primary business model as online product sales, including a wide range of products such as dietary supplements, cosmetics, and general consumer goods.

The Ongoing Chain of Ponzi Schemes in Thailand

The iCon Group is not the first Ponzi scheme in Thailand to cause losses amounting to billions of baht, and it may not be the last. As long as fraud schemes continue to evolve, changing with new products and targeting new groups of people with advertisements that attract those seeking to get rich quick, and placing a high value on wealth of celebrities, these schemes will persist. This has been demonstrated in previous cases such as the Charter scam, with damages amounting to 5 billion baht, and the FOREX-3D scam, with damages of 2 billion baht.

For example, the FOREX-3D case in 2019 involved Mr. Apirak Kotethi, who created a website (www.forex-3D.com) to advertise and persuade the public to invest in foreign exchange (Forex) trading, promising returns as high as 60-80% of the profits. However, the money was not actually invested. The system relied on a "downline" structure, where dividends were given to members who could recruit others to invest. The FOREX-3D had a link with celebrities who were shareholders or persuaded investors. Initially, the company paid dividends as promised, but in May 2019, the company stopped paying dividends, causing a loss of investor confidence. The case resulted in 9,824 victims and nearly 2.5 billion baht in damages. Later, the DSI accepted this case as a special investigation because the actions of Mr. Apirak and his seven accomplices fell under fraud-related loan offenses against the public.' On December 26, 2024, the Criminal Court ruled on the Forex-3D fraud case, acquitting Mr. Pattanapon Kunjara and Ms. Suteewan Kunjara, aka Thaweesin. However, three others were sentenced to nearly 50,000 years in prison and ordered to repay the victims a total of 2.4 billion baht. The charges included joint money lending with the intent to defraud the public, joint fraud, jointly entering false or distorted computer data, whether wholly or partly, or false computer data.8

Another well-known case in Thailand was that of the Ponzi scheme fraud of "Mae Chamoy" case. This case involved a fraudulent scheme that raised money from the public between 1977 and 1985, using a method called "oil share" which was invented by Mrs. Chamoy Thipyaso. The scheme resulted in 13,248 victims and a total

loss of over 4.5 billion baht. Mae Chamoy case involved a method of deceiving the public by claiming to operate an oil trading business both domestically and internationally. She persuaded the public to invest in the "oil share trading" scheme by borrowing money from individuals and offering high returns of 12,000 baht per month, or 6.5% of the principal per month, or 78% per year. The method involved organizing a queue of money, where funds were deposited in a bank, and both principal and interest were gradually circulated to pay returns. However, if no new investments were made, payments would be done only in the initial stage. Eventually, the accumulated principal ran out, and the scheme could no longer return the invested money to the public. Ultimately, the court ruled that Mrs. Chamoy and her associates were guilty of defrauding the public in a total of 23,519 counts, sentencing each person to 117,595 years in prison under the Emergency Decree on Borrowings Which Are Regarded as Public Cheating and Fraud, B.E. 2527. However, the maximum duration of imprisonment under the Criminal Code is capped at 20 years, so each was sentenced to 20 years. The court also ordered Mrs. Chamoy and her associates to jointly return the defrauded funds.9

It can be seen that all three cases share a common pattern: Deceiving the public into investing. However, the Forex-3D and Mae Chamoy cases involved signed agreements that clearly stated the money would be invested and high returns would be paid. In these cases, the evidence was more straightforward for prosecuting the offenders. By contrast, The iCon Group case is more complex and differs from the earlier ones, requiring more thorough investigation—especially evidence proving that the scheme involved deceptive investment practices or qualified as a pyramid scheme. In The iCon Group case, the alleged offender or Boss Paul who owned the business, continuously gave interviews and maintained that he was running a legitimate business, not fraudulently raising funds. He claimed it was a product-sales business, where investors received goods but could not resell them themselves. In addition, Boss Paul claimed that there was no clear agreement for profit-sharing, unlike the previous two cases. A key distinction is that The iCon Group provided tangible products in exchange for investment, while the other two offered unrealistically high returns.

Comparatively, in the Forex-3D case, some co-defendants like DJ Man and Bai Toey were acquitted because evidence linking the company's finances to their personal bank accounts was inconclusive. Their roles in soliciting investments were unclear, and there was no proof they were business partners. However, in The iCon Group case, there is more explicit evidence—celebrities were seen promoting the scheme at public events. Therefore, at the time of this report, solid evidence still needs to be gathered to determine whether The iCon Group's business model constitutes a pyramid scheme.¹⁰

Thailand has experienced many such scams in the past, but why have efforts to tackle pyramid schemes so far failed? A research study titled "Obstacles in the Prevention and Suppression of Fraudulent Public Borrowing: A Case Study of Pyramid Schemes" conducted by the Office of Justice Affairs explored this issue. 11 The study found that a lack of clarity and overlapping responsibilities among relevant agencies pose significant obstacles to effective integration of these agencies in preventing and suppressing fraudulent public borrowing. Multiple sets of officers and committees have been appointed, resulting in inefficient operations. Additionally, penalties are deemed inadequate, failing to instill fear or deterrence among offenders. Other challenges include limited resources to support operations, a mismatch between staffing levels and workload, and a lack of knowledge, understanding, and expertise among personnel. Collaboration with other sectors is also lacking. Moreover, the public has limited awareness of pyramid schemes and insufficient access to information, making them more vulnerable to deception. Furthermore, advancements in technology and communication have facilitated the widespread perpetration of such offenses.

From the perspective of business analysts and marketers, the persistence of pyramid schemes in Thailand can be attributed to several key factors as follows: 12

- People still seek social acceptance—money and power are key elements that pyramid scheme operations use to persuade or lure victims into their traps.
- 2 A natural inclination toward risk-taking—according to the Lifestyle Theory by Michael Hindelang et al, those who often fall victim tend to have a higher level of risk-seeking behavior than others, i.e., hoping to invest little while receiving high returns.
- The penalties are still worth the risk—even when additional penalties are imposed for multiple offenses, and sentences may add up to thousands of years, the Criminal Code, Article 91 limits actual imprisonment to no more than 20 years. Furthermore, in practice, prison terms can be reduced even further through various mechanisms.
- Pyramid scheme operations often adapt their products or "content" to fit the times—offering things like marketing seminars, foreign currency investments, or gold trading, in order to attract people based on current trends.

The iCon and Pyramid Scheme Business

The key difference between a legitimate direct sale business and a pyramid scheme can most easily be observed in how products are sold. A direct sale business focuses primarily on product sales. Membership fees, if any, are usually low or even non-existent, and there is no emphasis on recruiting team members or building a network. The priority is on selling products rather than recruitment. In contrast, pyramid schemes use deceptive tactics to lure people into investing or purchasing products under the promise of high profits in a short amount of time. These schemes often pay initial returns to early investors to gain their trust, when, in reality, the business does not operate as claimed. In essence, "they simply use funds from newer investors to pay earlier ones." There are five common persuasive tactics frequently used in these types of scams, including pyramid schemes:

 Promises of high returns quickly — Often accompanied by flashy photos with large sums of cash or luxury cars to stir up desire and greed, creating the illusion that anyone can achieve such wealth

- 2. Guaranteed returns Claims of specific and unusually high returns, such as 10-15% per week or 40% per month
- 3. Urgency to decide quickly Using timelimited offers such as "today only," "only 5 minutes left," or "spots are almost full" to rush decisions and prevent careful consideration
- 4. Claiming that everyone is investing or dropping names of celebrities and public figures to enhance credibility. People are made to feel they will miss out on wealth if they do not join.
- 5. Intangible or unverifiable business models Involves investments in businesses that have no visible product, or in unregulated foreign platforms. They often claim the business is certified, but such claims are unverifiable.

In addition to these five tactics, people need to be extra cautious if the recruitment includes any of the following red flags, as they may indicate a "pyramid scheme": Emphasis on network building over product sales; Pressure to recruit large numbers of new participants; Bonus incentives are tied to how many people you recruit; and Pyramid schemes often disguise themselves as investments in stocks, foreign exchange, or digital assets.¹³

In sum, the deceptive tactics used in pyramid schemes—both past and present—often share a common theme: the promise of "high returns" and "wealth" as persuasive tools that easily lure people in. In the case of The iCon Group, the scheme gained credibility by involving well-known figures and celebrities. One example of this can be seen in a case shared by a victim interviewed by The Active webpage. She said she was first introduced to The iCon Group through a training session that cost only 98 baht and lasted a little over an hour. During the session, she was approached by 4-5 people who encouraged her to register as a member in exchange for learning about the "backend system." They claimed that by paying 2,500 baht, she would gain access to detailed sales information and, more importantly, get to meet the company's celebrity boss. Tempted, she signed up and attended another training session. After the training, she tried to sell the products as instructed—posting daily videos and ads—but she was not able to make any real sales. Later, her upline invited her to attend The iCon's monthly event, where she encountered a diverse crowd of people from both Thailand and abroad who had supposedly found success through the platform. She began to hope that one day she too would stand on that stage of success and be rewarded with luxury cars, homes, or international travel by the company. Motivated by this dream, she decided to upgrade her membership to a higher tier—investing over a hundred thousand baht—to become a team leader, after being persuaded that team leaders receive greater returns, more privileges, and faster earnings. However, once she became a team leader, the reality was far from what she expected. Rather than selling more products, she was instructed to recruit others to join the 98-baht training and become members, repeating the same path she had taken. She was told that the more recruits she brought in at higher investment levels, the faster she would recover her investment, since her unsold inventory would then be passed on to the new members she recruited. At that point, she started having doubts, realizing that the core of The iCon's business was no longer about selling products, it was about building a network of downlines. Later on, her products remained unsold, and she had already lost more than 300,000 baht. 14

Approach to Building Protection Against Pyramid Schemes

Every person must enhance their knowledge and understanding to avoid becoming a victim of pyramid schemes. Key measures include:

- Research before investing Scammers often take advantage of people's lack of understanding about stocks or cryptocurrency to lure them into schemes.
- 2. Stay calm and think before deciding When invited to invest in a high-return business that seems intangible or unclear, proceed with caution. If the invitation involves investment/fundraising in securities or digital assets, verify whether the business is authorized via the SEC Check First application.
- 3. Understand that consequences may go beyond financial loss If you fall victim and lose money, that is serious enough. But if you then invite others to invest in the scheme, you could also be legally liable.

4. Stay informed and alert — Constantly follow updates about pyramid schemes or other investment scams, as new fraud tactics are always emerging.

How to identify a pyramid scheme or fraudulent business model:



Pyramid structure — The business focuses on recruiting new members rather than selling actual products or services.



False or misleading products/services



Forced purchases or excessive investments or stockpile of goods that cannot be sold



Exaggerated or unrealistic claims about business or income or returns



No operating license issued by the Office of the Consumer Protection Board (OCPB)



Failing to clearly inform consumers, not allowing refunds or changing goods as required by law, or lacks consumer protection mechanisms

If you encounter or are invited to a suspicious investment opportunity, you can report it to the following agencies: Unregulated Finance Reporting Center, Fiscal Policy Office, Call 1359; Department of Special Investigation (DSI), Call 1202; and Technology Crime Suppression Division, Call 1441. Filing a report online is available via the relevant government website www.thaipoliceonline.com. If the invitation involves fundraising or claims about products regulated by the Securities and Exchange Commission (SEC), such as stocks, cryptocurrencies, or digital assets, you can report the tip-off to the SEC Complaint Center at 1207, or through the SEC Facebook page and SEC Live Chat on the website www. sec.or.th

Summary

The problem of being deceived in pyramid schemes is a frequent issue in Thailand, despite the lessons learned from past legal actions. In reality, Thailand has numerous laws and agencies that play a role in preventing and combating fraud and pyramid schemes. However, the enforcement of these laws is often ineffective. On the contrary, pyramid schemes have been adapted by using business strategies that align with modern times, such as investment methods, types of products and services, and marketing strategies to target different groups. For example, the iCon Group took advantage of the COVID-19 crisis to expand its network business through online product sales and recruiting many network members, particularly individuals who could not work or operate businesses in establishments, leading to rapid network growth. Effective coordination between relevant agencies is essential to improving law enforcement. In the past, Thailand lacked a key coordinating body to link these agencies. The government should therefore create a strategy for addressing fraudulent lending (pyramid schemes) and establish a national coordination mechanism, along with revising laws to ensure that penalties are commensurate with the harm caused to victims and the economy. Additionally, other measures should be implemented, such as monitoring systems, data verification, and investigative efforts to uncover criminal activities. Developing an anti-crime network across government, private sector, and the public, while providing proactive public education through various channels like television, radio, and social media, is crucial to prevent citizens from falling victim to fraud.

Bus Accidents:

Many Questions about Safety Standard



Introduction

Bus accidents in Thailand occur continuously and often with great severity. This tragedy can be attributed to multiple factors, particularly vehicle modifications and safety standards that fall below acceptable levels. A common issue is the use of non-standard or modified buses on the roads, which often leads to severe accidents. For example, modifications to the engine and structure of the vehicle, without proper inspection or safety certification from relevant authorities, increase the risk of accidents, especially when traveling at high speeds or over long distances. Additionally, the installation of non-standard accessories can cause accidents when sudden braking occurs or in the event of an impact. Furthermore, modifications that do not account for the original vehicle structure can lead to fatal damage in case of a crash or rollover. Another issue is the insufficient enforcement of regulations, as regular inspections and maintenance are inadequate. Annual checks often only cover basic safety measures, not addressing all aspects of safety. There is also a concern regarding the safety of the bus driver certification system, as some drivers lack sufficient safety training, which makes them unprepared for safely operating a bus. This article discusses the overall safety issues of public buses in Thailand, the opinions of experts and stakeholders on the problems, and recommendations for addressing these issues.

The Tragedy of Public Bus Accidents in Thailand

"Public bus accidents" are a form of large-scale carnage on the roads that result in significant loss, whether in terms of physical and mental harm to the victims or property loss from the accident itself. Since public buses are a type of vehicle that can transport many passengers at one time, it is not surprising that each bus accident leads to greater loss compared to accidents involving other types of vehicles.



January 19, 2007: A group of teachers from Chanthaburi Province was visiting the World Horticultural Exposition when the bus overturned on a sharp downhill curve. 21 people died, and more than 30 were injured.



October 10, 2008: A group of students from Khon Kaen Province was on a field trip when the bus veered off the road and fell down a mountain. 21 people died, and 27 were injured.



February 28, 2014: A group of students from Nakhon Ratchasima Province was involved in a collision with an 18-wheeler trailer. 17 people died, and 45 were injured.



March 9, 2017: A bus plunged into a ravine in front of the Ton Shrine in Prachinburi Province. 6 teachers and students died, and nearly 50 were injured.



March 21, 2018: A tour group from Kalasin Province experienced a bus accident where the bus swerved across the median and overturned. 18 people died, and 32 were injured.



June 3, 2023: A bus carrying village headmen on an excursion had an accident, resulting in 2 fatalities and over 30 injuries.



October 1, 2024: A public bus transporting students and teachers on a field trip caught fire while on the road in Pathum Thani Province, resulting in 23 fatalities (20 were students), 4 severe injuries and 4 minor injuries. This was the great tragedy of Thai road accidents in 2024.



February 26, 2025: A bus carrying a study tour group from Phon Charoen Subdistrict Municipality, Bueng Kan Province, overturned and fell off the road in Prachinburi Province. 19 people died, and many others were injured.

Accident Statistics and Trends

Data from the Department of Land Transport in 2023² reveal the statistics of public bus accidents from the fiscal year 2019-2022, during the Thai COVID-19 pandemic, indicating a declining trend in accidents during this period. In 2019, there were 414 accidents, in 2020 there were 245 accidents, in 2021 there were 113 accidents, and in 2022 there were 142 accidents. The reduction in accidents during this time had been attributed by the Department of Land Transport to several factors, such as reduced travel due to lockdown measures and remote work, increased awareness of road safety, stricter safety measures by transportation operators, and improved collaboration between relevant agencies.

However, the number of accidents in Fiscal Year 2023 saw a significant increase compared to Fiscal Year 2022. In 2023, there were 206 accidents, a 45.1% increase from the previous year. This increase is partly due to the relaxation of COVID-19 restrictions and the Cabinet's decision to add special public holidays, creating extended breaks which stimulated travel to support tourism. These factors led to increased traffic volume which, in turn, raised the risk of accidents.

The data from the Department of Land Transport aligns with the statistics of traffic accident cases from the Royal Thai Police for the Fiscal Year 2013-2022, which showed that accidents involving large buses had been continuously decreasing from 2013 to 2022. During 2013-2017, there were over 700 cases, which dropped to just over 500 cases between 2018 and 2022 (Figure 1). Similarly, the number of large buses involved in accidents on highways, as reported by the Bureau of Highway Safety, Department of Highways, also showed a decreasing trend from 2014 to 2021, but increased again in 2022-2023, after the lifting of the "lockdown" measures due to the COVID-19 pandemic.

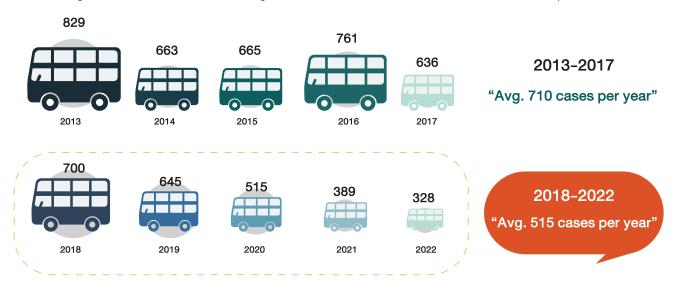


Figure 1: Trend of Thai bus accidents during Fiscal Year 2013-2022 Source: Traffic accident case statistics for Fiscal Yeaar 2013-2022, Royal Thai Police

The number of fatalities and injuries from public bus accidents in Thailand during Fiscal Year 2019 to Fiscal Year 2022 showed a declining trend (in 2019, 432 injured and 180 killed; in 2020, 320 injured and 99 killed; in 2021, 156 injured and 62 killed; in 2022, 125 injured and 66 killed). This data aligns with the trend of a decreasing number of accidents.

However, the number of injuries from public bus accidents in Fiscal Year2023 increased to 316, a rise of 45% compared to Fiscal Year 2022, while the number of fatalities in Fiscal Year 2023 was 76, an increase of 15.2% from Fiscal Year 2022. Subsequently (Figure 2), in 2024, a severe public bus accident occurred, resulting in a significant number of injuries and fatalities. The major incident was the accident involving students from Wat Khao Phraya Sangkharam School in Uthai Thani on October 1, 2024. The bus, which was carrying 44 students and teachers, caught fire, resulting in a total of 23 fatalities, including 20 students and 3 teachers.⁵

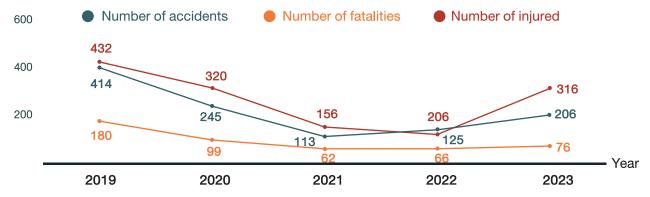


Figure 2: Statistics on public bus accidents for Fiscal Year 2019-2023

Source: Report on the Analysis of Public Bus Accident Situations, Fiscal Year 2019-2023, Land Transport Safety Bureau, Department of Land Transport

Although the statistical figures for bus accidents over the past 10 years seem to show an overall positive trend when compared to the past, when considering the severity or the losses resulting from these accidents, it becomes clear that there has been no significant reduction. For example, the Severity Index or the ratio of the number of deaths per number of bus accidents, as reported by the Department of Land Transport, clearly shows that accidents involving public buses result in an average of 44 deaths per 100 bus accidents (Figure 3). This is still considered relatively high when compared to accidents involving other vehicle types.

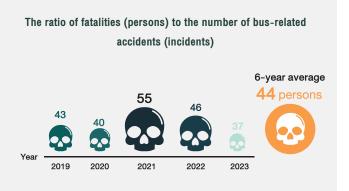


Figure 3: Severity Index of public bus accidents, Fiscal Year 2018-2023

Source: Report on the Analysis of Bus Accident Situations, Fiscal Year 2019-2023

Land Transport Safety Bureau, Department of Land Transport

"Students": Another Group of Victims in Bus Accidents

According to surveillance data from the Road Safety Thailand and the Consumer Organization Network under the Thailand Consumers Council, there were 30 incidents of road accidents and safety issues involving school transport vehicles between 2022 and 2024. Notably, from January to March 2024 alone, there were 15 such accidents involving school transport, resulting in one student fatality and injuries to as many as 153 students. The causes of these accidents stem from the negligence of operators or drivers, unsafe vehicle conditions, and a lack of systematic and effective management.

In the case of the school excursion bus fire involving students from Wat Khao Phraya Sangkharam School in October 2024, the incident involved a chartered non-regular bus that lacked a contract with standardized safety measures. Additionally, the excursion bus experienced a tire blowout, causing the driver to lose control and collide with another vehicle before crashing into a concrete barrier in the road median. This led to a fire that quickly spread into the passenger cabin. The rapid spread of the flames was primarily due to a leakage of NGV, which was one of the bus's fuel systems, combined with the presence of highly flammable interior materials in the passenger compartment.

When the Department of Land Transport investigated the NGV fuel system installation standards, it was found that the bus involved in the incident had illegally installed additional NGV gas tanks (11 tanks in total) despite having received official permission for only six tanks. Moreover, a check of the vehicle's registration history revealed that the bus was originally registered in 1970. It was later modified with a new body and engine, then re-registered in 2018. Based on this information, it appears that the condition of the bus and vehicle-related factors were likely the primary cause of this tragic accident.

Analysis of Bus Accidents in Thailand

Bus accidents in Thailand are primarily caused by a combination of certain factors.

- ① Driver behavior This includes speeding, reckless driving and failure to follow traffic rules.
- 2 Technical issues These include brake system failure and poor vehicle maintenance.
- 3 External factors These include road conditions and weather conditions such as rain or heavy fog.

The Land Transport Safety Bureau, Department of Land Transport, analyzed the situation of public bus accidents in 2024 and found that, although the number of accidents involving double-decker buses is not significantly different from those involving single-decker buses, "...traveling by double-decker bus carried a six-fold higher risk of fatality compared to single-decker buses." The analysis of data from the investigation into the causes of public bus accidents during 2005-2009, conducted by the Thailand Accident Research Center (TARC) and Asian Institute of Technology (AIT), based on a total of 48 cases, identified the following factors contributing to accidents: 9,10

1 Factors contributing to accidents include:

- Size and dimensions affecting vehicle stability: Double-decker buses, which have a height of over 4.0 meters, have a lower Static Stability Factor (SSF). Therefore, the risk of overturning for double-decker buses is higher compared to other vehicles.
- Inappropriate road and environmental conditions: Curves downhill Driving a bus through a curve at high speed increases the likelihood of the vehicle overturning; Steep slopes and descending steep roads; and Roadside barriers that have the current standard height of 0.80 meters, while a double-decker bus has a height of over 4 meters.
- Speeding: Surveys and monitoring of the speed behavior of bus drivers show that more than half of the bus drivers exceeded the legal speed limit.

2 The components of injury and death include:

- Vehicle structure: The structure of buses is mostly assembled and constructed by relying solely on the skill of technicians with varying levels of experience, without referencing or adhering to international standards. As a result, the structure of the bus is prone to severely damage during an accident.
- Seat belts: The seating in most public buses is fastened to the vehicle and side walls. However, these installations are not strong and stable enough and, in the event of an accident, the seats can easily detach from their mounts.
- Passenger restraints: Although the Land Traffic Act requires bus passengers to wear seat belts during travel, it is still commonly found that either seat belts are not installed or, if installed, passengers do not use them.

Raising the Safety Standards of Public Buses

The information gathered from the research on the causes of bus accidents mentioned above serves as a guideline for agencies responsible for overseeing public buses, such as the Department of Land Transport, in order to implement measures to address these accidents. These include four main measures: vehicle-related measures, driver-related measures, transportation operation measures, and regulatory oversight measures (Figure 4). These efforts aim to improve the safety of public transportation, solve problems, reduce accidents, and build public confidence in using public transportation services. These measures have been in place since 2007, resulting in a downward trend in accident numbers over the past decade. However, the issue of the Severity Index of accidents has not yet been fully addressed.

รกโดยสารสาธารณะปลอดภัย

มาตรฐานประเทศไทยความปลอดภัยระดับสากล



"มาตรฐานรถปลอดภัยระดับสากล"

- ยกระดับมาตรฐานตัวรถ
 เทียบเท่าสากล
- ผ่านการตรวจสภาพรถ รถปลอดภัยพร้อมใช้ในการขนส่ง
- ได้รับการบำรุงรักษาเพื่อให้รถ อยู่ในสภาพพร้อมใช้งาน



"คนขับรถที่มีคุณภาพ"

- ใบอนุญาตงับรถตรงตามประเภทรถ
- ผ่านกระบวนการคัดกรอง
 ด้านสุงภาพและสมรรถนะ
- มีความรู้ ทักษะในการขับรถ
- เรียนรู้อย่างต่อเนื่องผ่านการอบรม ต่ออายุใบอนุญาตงับรถ
- ควบคุมพฤติกรรมการขับขี่
 ด้วยระบบตัดคะแนนความประพฤติ

02

"ผู้ประกอบการขนส่งที่มีคุณภาพ"

- บริการดี มีคุณภาพ ปฏิบัติตามมาตรการ
- ประวัติดี มีประสบการณ์สูง
- ยกระดับมาตรฐานคุณภาพ Q-Bus
- บุคลากรจัดการด้านความปลอดภัย ในการงนส่ง บริการจัดการ การงนส่งให้มีประสิทธิภาพและปลอดภัย

"ปลอดภัย มีคุณภาพ ประสิทธิภาพสูง"

- GPS ติดตามรถ และพฤติกรรมการขับ
- Check point การตั้งจุดตรวจ รกโดยสารสาธารณะและ พนักงานขับรถทั่วประเทศ ตลอด 24 ชั่วโมง

มาตรฐานความปลอดภัย รถโดยสารประเทศไทย

- การติดตั้ง CNG UN R 110
- การติดตั้ง CNG UN R 67
- กำลังเครื่องยนต์ UN R 85
- เง็มงัดนิรภัย
- การทรงตัวของรถ UN R 107
- ประตูฉุกเฉิน
- กระจก UN R 43
- ทางออกฉุกเฉิน ค้อนทุบกระจก
- ติดตั้ง GPS

- ลดความสูงของรถโดยสาร
 โดยรถสองชั้น ไม่เกิน 4 เมตร
 รถชั้นเดียว ไม่เกิน 3.8 เมตร
- จุดยึดเง็มงัดนิรภัย UN R 14
- ที่นั่ง จุดยืนที่นั่ง UN R 17
- วัสดุลามไฟ UN R 118
- การบำรุงรักษารถ
- ความแข็งแรงโครงสร้าง UN R 66
- ถังคับเพลิง



Figure 4: Enhancing the safety of public buses Source: Department of Land Transport

Recommendations to Reduce Passenger Bus Accidents

From the large-scale tragedies caused by several incidents of bus accidents (specifically non-scheduled buses or tour buses), various agencies, including government bodies, private sectors, and civil society, should focus on and cooperate in establishing guidelines or implementing measures to prevent and address the issue of bus accidents more seriously and tangibly as follows.

- The Department of Land Transport: Strengthen the rigor of bus inspection standards especially for buses using NGV fuel. There should be checks on the use of emergency exits, safety equipment (such as glass-breaking hammers, fire extinguishers, seat belts, etc.), and the enhancement of driver standards by supporting bus drivers to undergo emergency response and passenger assistance training. Additionally, there should be guidance on the use of safety equipment for passengers. The safety standards of the vehicle should also be improved by enforcing United Nations (UN) regulations, such as UNECE Standard 107, which requires buses to be equipped with an automatic fire suppression system to prevent and reduce the severity of fires. Integration with relevant agencies involved in bus services should be supported, such as helping officials from the Department of Land Transport in vehicle inspections before use, promoting public awareness through safety equipment usage guidelines, and educating on procedures in case of emergencies (similar to safety instructions on airplanes). Furthermore, supporting channels for complaints should be provided if the public or service users observe buses that are unsafe or not complying with regulations.
- Ministry of Education: Set guidelines for schools on conducting field trips for students. These guidelines should be appropriate for students at each age group, such as selecting learning destinations that are within an appropriate distance, considering the readiness and ability to care for students at each age level. It may be necessary to establish procedures for selecting bus services, with safety as the primary concern. This includes checking the condition of the buses, reviewing the driving history, ensuring that the service provider certifies the safety inspection of both the vehicle and the driver, creating an emergency response plan and conducting drills before the actual trip, and arranging travel insurance, among other measures.
- Thai Royal Police: It should intensify the enforcement of laws for passenger buses, such as checking driver's licenses, measuring the driver's blood alcohol level, monitoring the use of mobile phones while driving, speed detection, and ensuring the use of seat belts by passengers. Additionally, they should collaborate with educational institutions to support convoy buses for field trips to facilitate safety and convenience during travel.
- 4 Civil society and bus operators or service providers: These entities should support and provide knowledge on the use of various safety equipment for service users, especially in the use of various equipment in emergency situations. Service users should be aware of and strictly follow the regulations or recommendations, and encourage and promote citizens or service users to file complaints or demand their right s to safety.

Summary

Although the measures taken to address bus accident issues over the past decade have played an important role in reducing the overall number of bus accidents in the country, the severity of bus accidents seems to show no signs of decreasing. This is evident from the tragic loss involving a student tour bus in 2024, which highlights the urgency and importance of immediate action. Relevant agencies, including government bodies, the private sector, and civil society organizations must work together to establish strategies and measures to reduce both the number and severity of bus accidents. The Department of Land Transport, the Ministry of Education, the Royal Thai Police, civil society, and bus operators/service providers play a key role in collaboratively addressing the issue and setting international safety standards. They must be strict in supervision and inspection, while seriously protecting the safety rights of service users.

7

Flood Management in Northern Thailand:

Reducing Disaster Risk



The main causes of major flooding in Northern Thailand stem from a combination of factors, including climate change, deforestation, urban expansion that blocks natural waterways, the lack of cross-border water management cooperation mechanisms, and insufficient data on water resource engineering.

Introduction

In 2024, northern Thailand experienced its most severe flooding in decades. Beginning in early August, heavy rainfall caused the Sai and Kok Rivers to overflow, inundating areas in Mae Sai and Chiang Saen Districts of Chiang Rai Province. Landslides also occurred along Highway 1333, disrupting transportation. Continued heavy rain increased the risk of landslides in various mountainous areas, affecting agricultural communities and cross-border trade. By mid-September 2024, the flooding intensified once again, particularly in Mae Sai and Chiang Rai City. Torrential rains brought on by Tropical Storm Yagi caused the Sai River to overflow its banks, flooding downtown Mae Sai and surrounding communities. Chiang Rai City was severely impacted—transportation within the city was cut off, and many households were forced to evacuate to safer areas. Local authorities and rescue teams rushed to distribute relief supplies and set up temporary shelters for affected residents. From late September to early October 2024, the flooding remained severe, especially in Chiang Mai Province. The Ping River overflowed, flooding municipal areas and main roads, disrupting economic activities and daily life. Flash floods from the mountains in Mae Taeng District inundated elephant camps, forcing the evacuation of over 100 elephants and other animals from conservation areas. This event caused extensive damage to both the environment and the tourism sector.

The provinces of Chiang Rai and Chiang Mai were severely affected in terms of both lives and property. In Chiang Rai, floods and landslides occurred across 13 districts and 64 subdistricts, impacting 56,587 households. Fourteen people lost their lives, three were injured, and 112 houses were completely destroyed. Additionally, more than 18,587 rai of agricultural land became unusable. Mae Sai District was the hardest hit. Flash floods from the upstream areas of the Sai River, 80% of which lie in Myanmar, caused water levels to rise as high as 3 meters in some areas. What worsened the situation was the large amount of mud that accumulated in local communities. In addition, water from the Kok River not only flooded the city's economic zones but also submerged all 5 bridges crossing the river, forcing Mae Fah Luang Airport to temporarily shut down operations. In downtown Chiang Mai, repeated flooding occurred as flash floods from the Mae Taeng River basin and the overflowing Ping River inundated the city's economic zones. Transportation was brought to a standstill, and markets, temples, and tourist attractions suffered significant damage. The Thai Chamber of Commerce and the University of the Thai Chamber of Commerce estimated that the 2024 flood disaster caused economic losses of up to 36 billion baht. A

The 2024 flood disaster in northern Thailand caused the most severe damage in the past 30 years, and highlights the urgent need for systematic water resource management and disaster risk reduction. This year's flooding was not solely the result of heavy rainfall, but also stemmed from global climate change and alterations in the local landscape that have affected water management in the region. As such, disasters are likely to become increasingly severe in the future. This article discusses the recent flooding situation, the government's response policies, the root causes of the problem, and recommendations from various stakeholders for addressing the crisis.

Government Policy on Water Management in Northern Thailand

Thailand has established a 20-year water management master plan (2018-2037) as a framework for integrated and sustainable water management to address issues of flooding and drought, as well as to prevent the long-term impacts of water-related disasters. The plan emphasizes achieving a balance between infrastructure development, sustainable water resource usage, and the integration of data and cooperation among various agencies. The master plan contains goals and guidelines for water management in each area as follows:⁵

- Water management for flood prevention and mitigation: The government has focused on developing infrastructure, such as building dams, reservoirs, drainage canals, and flood retention areas in flood-prone regions like Chiang Rai and Chiang Mai Provinces. This also includes the rehabilitation of irrigation systems and increasing the capacity of water conveyance canals for draining water in urban areas.
- Development of early warning and forecasting systems: The use of technologies such as telemetering systems and rain radar, along with applications for alerting communities in flood and landslide-prone areas, is emphasized to ensure timely decision-making and evacuation. The work focuses on cooperation between the Meteorological Department, the Department of Water Resources, and the Department of Disaster Prevention and Mitigation (DDPM).
- Water management in normal conditions: Agencies like the Royal Irrigation Department and the Electricity Generating Authority of Thailand (EGAT) play a key role in regulating water levels in dams and reservoirs to maintain balance, as well as managing water for supporting agriculture, industry, and domestic consumption in areas facing water shortages.
- Development of flood risk data and maps: Hydro-Informatics Institute (HII) and the Department of Water Resources are responsible for creating flood risk maps for flood-prone areas, such as the northern region, using GIS data and analysis of recurring flood zones to support spatial decision-making and long-term flood prevention planning.
- Enhancing community preparedness in high-risk areas: Training in community-based disaster risk management (CBDRM) is conducted by the Department of Disaster Prevention and Mitigation, including the establishment of disaster preparedness centers at the sub-district and village levels to enhance the community's capacity to respond to flood situations.

The Master Plan and the Actual Situation

The severe flooding in 2024 highlights the need to modernize the water management system and align it with the changing climate and current circumstances. Although the 20-Year Master Plan for Water Management (2018-2037) outlines key strategies, such as expanding flood retention areas, restoring upstream forests, and improving drainage systems in urban areas, the implementation of the plan has not been efficient due to various constraints. These include the lack of coordination amona the many agencies involved, with 38 agencies responsible for water management in the Northern Region alone.⁶ The design of infrastructure does not align with the landscape, and there is a lack of up-to-date data systems. These obstacles have hindered the practical effectiveness of the 20-Year Master Plan.

To make the plan more effective, lessons learned from past events must be applied, such as improving the early warning systems to cover all areas, supporting community involvement in planning and decision-making for water management, developing

infrastructure suitable for risk-prone areas, and studying community adaptation lessons to integrate them into long-term strategies. This will help ensure that water management can effectively respond to future disasters in a sustainable manner.

The flooding situation in Northern Thailand in 2024 highlights several challenges of implementing the Master Plan, which can be summarized as follows:⁷

Infrastructure development

The Master Plan focuses on the development of infrastructure, such as building dams, weirs, drainage canals, and retention areas in flood-prone areas, to help prevent and mitigate long-term flooding impacts. However, in 2024, it was found that many areas in northern Thailand still lacked effective drainage systems, resulting in waterlogging in urban areas such as Chiang Mai and Chiang Rai cities. Some retention areas have either not been developed or are insufficient to handle heavy rainfall, leading to slow drainage and recurring flooding.

2 Forecasting and early warning systems

The Master Plan emphasizes the development of forecasting and early warning systems, such as installing telemetry systems, rain radar, and GIS to help the public and relevant agencies prepare in a timely manner. However, the real situation reveals that many areas lack digitalized warning systems, and several agencies still send alerts via fax. Moreover, rural areas (e.g., Wiang Kaen and Wiang Pa Pao Districts, and mountainous regions) are not adequately covered, leading to ineffective early warnings. Communication between agencies and public alerts are sometimes delayed, such as the warning for floods from all rivers, which occurred too rapidly for the system to respond effectively.

3 Water management in dams and reservoirs

The Master Plan stipulates that the Royal Irrigation Department and EGAT should focus on balanced water management in dams and reservoirs to prepare for the rainy season and reduce flood risks. However, in practice, the water release from certain dams (e.g., Mae Kuang Dam and small reservoirs in Chiang Rai), was delayed during heavy rainfall, causing water to overflow and flood areas downstream. Coordination between agencies responsible for water management in dams was also delayed, preventing efficient flood risk mitigation.

4 Community Involvement in high-risk areas

The Master Plan promotes training on communities-base disaster rike management (CBDRM) and establishing disaster preparedness centers at the subdistrict and village levels to enhance their capacity to cope with floods. In practice, many communities in flood-prone areas have not received sufficient disaster preparedness training, such as in rural areas of Chiang Mai and Chiang Rai Provinces. Some disaster preparedness centers lack resources like survival kits and rescue equipment, causing delays and limited coverage in providing aid to affected citizens.

5 Development of flood risk maps and data

The Master Plan stipulates the creation of local flood risk maps using GIS to support water management decision-making. However, in reality, flood risk maps have not been fully developed for all areas, especially in flood-prone regions like Wiang Pa Pao and Mae Taeng. This has resulted in inaccurate planning for these areas. Additionally, flood data in certain areas has not been updated, such as the water levels in the Kok, Ping, and Ruak Rivers.



Analysis of Repeat Flood Disasters in Northern Thailand

The main causes of the major flooding in northern Thailand are due to several combined factors, including climate change, deforestation, urban expansion blocking waterways, the lack of cross-border water management cooperation, and insufficient engineering data on water resources. These factors are discussed more below.⁸



Climate change has significantly impacted Northern Thailand, especially in flood-prone areas like Chiang Rai and Chiang Mai Provinces. Rising global temperatures have led to weather volatility, such as increased rainfall over short periods, resulting in flash floods and runoff in many areas. Statistics from

2024 show that heavy rainstorms caused major waterways like the Kok and Ping Rivers to exceed normal levels and overflow more quickly than expected. This change is not only due to increased rainfall but also the unpredictability that makes forecasting difficult. This makes it harder for local communities and relevant agencies to prepare, exacerbating economic and social impacts more than anticipated.



Over the past decades, forested areas in Northern Thailand have significantly decreased due to encroachment for agriculture, especially monoculture farming such as corn and other cash crops on highland areas. This type of farming not only destroys biodiversity but also reduces the soil's capacity

to absorb water. When heavy rains occur, water quickly flows into low-lying areas. Additionally, farming on sloped land leads to soil erosion, causing land degradation that disable crop cultivation in the long-term. The consequences include increased flood risks and the creation of PM 2.5 dust problems from forest fires and crop residue burning during the growing season. These dust particles blanket the northern region during the dry season, damaging public health and further aggravating environmental issues.



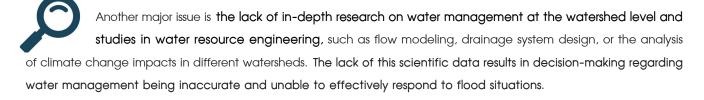
The growth of the tourism industry and urban expansion in northern Thailand, especially in Chiang Mai and Chiang Rai, has led to rapid land use changes. Numerous resorts and vacation homes have been built on high mountains, leading to a continuous reduction of watershed forests. Furthermore, urban expansion

in flood-prone areas has transformed natural flood retention areas into spaces for government and private sector use. The river systems and drainage canals in urban areas have also been altered to accommodate infrastructure such as roads and bridges without proper studies of post-construction drainage efficiency. This has resulted in clogged drainage pipes or deteriorating infrastructure over time, preventing rainwater from flowing into rivers quickly, which causes severe urban flooding and widespread damage.



The Sai and Kok Rivers are major water sources for communities in Chiang Rai Province. The Sai River connects to the Mekong River, with its source in Shan State, Myanmar. However, managing water of these two rivers faces significant challenges due to the water sources being located in areas governed by a

"State within a State" due to Myanmar's political issues. As a result, data on water levels and rainfall in the upstream areas are uncertain and difficult to access, delaying and hindering flood forecasting in Thailand's downstream areas. Additionally, gold mining in Shan State has adversely impacted the environment and the watershed's ecosystem. Continuous mining and soil excavation have led to soil degradation and sediment being washed into the river, compounded by the decreasing forested watershed areas that play a vital role in slowing down floodwater. As a result, water quickly flows into downstream areas, causing severe flooding and mudflows in the Chiang Rai basin. The lack of international cooperation mechanisms in water resource management has made these issues more complex and difficult to resolve.



Approaches to Developing a Sustainable Water Management System

Sustainable water management is not just about addressing immediate issues but also about laying the foundation to handle future scenarios. The 2024 flooding event highlighted the importance of post-flood recovery alongside the development of long-term water management systems. One of the key lessons learned from this year's recovery is the restoration of infrastructure and communities affected by the flood, including repairing critical transportation routes. These actions emphasize the need for designing infrastructure that can efficiently manage future floodwater volumes, such as building appropriate drainage systems, expanding flood retention areas in urban zones, and developing small-scale reservoirs in high-risk areas. Additionally, the establishment of temporary shelters and community support in the recovery process underlines the importance of enhancing the capacity of communities in disaster-prone areas. Training communities on disaster preparedness, creating volunteer networks, and providing essential resources such as survival kits and rescue equipment are vital components that enable communities to recover quickly and be better prepared for future events. Assoc. Prof. Dr. Mongkolkom Srivichai, an expert in water resources and environmental management, suggests that laying the foundation for long-term sustainability must include developing infrastructure suited to the landscape, promoting knowledge and preparedness within communities, and creating a management system that links agencies and communities to work together effectively. The following approaches are proposed:

Development of a sustainable water management system

The water management system in Thailand should focus on the development and maintenance of water infrastructure, such as drainage systems, irrigation canals, and small reservoirs in flood-prone areas. Additionally, creating flood retention areas in both urban and rural regions will slow down floodwaters and effectively reduce flood risks. In Chiang Rai Province, "community flood retention areas" such as the Mae Sai watershed can be developed to help store floodwaters during the rainy season and utilize them during the dry season. There should also be continuous updates to flood risk maps and the establishment of a centralized water database accessible by all agencies to enhance the accuracy of water management and planning.

Improvement of local and community participation processes

Communities play a vital role in managing flood problems. Building collaboration between agencies and communities will help increase the efficiency of water management. Communities should be encouraged to participate in planning and resolving local flood issues, such as creating community water networks. Furthermore, training and raising awareness within communities about water management, disaster response, and efficient water resource usage will increase public awareness and preparedness. Promoting volunteerism in water management in local areas will assist during emergencies and strengthen community resilience. However, continuous empowerment of communities is essential. The government and relevant agencies should support training and network-building at the local level to enhance public preparedness, including creating spaces for knowledge and experience exchange between communities facing similar challenges.

Water management with communities in the area

Water management in specific areas should focus on public participation at all levels, from developing water management plans at the subdistrict and provincial levels to implementation at the watershed level. Developing water infrastructure suitable for the terrain, such as flood barriers in steep areas and irrigation canals designed to handle floodwaters, will help effectively reduce flood impacts. Additionally, resources such as food, drinking water, and rescue equipment should be allocated according to the needs of affected areas. Training on disaster prevention and relief in flood-prone areas will help communities be better prepared and capable of self-help during emergencies.

A local voice forum to solve the flood problem



$oldsymbol{4}$ lacksquare Urban planning to prevent flooding

Urban planning in northern Thailand is a key factor in ensuring public safety. The management approach can be divided into several aspects: comprehensive urban planning, effective land use allocation, and avoiding development in flood-prone areas, especially flood retention areas that are used to store floodwaters during the rainy season. In addition, conserving green spaces and wetlands, which help prevent and mitigate flooding impacts, will play a crucial role in maintaining ecological balance. Developing appropriate infrastructure, such as designing and constructing efficient drainage systems like storm drains, retention ponds, and reservoirs, is a strategy to control water levels and prevent flooding in vulnerable areas. The use of GIS technology to monitor and analyze flood situations will allow for accurate forecasting and planning, enabling planners to better understand risks and make informed decisions. These factors will help reduce risks and create sustainable urban development in northern Thailand.

Support for budget, technology, and education

Effective water management requires sufficient budget allocation for developing infrastructure, post-flood recovery, and the establishment of disaster preparedness centers. The use of technology should be promoted, such as GIS, satellite data, and related technology to identify flood-prone areas and develop localized flood prevention plans. Mathematical models and Artificial Intelligence (AI) should be employed to aid in planning and monitoring water situations with precision. Education and research, such as creating models to assess the impacts of water management measures, will provide clearer and more effective information for planning.

International cooperation

Flooding issues in transboundary watersheds, such as the Sai and Kok Rivers, require international cooperation. Developing mechanisms for the exchange of data on water levels, rainfall, and joint water resource management between Thailand and neighboring countries (e.g., Myanmar and Laos) will enhance the accuracy of flood forecasting and water management in the watershed. Additionally, establishing a regional water management committee will strengthen cooperation in the conservation of headwater forests and the joint development of water data systems.

Building long-term resilience

Restoring natural areas, such as headwater forests and wetlands, is critical for increasing water retention capacity and reducing flood risks in watersheds. Promoting sustainable agricultural systems, such as diversifying crops instead of monoculture farming, will help reduce soil erosion and increase water absorption capacity. Local disaster preparedness centers should be established with adequate resources and properly trained personnel to respond quickly and effectively to flood situations.

Summary

The major flooding in northern Thailand in 2024 was not only caused by heavy rainfall over a short period (which is partially attributed to climate change), but also by changes in the landscape that have impacted water management in the area. Headwater areas that were once forests, playing a key role in slowing water and trapping sediments, have been converted into agricultural land, causing water to flow rapidly and carrying vast amounts of mud and soil to lower-lying areas. Additionally, public areas that once served as natural water paths and flood retention zones have been transformed into built structures that block the flow of water. These issues highlight the need for comprehensive water management, from headwater to downstream. Effective water management must begin with the development of appropriate infrastructure and flood retention areas that can help mitigate the severity of flooding. These structures should be designed to fit the landscape and meet the needs of the area. At the same time, conserving headwater forests and restoring wetlands are crucial for maintaining ecosystem balance and reducing disaster risk. Furthermore, the development of an early warning system is another key factor in reducing loss of life and property. Early alerts allow people in flood-prone areas time to prepare and respond accordingly. Efficient water management in collaboration with local communities will help ensure that people can face future changes more securely and safely.

"Blackchin Tilapia"

and Dealing with Alien Species in Thailand

The problem of "alien species" or non-native organisms is having a severe impact on Thailand's ecosystems. This phenomenon is considered the number one cause of biodiversity loss. Native species essential to local livelihoods are being threatened. A major reason for this is human activity—introducing these non-native organisms for ornamental purposes or research, then allowing them to escape into the wild.



Source: modify from www.komchadluek.net/news/general-news/579137

Introduction

In 2024, there was major news about the outbreak of blackchin tilapia (or blackchin fish), a non-native species, in water sources across the country, raising concerns about Thailand's ecosystem. On August 16, 2024, the Department of Fisheries issued an announcement stating that blackchin tilapia (Sarotherodon melanotheron) had spread in 19 provinces: Chanthaburi, Rayong, Chachoengsao, Samut Prakan, Nonthaburi, Bangkok, Nakhon Pathom, Ratchaburi, Samut Sakhon, Samut Songkhram, Phetchaburi, Prachuap Khiri Khan, Chumphon, Surat Thani, Nakhon Si Thammarat, Songkhla, Chonburi, Phatthalung, and Prachinburi. Particularly in coastal provinces along the Gulf of Thailand, the outbreak has affected both the ecosystem and local fisheries, as many marine plants and animals—such as plankton, fish larvae, shrimp larvae, shellfish larvae, and even the remains of dead organisms—serve as food for the blackchin tilapia.

The blackchin tilapia has been spreading rapidly due to its strong adaptability to various environments and high tolerance for salinity. This species of fish can consume plants, animals, and decaying organic matter, and has an efficient digestive system, contributing to its fast growth rate. A single female blackchin tilapia can produce approximately 50-300 eggs or more. The gestation period lasts only 22 days, after which the male incubates the eggs

in his mouth for just 4-6 days. He then continues to protect the hatchlings in his mouth for another 2-3 weeks, significantly increasing their survival rate. Moreover, this species can reproduce year-round.²

The Office of Thailand Science Research and Innovation (TSRI) has forecasted the outbreak of blackchin tilapia in Thailand³ over the next 5 to 20 years, if no action is taken to control its spread. TSRI projects that the fish will be found in 45 provinces within 5 years, in 60 provinces within 10 years, and in all 76 provinces across Thailand within 20 years. This article summarizes the blackchin tilapia outbreak situation, including other alien species in Thailand, analyzes the causes of the spread, and explores possible solutions to address the issue.



The Epidemic of "Alien Species" in Thailand

Alien species in Thailand include both invasive and non-invasive ones. According to the 2021 announcement by the Ministry of Agriculture and Cooperatives on the designation of aquatic species prohibited from being cultivated in the Kingdom, ten fish species are listed as prohibited for import into Thailand without official permission. These are as follows: The prohibited invasive species include blackchin tilapia, Mayan cichlid, butter cichlid, all species in the genus Cichla and their hybrids, rainbow trout, sea trout, Largemouth black bass, goliath tigerfish, jade perch, and all genetically modified organisms (GMOs). In addition, there are three other types of aquatic animals that are also banned: Chinese mitten crab, freshwater pearl mussel, and all species of blue-ringed octopus in the genus Hapalochlaena. As for non-invasive alien species, they include animals that, once introduced, do not cause negative impacts on the ecosystem. They coexist without competing with or disrupting the survival of native aquatic species or the ecological balance. Examples include Nile tilapia, common carp, and various species of Chinese carp, as well as other economically valuable fish that have been released into water sources.

According to the 2017 database of the Office of Natural Resources and Environmental Policy and Planning (ONEP), there are as many as 309 alien species found in Thailand.⁶ What is alarming, however, is that 151 species, or 48.9%, belong to Category 1 (invasive alien species). Blackchin tilapia is also one of the alien species in Category 1. The Research Centre for Social Return on Investment at Thammasat University (SROI TU) has published a research report on blackchin tilapia. The report noted that, between 2016 and 2018, blackchin tilapia caused significant damage to the economy and ecosystem in the community of Prak Nam Daeng, Amphawa District, Samut Songkhram Province. In 2016, it caused a 5% reduction in the community's fishing income. In 2017 and 2018, the damage increased, leading to a 10% and 15% decrease in fishing income, respectively. The economic damage caused by blackchin tilapia in the Prak Nam Daeng Community alone is currently valued at no less than 100 million baht per year.8 This is consistent with the situation faced by shrimp farmers, who have found that their shrimp ponds are heavily infested by blackchin tilapia due to water being pumped into the ponds. Mr. Suntorn Rodbunchai, the head of Village 5 in Prak Nam Daeng, Amphawa District, stated that "For over 10 years, I have been facing the problem of blackchin tilapia eating shrimp in my ponds, which cover more than 70 rai. No matter how much we try to eliminate them, they never go away. I bought 300,000-400,000 shrimp to release into the ponds, but after six months, there were no shrimp left—only blackchin tilapia." In the Southern Region of Thailand, a survey by the Fisheries Department in Songkhla Province found that 21 of 245 shrimp farmers had blackchin tilapia in their water storage ponds, ¹⁰ As for the abandoned shrimp ponds, which number in the thousands inthis area, most have been overtaken by blackchin tilapia. Mr. Phattharaphon Sangkhaphaithun, president of the Songkhla Shrimp Farmers Association, estimates that there are approximately 50 tons of blackchin tilapia in both thewater storage ponds and the abandoned shrimp ponds.

Causes of the Epidemic of Blackchin Tilapia in Thailand

According to the report on the investigation into the causes and solutions to the issues, as well as the impacts of introducing blackchin tilapia for research and breeding purposes in Thailand, prepared by the Committee on Higher Education, Science, Research, and Innovation of the House of Representatives, it was found that a request to import blackchin tilapia was made on October 18, 2006. Charoen Pokphand Foods PCL sent a letter to the Department of Fisheries requesting to import Clarias gariepinus and blackchin tilapia. At that time, the fish species to be imported was identified as Nile tilapia (Sarotherodon melanotheron) to improve and maintain growth rates and to compare with the existing Nile tilapia strain for higher salinity tolerance. On November 24, 2006, the Department of Fisheries approved the import, and 2,000 fish were brought into the country on December 22, 2010, with a test center set up in Yisan Subdistrict, Amphawa District, Samut Songkhram Province. Subsequently, it was found that the fish died continuously, but the farm did not report this to the Department of Fisheries in writing.

However, in late 2011, an outbreak of blackchin tilapia was discovered in the aquaculture ponds of farmers in Yisan Subdistrict. By early 2012, the outbreak had worsened, causing continuous damage to native aquatic species cultivated in ponds, farms, and natural water sources, a situation that persists to this day. This led to an investigation to determine if the outbreak originated from a single source, in order to hold the relevant private parties accountable for the situation. Although Charoen Pokphand Foods openly applied for the import, there is credible information suggesting that other private companies also illegally imported the fish without authorization. According to the Department of Fisheries' data, it was found that Thailand was consistently exporting blackchin tilapia as ornamental fish between 2013 and 2016, with more than 320,000 fish exported, worth a total of 1,510,050 baht. The average annual export volume ranged from 10,000 to 100,000 fish. This has raised questions about the origin of the exported blackchin tilapia and who the importers were, especially since only one private company was authorized to import the specie.

However, an analysis of the spread of blackchin tilapia along the coastal areas of Thailand, based on the genetic structure of the population using genetic markers (Mitochondrial DNA), conducted by the Department of Fisheries, found that the population group found to be spreading across the coastal areas of six provinces (Phetchaburi, Chumphon, Samut Songkhram, Surat Thani, Prachuap Khiri Khan, and Rayong) showed minimal genetic differences. The genetic distance data and evolutionary relationship analysis indicate that the blackchin tilapia population spreading in Thailand share a common origin. ¹²



State Measures to Control the Epidemic

To control the spread of blackchin tilapia, the Department of Fisheries has implemented a three-phase strategy to address the issue. 13

- Immediate measures: These include controlling and eliminating blackchin tilapia from all water sources where outbreaks are found, and removing the fish from the ecosystem for useful purposes such as turning it into fishmeal or processing it into various products. It also involves surveying and monitoring the spread of blackchin tilapia in natural water sources in buffer zones, conducting public awareness campaigns, and promoting participation from all sectors in the eradication of blackchin tilapia.
- 2 Medium-term measures: These include introducing appropriate predators to the area, such as releasing white seabass and mullet in brackish water areas, and releasing species like clown knifefish, snakehead, red tial mystus, and others in freshwater areas.
- oe: ประชากรัมพันธ์ กรมประมน (a) Long-term measures: This refers to conducting research on controlling the blackchin tilapia population to prevent it from affecting ecosystems and native aquatic species, as well as rehabilitating

blackchin filapia population to prevent it from affecting ecosystems and native aquatic species, as well as rehabilitating the ecosystem after the eradication of blackchin tilapia populations.

On August 20, 2024, the Cabinet approved a budget of 450 million baht for the Department of Fisheries to implement the action plan to address the spread of blackchin tilapia from 2024 to 2027, designating it as a "National Agenda." The blackchin tilapia action plan includes seven measures, as follows: 14

- 1. Reduce the amount of blackchin tilapia in the outbreak areas by 4,000,000 kilograms or 4,000 tons by mid-2025.
- Release appropriate predators after reducing blackchin tilapia, such as seabass.
- 3. Utilize the blackchin tilapia caught by converting it into compost, bio-liquid fertilizer, fermented fish sauce, or fishmeal, to prevent waste.
- 4. Prevent the spread to neighboring water sources.

- Educate the public on how to observe and prevent potential dangers if an invasive aquatic species invades the ecosystem.
- 6. In the medium-and long-term, use chromosome manipulation technology on blackchin tilapia, inducing a change from 2N to 4N, making them sterile. When these sterile fish mix with natural populations, the resulting offspring will be 3N, creating sterile blackchin tilapia.
- Restore water sources damaged by blackchin tilapia. The Department of Fisheries will reintroduce native aquatic species to restore the ecosystem of the affected water sources based on recorded data.

However, the government's approach to solving the problem, as outlined above, is seen as a reactive measure that addresses the situation as it arises, and may only be taken seriously during times when it is a news topic. Importantly, the plan does not include preventive measures or monitoring of natural water sources that have not yet been inhabited by such an invasive species, nor does it involve surveying water sources to control the spread. Some measures need to be implemented with caution, as they may cause further damage to the ecosystem. For example, introducing other predator species to hunt blackchin tilapia could pose risks. Greater emphasis should be placed on prevention rather than addressing the issue after it has caused damage, something that is given more attention abroad. Dr. Thon Thamrongnawasawat, an expert in marine ecology and the Deputy Dean of the Faculty of Fisheries at Kasetsart University, stated that: 15 "Spatial management means controlling the spread as much as possible by dividing the area into primary and secondary zones. In the primary zone, the focus should be on reducing the number of fish, while in the secondary zone, the aim is to prevent the spread to adjacent areas. For areas where the fish have not naturally reached, efforts should be made to keep it that



The Role of Different Parties in Solving the Problem of the Blackchin Tilapia

The situation with the blackchin tilapia has raised awareness among civil society, and galvanized citizens from each province to form networks to address this issue. On January 13, 2025, a network of citizens from 19 provinces ¹⁶ led by the BIO Thai Foundation, submitted a petition to the government's complaint center at Government House urging swift action to resolve the issue. They made four demands: 1) To establish an independent investigation committee to identify the responsible parties within 30 days; 2) To expedite compensation for farmers and others affected; 3) To set up a national committee and provincial task forces to eradicate the blackchin tilapia by 2026; and 4) To sue those responsible for the problem and demand compensation for the damage caused.

One approach to eradicating the blackchin tilapia is to utilize the fish in large quantities, ensuring that they are removed from water sources. The Land Development Regional Office 10 and the Land Development Stations in Samut Sakhon, Samut Songkhram, and Phetchaburi Provinces launched a campaign on March 29, 2024, to produce high-quality biological fermented water (high-nitrogen formula). By using blackchin tilapia as raw material, the innovation helps promote plant growth. This has led organizations that require bio-fertilizers, such as the Rubber Authority of Thailand (RAOT), to purchase blackchin tilapia to produce bio-fermented water for rubber plantations. A total of 1,000 tons of fish were bought at 15 baht per kilogram, which would yield approximately 160,000 liters of bio-fermented water. 18

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Viewpoints and Recommendations

The situation of "alien species" is a serious problem for Thailand's ecosystems, and poses a significant challenge for all sectors, including the government, private sector, and civil society. Each sector has different perspectives and capacities for addressing the issue. For example, the government has the ability to conduct biological research and the authority to issue regulations to address the problem. Civil society plays a key role in highlighting the issues and impacts, and acts as a mechanism for solving problems at the local level. Meanwhile, the private sector contributes through innovation in problem-solving, such as purchasing or converting "alien species" into products that generate income to reduce the quantity of "these species." All three sectors should collaborate in the form of an integrated committee, with a government agency serving as the lead. Furthermore, existing fragmented committees from various agencies should be abolished to ensure a unified and organized approach to addressing this issue as a national agenda.

As for longer-term solutions, the Committee on Higher Education, Science, Research, and Innovation of the House of Representatives has made the following recommendations:

- There should be legislation or amendments to laws, regulations, and provisions to prevent the importation
 of certain aquatic species into the Kingdom. Once the importation is authorized, the process following
 the import should be specified to enforce compliance with the law effectively, with penalties for noncompliance by the applicants.
- 2. There should be legislation or amendments to laws, regulations, and provisions regarding the importation of foreign aquatic species for research. Applicants should be required to provide details on the source, producer, production site, distributor, genetic information, and other necessary data for thorough verification.
- 3. There should be an in-depth investigation into the spread of blackchin tilapia, determining the source of the escape into natural water bodies, and provide compensation to those affected.
- 4. The Ministry of Natural Resources and Environment, and the Ministry of Agriculture and Cooperatives should be the main agencies responsible for assessing the damages to Thailand in various sectors, and address the invasion of the blackchin tilapia to ensure swift action.

In addition to the various measures to address the blackchin tilapia problem, it is also necessary to simultaneously tackle other "alien species" in order to preserve and maintain the balance of ecosystems from being destroyed. The Office of Natural Resources and Environmental Policy and Planning (ONEP) has summarized the measures for the prevention, control, and eradication of invasive alien species.¹⁹ It is recommended that the enforcement of existing laws be expanded to cover activities under these measures in order to achieve practical effectiveness.²⁰ Although the Department of Fisheries has implemented measures to control the import of some "alien species," ²¹ these are mostly legal measures. The key problem lies in smuggling and violations of the law, partly due to weak enforcement. In addition, existing laws may be outdated and unable to keep up with current developments in technology. This results in overly lax discretion by licensing authorities and a lack of thorough oversight. Therefore, related laws should be regularly updated and improved.

Summary The issue of the blackchin tilapia is only one part of the broader alien species problem within Thailand's ecosystems. This is a long-term issue with widespread environmental and economic impacts, affecting the sustainability of ecosystems, natural resources, food security, public health, and the livelihoods of farmers. All sectors must be alert and committed to addressing the problem seriously. The government, in particular, should focus on sustained efforts to tackle the issue—including reducing blackchin tilapia populations in infested areas, breaking the cycle of infestation through biological measures, creating industrial demand for the fish (e.g., for fertilizer or processed food), preventing further spread to other areas, providing remedies for those affected, and working in collaboration with civil society and the private sector to prevent and control other alien species that may pose similar threats to the ecosystem, as blackchin tilapia currently does.

9

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



Thailand has over 70,000 factories that generate hazardous industrial waste. In 2022, the volume of such waste reached **2.7 million** tons. The key issues include illegal dumping in public areas, improper disposal methods, an insufficient number of disposal facilities, and unsafe transportation practices—as exemplified by the illegal transport of cadmium waste in 2024.



Introduction

The year 2024 saw numerous reports of massive leaks of industrial waste across various areas, causing widespread alarm among nearby communities. Early in the year, a group of illegal recycling factories in Klong Kiew Subdistrict, Ban Bueng District, Chonburi Province, was found to be secretly operating, resulting in damage to local residents due to leaking wastewater. This eventually led to the arrest of a Chinese investor under the Factory Act and the Hazardous Substance Act, and the revocation of the business license in March 2024. In the same month, there was an explosion at the T&T Waste Management 2017 Co., Ltd. factory and a fire at a warehouse in Phachi District, Phra Nakhon Si Ayutthaya Province, which was used to store chemical waste for Aek-Uthai Co., Ltd. The company was found to be in illegal possession of hazardous substances without authorization.

In April 2024, a major scare occurred when over 15,000 tons of cadmium waste were discovered in a factory in Samut Sakhon Province. It was later revealed that this cadmium waste had been transported from Bound & Beyond Public Company Limited in Tak Province. This violated waste disposal regulations, as cadmium waste is classified as hazardous and must be disposed of through landfilling only—it cannot be transported or sold. Further investigations found that some of the cadmium waste had also been sent to the illegal recycling operations in Klong Kiew Subdistrict Later, a fire broke out at Win Process Co., Ltd. in Bang But Subdistrict, Ban Khai District, Rayong Province, which took more than a week to bring under control. Inside the factory were tens of thousands of tons of hazardous chemical waste illegally stockpiled by the company, both above ground and underground.

Fire at Aek-Uthai Company's warehouse used for illegel chemical storage



On May 1, 2024, another fire broke out at a warehouse illegally storing chemicals belonging to Aek-Uthai Co., Ltd., just two months after the initial fire. A subsequent investigation revealed links between Win Process Co., Ltd. and all three branches of Aek-Uthai Co., Ltd. (located in Phra Nakhon Si Ayutthaya, Nakhon Ratchasima, and Phetchabun Provinces). During raids conducted between May and June 2024, large amounts of chemicals were found illegally buried underground at sites in Phachi District (Phra Nakhon Si Ayutthaya), Pak Chong District (Nakhon Ratchasima), and Si Thep District (Phetchabun).

In September 2024, two court rulings were issued in cases classified as "environmental crimes,"

1 The Rayong Provincial Court ordered Win Process Co., Ltd. to pay 1,743 million baht in pollution remediation costs to the state.

The Si Khiew Provincial Court (Pak Chong) sentenced an executive of Aek-Uthai Co., Ltd. to 2 years and 6 months in prison for causing pollution in Klang Dong Subdistrict, Pak Chong District, Nakhon Ratchasima. Later in November 2024, police filed charges against Mr. Zhang Guo Dong, the manager of T&T Waste Management Co., Ltd., for unauthorized possession of hazardous substances. There were suspicions that this operation was linked to the same Chinese investors behind the illegal recycling factories in Klong Kiew Subdistrict.

The problem of industrial waste in Thailand has become a recurring cycle. One key reason for the persistent issue of industrial waste mismanagement is the presence of loopholes in waste disposal and oversight systems. Individuals knowledgeable about the procedures are able to exploit these gaps to evade legal monitoring and regulation. In addition to industrial waste, hazardous waste in communities remains a largely overlooked issue. Despite its similar composition to industrial waste, hazardous waste is more intimately connected to everyday life, as virtually every household generates it in some form.

Therefore, understanding the laws related to the management and disposal of hazardous waste and industrial waste is crucial for enabling all stakeholders to plan more effectively. This article discusses the issues that have arisen, analyzes their causes and existing remedial measures, and provides policy-related recommendations.

The Problem of Industrial Waste and Hazardous Waste in Communities

Both industrial waste and hazardous waste found in communities pose significant threats to the environment due to their similar components and chemical compositions. The only difference lies in their sources hazardous waste originates in communities, while industrial waste is generated by industrial facilities.

"Industrial waste" refers to waste or unusable materials resulting from factory operations, including raw material intake, production processes, quality control, pollution treatment, machinery or equipment maintenance, and the demolition or construction of buildings within the factory premises. It also includes sludge or residues from these activities. Furthermore, hazardous waste generated from office buildings and worker accommodations within factory grounds is also classified as industrial waste.²

As for hazardous waste from communities, the Guidelines for the Transportation of Hazardous Waste from Communities in jurisdiction of Local Administrative Organizations defines it as follows:³

"Hazardous waste" refers to leftover or deteriorated items and containers of various chemicals that are contaminated with hazardous substances—such as toxic, flammable, or corrosive substances—as well as substances that cause disease or any other materials that may pose a danger to humans, animals, plants, property, or the environment.

"Hazardous waste from communities" refers to waste materials that are contaminated with or contain substances with hazardous properties such as toxins, flammable substances, oxidizing agents, peroxides, irritants, corrosives, reactive substances, explosives, mutagens (substances that cause genetic changes), or any other substances

that may cause or are likely to cause harm to humans, animals, plants, property, or the environment. These originate from various activities in residential areas, government offices, educational institutions, businesses, and other places within the community —excluding excreta or unused materials from factories as defined by factory law, infectious waste as defined by public health law, and radioactive waste.

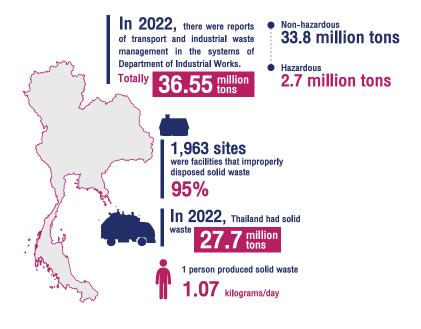
According to the Health Systems Research Institute, hazardous waste generated from households includes at least 15 types of items: light bulbs, fluorescent lamps, dry-cell batteries, mobile phone batteries, spray cans, spray paint cans, expired cosmetics, cleaning liquids, car batteries, motor oil, brake fluid, wood preservatives, polish, house paint, glue, thinner, lacquer, insecticides, herbicides, chemical fertilizer containers, and expired medications.

According to the 2023 annual report by the Division of Waste and Hazardous Substances Management, the issues concerning hazardous waste in Thai communities and industrial waste residues were highlighted and can be summarized as follows:⁴

The issue of illegal dumping of industrial waste into the environment and public areas largely stems from industrial factories—the primary sources of such waste—neglecting or failing to comply with legal regulations and the conditions attached to their operating licenses. This often involves intentionally avoiding proper waste treatment and disposal systems. Additionally, transport operators and waste treatment and disposal facilities (e.g., factories classified as Types 101, 105, and 106) have been found accepting unauthorized industrial waste and disposing of it improperly. These practices cause significant environmental damage and pose widespread health risks to the public. They also burden government agencies, which must allocate substantial resources for monitoring, legal proceedings, and environmental remediation.

In 2022, the total amount of industrial waste (both non-hazardous and hazardous) reported for transport and entered into the waste management system of the Department of Industrial Works reached 36.6 million tons—an increase of 96.8% compared to 2021 (which had 18.6 million tons). Of this total, 33.8 million tons were non-hazardous industrial waste, and 2.7 million tons were hazardous industrial waste. Under Thailand's Second National Waste Management Action Plan (2022–2027), the target for integrating hazardous industrial waste into proper management systems in 2022 was set at 50% of the total generated, with the goal of reaching 100% by 2027.

As for solid waste, in 2022, Thailand generated a total of 25.7 million tons of municipal solid waste. Based on population figures, this equates to one person producing approximately 1.07 kilograms of waste per day. Of the total, 8.8 million tons were recycled or reused, while the remaining 16.9 million tons were disposed of at waste disposal facilities. There are a total of 2,074 waste disposal facilities operated by both public and private sectors across the country. Among these, only 111 facilities (5%) operate in accordance with proper standards. The remaining 1,963 facilities (95%) do not comply with these standards—a significantly high proportion. This is due to several factors, including limited waste management budgets in many local administrative organizations (LAO), a shortage of skilled personnel, and disposal sites being overloaded beyond their capacity. Additionally, establishing new waste disposal facilities has become increasingly difficult due to opposition from local communities. Enforcement of laws against private disposal sites is also challenging, and oversight of LAO may be inadequate. These issues have led to recurring problems such as landfill fires, pollution from improper waste disposal, and leachate contamination from waste dumps.



Laws Related to the Control of Hazardous Waste and Industrial Waste Residue

Understanding the laws related to the control of industrial waste and waste residues enables a clearer grasp of both management issues and legal challenges. The key laws concerning the control of industrial waste can be summarized as follows:

The Enhancement and Conservation of National Environmental Quality Act B.E. 2535: This act serves as the primary legislation for environmental management in Thailand. It outlines the principles for managing industrial waste, stating that the collection, transportation, and any method of treatment or disposal of solid waste and residues must comply with the relevant laws. In cases where there are no specific laws governing the matter, the Minister, upon the advice of the Pollution Control Committee, is authorized to issue ministerial regulations prescribing proper procedures for the treatment or disposal of such waste.⁵ At present, no such ministerial regulations have been issued. This law also establishes the principle of civil liability for individuals, owners, or occupants of pollution sources who cause damage to natural resources or the environment. 5 The owner or possessor of the source of the pollution is responsible for paying compensation or damages for the harm caused.⁷

2 The Public Health Act B.E. 2535 is the primary legislation related to the management of solid waste and hazardous waste in Thailand. This law classifies waste into two categories as follows:⁸

(2.1) The management of waste and garbage in local areas is under the authority of LAO through the powers granted by the Public Health Act B.E. 2535 and the Act on the Maintenance of Cleanliness and Orderliness of the Country B.E. 2535. These two laws establish the responsibility for waste management as a duty of the local government authorities of each area (for collection, transportation, and disposal of waste), in alignment with the laws that establish LAO of all types. The definition of "waste" under the Public Health Act B.E. 2535 also includes hazardous waste generated within the community. 10 Overall, the Ministry of Interior will assign the responsibility to LAO to implement the Public Health Act. 11 The Ministry of Public Health 12,13,14 or the Pollution Control Department 15 will set standards or guidelines for various operations to ensure that all types of LAO are responsible for managing and handling hazardous waste in the community. 16

(2.2) The management of hazardous waste under the Factory Act falls under the authority of the Department of Industrial Works, which exercises its powers under the Factory Act B.E. 2535 to issue subordinate legislation that sets standards and control measures for the release of waste, pollutants, or any substances that impact the environment as a result of industrial operations, across various dimensions and in multiple regulations.

In sum, under the Public Health Act B.E. 2535, waste management is divided into two main categories: the management of excreta and general solid waste at the local level, and the management of hazardous waste under the Factory Act. This results in two key agencies being involved in hazardous or industrial waste management: the Local Administrative Organizations (LAO) and the Department of Industrial Works under the Ministry of Industry.

3 The Factory Act B.E. 2535 is the primary legislation in Thailand governing the management and disposal of industrial waste. Under this Act, several subordinate legislations (secondary laws) have been issued to set standards and methods for controlling the release of waste, pollutants, or any substances that may impact the environment as a result of factory operations, addressing various aspects. Key secondary regulations under the Ministry of Industry include: Notification on the Specification of Types and Sizes of Factories on Setting Methods for Controlling the Release of Waste, Pollution, or Any Substances Harmful to the Environment, Defining the Qualifications required for Supervisors and On-site Personnel, and Outlining the Criteria for Registering Supervisors for Controlling Hazardous Environmental Protection Systems, B.E. 2545; Notification on Prescribing Factories Required to Have Wastewater Treatment System Must Install Additional Special Equipment or Tools, B.E. 2547; Notification on Measures to Control the Amount of Dirtiness in Wastewater from Industry for Rehabilitation of the Chao Phraya River Quality, B.E. 2551; Notification

on Study Report of Measures to Prevent and Address Impacts on Environmental Quality and Safety, B.E. 2552; Notification on Report on Types and Amount of Pollutants Released from Factories, B.E. 2558; and Notification on Specification of Standards of Controlling Wastewater Release from Factory, B.E. 2560.

4 The Hazardous Substance Act B.E. 2535: Although this law defines hazardous substances in very broad terms, that does not mean that all types of substances fall under this law. Only substances that are specifically listed by the Minister of Industry, with the approval of the Hazardous Substances Committee, are subject to regulation under this Act. Once the list of hazardous substances has been officially announced, a list of responsible agencies for overseeing those substances will also be specified. As a result, multiple agencies, departments, and ministries become involved in the management and regulation of hazardous substances.

Problems in the Control of Industrial Waste and Hazardous Waste

Based on the laws related to the management and disposal of industrial waste and hazardous waste, it was found that the legal framework is complex and scattered across numerous pieces of legislation, including both Acts and subordinate laws. These laws are technical in nature, containing complexities in both content and enforcement, thus requiring experts and individuals with specific knowledge to interpret and implement them effectively. Additionally, the recording of data regarding hazardous waste and industrial waste, as mandated by law, is carried out in a closed system. There is no public disclosure of information related to those involved in the process—whether they are pollution sources, factories registered as waste generators, transporters, or disposers. This information is maintained within government databases and is not accessible to the general public.

The key challenges affecting the control of industrial waste and hazardous waste include the following:

The agencies that support industry are the same ones tasked with managing the disposal of industrial waste. A review of relevant legislation reveals that the control of industrial waste falls directly under the Factory Act B.E. 2535 and its subordinate laws. Under this framework, the Department of Industrial Works, Ministry of Industry, is designated as the lead agency responsible for managing industrial waste and hazardous waste. At the same time, this department also has a core mission to promote industrial businesses by supporting, encouraging, and regulating industrial operations. It is therefore unusual that the government has granted authority to the Department of Industrial Works—an agency whose primary responsibility is to support the establishment of industrial factories—to also oversee the management of industrial waste. This creates an overlap and conflict of duties.

2 The "polluter pays" principle under Thai law faces challenges in enforcement. The Enhancement and Conservation of the National Environmental Quality Act B.E. 2535 adopts the polluter pays principle and incorporates it into civil liability in two forms.

Liability arising from the spread of pollution from a pollution source that causes harm to life, body, or health, or results in damage to the property of others or the state. ¹⁹ The damage must have a causal relationship with the incident, without the need to consider whether the act was intentional or negligent. It is sufficient that the act caused harm to members of the public who suffered damages (However, there are three exceptions to liability: force majeure or acts of war, actions taken under government orders, and actions caused by the injured party themselves).

Liability for those who cause damage through pollution.²⁰ The law establishes the principle that *the damage* must involve the destruction, loss, or deterioration of natural resources that are state property or public domain. Therefore, only government agencies responsible for the care, protection, preservation, or conservation of such natural resources or public property have the right to file a lawsuit in such cases.²¹ It is also required that damages be clearly quantified in monetary terms, with the court having discretion to assess the extent of the damage.

A major challenge in pursuing such lawsuits is that civil damage claims typically take a long time to process, as they must go through the court system. This involves the burden of presenting witnesses and evidence to prove the causal relationship between the damage and its source in accordance with tort law. Such processes place a significant burden on both the general public and concerned government officials, as the processes that cause pollution in industrial factories are often complex and operate within closed systems, making it difficult for outsiders to access relevant information. Furthermore, court proceedings take a long time, and plaintiffs must provide a valuation of the total damage done to natural resources — a task made more difficult by the lack of clear criteria for such valuation, since claims of this kind are relatively new in Thai legal practice.

Another issue is that fines stipulated under the law are not proportionate to the damage caused. A review of relevant laws governing the management and disposal of hazardous waste or industrial waste — including the Factory Act B.E. 2535, the Public Health Act B.E. 2535, and the Hazardous Substance Act B.E. 2535 —shows that the prescribed fines are often lower than the actual cost of properly disposing of hazardous or industrial waste. This incentivizes business operators to violate the law and pay the relatively low fines rather than comply with the legal requirements.²²

3 The management of hazardous waste in communities may involve various standards for operation. Based on the facts, it is found that hazardous waste also arises from the consumption by people in communities (e.g., chemicals used in households, light bulbs, insecticides, cleaning chemicals, old vehicle batteries, used lubricants, electrical/electronic equipment, etc.). Some of these hazardous wastes can be reused or recycled, but those that are not in demand by recycling businesses are often discarded with general waste. Although the law mandates that LAOs are responsible for managing and disposing of hazardous waste in communities, there are various types and sizes of LAOs, which result in different capacities for waste management. If these wastes are not properly managed, they may pose a risk to public health and the environment. Therefore, it is essential to establish measures to closely monitor the operations of LAOs in hazardous waste management.

Recommendations

Although Thailand has several laws and multiple agencies responsible for managing and disposing of hazardous waste and industrial waste, there are still issues with the implementation of these matters. Therefore, the following improvements should be considered:

- The authority for managing industrial waste should be separated from the Department of Industrial Works to reduce conflicts of interest related to its responsibilities. Other agencies, such as the Pollution Control Department or other state agencies without a stake in the establishment of industrial factories, should take over the management and disposal of industrial waste.
- The law should be amended to establish an environmental damage compensation fund to address environmental issues affecting public health. This could be done by amending the Enhancement and Conservation of the National Environmental Quality Act, B.E. 2535 to establish an environmental fund aimed at addressing or compensating for environmental issues. It should also set guidelines for industrial plants that cause pollution to contribute to this fund, with the fund's objectives extended to cover compensation for damage to life, body, health, and well-being from pollution, as well as related social welfare issues.

- Penalty measures under the law, including fines and other punishments, should be adjusted to be proportionate to the damage caused, as well as to the economic and social conditions. This could involve increasing fines or introducing other penalty measures to make businesses feel that breaking the law is not worth the fine or penalties they will face under the law.
- 4 A process for public participation in the management of hazardous waste in communities and industrial waste should be established.

Reviewing the laws related to hazardous waste and industrial waste management shows that government agencies, both LAOs and the Department of Industrial Works, are the primary entities responsible for operations. They set standards for operators, those involved in transportation, or disposal, and maintain databases related to hazardous waste or industrial waste systems. Therefore, it is crucial to include the public in these operations. Information about management and disposal should also be made available, with personal data or business-sensitive information possibly redacted, allowing the public to more actively participate in monitoring and reviewing these activities.

Summary

Thailand faces significant challenges in managing industrial and community waste, reflecting legal issues related to the lack of separation of authority to oversee industrial operations from the Department of Industrial Works, as well as problems in enforcing laws that require polluters to compensate for the damage caused. Additionally, the waste management standards in each community differ according to the capabilities of the LAO. Therefore, it is necessary to amend the laws to separate the authority for managing industrial waste from the Department of Industrial Works, establish penalties for polluters that align with the impacts, and create an environmental damage compensation fund to quickly support those affected during the legal process.

Furthermore, the system for granting factory permits should be reformed so that only low-risk factories with efficient hazardous waste management systems are granted permits. The industrial waste movement permit system should also be reformed to increase transparency and disclose information, allowing the public to actively participate in monitoring the operations of factories in their local areas.

10 Living in Debt:

A Major Problem for Thai Households



Household debt is not just an individual problem; it also affects the society as a whole. Debt does not arise solely from excessive spending behavior, but all parties are involved in the problem. Therefore, solving the household debt requires a comprehensive approach, addressing the situation before, during, and after incurring debt. All sectors—government, creditors, debtors, the private sector, and other stakeholders—

must collaborate to solve the problem.

"

Introduction

According to economic and financial statistics from various countries around the world (CEIC Data: Economic Database System), the ratio of Thailand's household debt to gross domestic product (GDP) ranks among the highest globally. It ranks 3rd out of 21 countries in the Asian region, following the Republic of Korea and Hong Kong Special Administrative Region of the People's Republic of China, and 6th when compared to 65 countries worldwide. According to data from the Office of the National Economic and Social Development Council (NESDC), Thailand's household debt in the second quarter of 2024 totaled 16.3 trillion baht, accounting for 89.6% of GDP. Thailand's household debt-to-GDP ratio has exceeded 80% continuously since 2015. Nearly one-third of this debt is for consumption purposes, such as personal loans and credit card debt — often referred to as non-productive loans — which is relatively high compared to neighboring countries like Malaysia and China, where the ratios are 14% and 13%, respectively. Thai household debt in the future is highly vulnerable due to three main factors.

- Slow economic and income growth among Thais, which weakens the financial status of small business operators and affects up to 71% of the national labor force
- 2 Thailand's financial costs are higher than in the past due to rising borrowing costs since 2023, especially for small-scale loans, which are highly sensitive to interest rate hikes. This affects debt repayment ability and increases the risk of widespread loan defaults.
- 3 Indebtedness driven by poor financial discipline, the expansion of non-productive loans, and a significant rise in demand for informal debt reflect debt creation for the wrong purposes and poor financial discipline. Coupled with high interest rates on such loans, this can lead to a perpetual debt trap, making it difficult to reduce household debt.

A household debt level exceeding 80% of GDP not only undermines consumption but also negatively impacts long-term economic growth and contributes to social problems. At the household level, excessive debt leads to lower living standards and financial liquidity issues, resulting in stress, family problems, crime, and more.

This article discusses the emerging problems related to Thai household debt, their economic and social impacts, and potential solutions from the government and civil society — such as collaborative approaches to reduce household spending through various stakeholder networks.

The Situation of Thai Household Debt and Trends

Thailand's "household debt" situation has been steadily and significantly worsening from 1994 to 2024 — in terms of the household debt-to-GDP ratio, non-performing loan (NPL) rate, and average household debt. This issue is closely linked to the country's periodic economic crises. Thai households have been impacted by several major events: The 1997 Asian financial crisis (Tom Yam Kung crisis), the great flood in 2011, and the COVID-19 crisis between 2020 and 2022, whose effects are still being felt. These repeated shocks have slowed income growth for the population, failing to keep pace with the steadily rising debt. By late 2023 to early 2024, household debt had surged to 90.8% of GDP (Figure 1), placing Thailand among the countries with the highest household debt levels globally — exceeding those of emerging markets like India, Indonesia, and Malaysia, and comparable to developed countries such as Switzerland, the United Kingdom, and the United States (Figure 2). More importantly, Thailand's household debt-to-GDP ratio has grown faster than many other countries over the past decade, with a large portion consisting of non-productive debt. This poses a major obstacle to national development.

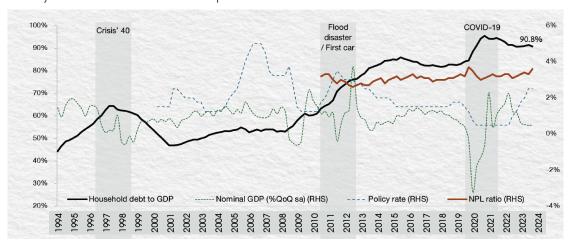


Figure 1 Proportion of Thai household debt to the country's GDP: 1994-2024 Source: Bank of Thailand, NESDC, and the Credit Bureau — data compiled by Sommarat Chantarat et al. (2024)



Figure 2 Proportion of household debt to GDP for countries around the world Source: IMF Global Debt Database (Sep. 2023)

Although the Office of the National Economic and Social Development Council reported that Thailand's household debt growth slowed in the second quarter of 2024 — totaling 16.3 trillion baht, with a growth rate of 1.3%, down from 2.3% in the previous quarter — the household debt-to-GDP ratio decreased from 90.7% in the previous quarter to 89.6%. However, this remains a very high level, ranking 3rd out of 21 countries in the Asian region.³ This raises the question: Does the gradual decline in the household debt-to-GDP ratio (also known as the debt deleveraging process) indicate an improvement in Thailand's household debt situation?

An analysis conducted by the Siam Commercial Bank concluded that the debt deleveraging process had already been gradually occurring since 2016 but was disrupted during the COVID-19 crisis. The process had slowly brought the household debt-to-GDP ratio down from 85.9% at the end of 2015 to 84.1% just before the Thai COVID-19 pandemic. However, the spread of COVID-19 caused this process to stall, and the ratio surged to a historic high of 95.5% in the first quarter of 2021. The debt deleveraging process began again after the COVID-19 crisis subsided, with the household debt-to-GDP ratio steadily declining to 89.6% in the second quarter of 2024. However, this decline was primarily due to a slowdown in the growth of outstanding household debt, largely resulting from financial institutions rejecting loan applications due to deteriorating credit quality across all types of household loans.⁴ Although household debt has slowed or contracted across nearly all types of loans, mortgage loans continued to grow slightly in the second quarter of 2024.⁵ Personal loans, which are highly sensitive to increases in lending interest rates, are showing a clear and accelerating trend of loan defaults.6

Non-formal Lending: A Dangerous Debt Trap

In addition to household debt from financial institutions, many Thai households are also burdened with a massive amount of informal debt, which comes with high costs and traps from which many households cannot recover or escape. According to the 2023 Household Socio-Economic Survey by the NESDC, Thai households accumulated informal debt totaling 67 billion baht, with 47.5% of this debt being used for consumption purposes. This reflects the lack of liquidity among households, putting them at risk of an endless debt cycle, including being defrauded by ambiguous contracts and facing illegal and violent debt collection practices.⁷

The significant implication for household financial liquidity stems from income not being in line with expenses, due to the long-term financial impacts of COVID-19. Borrowers enrolled in the loan deferment programs for home and car payments during the Thai epidemic are now burdened with higher interest rates after the relief measures ended. This has made it impossible for them to repay the principal to financial institutions, affecting their credit scores and preventing access to formal lending systems. Ultimately, many are forced to rely on non-formal loans at high levels, leading to an endless cycle of debt. Although the economy has gradually recovered after the COVID-19 crisis, this recovery has not been uniformed across all businesses. Changes in the manufacturing and technology sectors have directly resulted in business closures and layoffs in various industries. While the overall Thai economy in 2024 has improved compared to the previous year (driven by a recovery in exports), over 90% of export income is concentrated in large businesses. At the same time, the tourism sector (largely driven by small businesses) is concentrated in specific areas. This has led to slow recovery for small and medium-sized enterprises (SME), which employ 71% of the workforce in Thailand. This also adversely affects the income of many Thai workers, leading some households to take out additional loans to replace liquidity loss.

Negative Impact of Thai Household Debt

The 2023 Household Socio-Economic Survey by the National Statistical Office indicates that Thai households are facing increasingly severe financial problems. The main cause is that low-income households do not earn enough to cover their expenses, compared to 2021, while even middle-income households were starting to face insufficient income relative to their expenses. This situation left these households vulnerable, lacking the financial resilience to withstand adverse events that may occur in the future,

such as being laid off or experiencing wage cuts. In addition to reducing consumption, these households may also default on their debts, creating risks for financial institutions or lenders. In the worst-case scenario, widespread defaults could undermine the financial system, causing it to fail to operate normally, which would severely impact economic activities and potentially lead to an economic convulsion. Thus, the burden of debt has become a major factor hindering consumption and economic recovery. Looking ahead, although household incomes are expected to gradually recover along with the economy, high debt levels will likely continue to restrain economic growth. This is because households will need to use any increased income to repay existing debts, preventing them from fully utilizing their spending capacity.

Siam Commercial Bank (SCB) has analyzed two potential scenarios for the overall economy. In Scenario 1, if the economy grows significantly and debt increases slowly, household income will recover, and household lending will continue. Households are likely to be able to repay their debts in the future, which would help support consumption and investment in households, enabling the overall economy to grow sustainably. In Scenario 2, if the economy grows slowly and household income recovers only gradually, financial institutions will be cautious in extending new credits to households. This credit contraction will have a continued impact on consumption and investment, ultimately leading to a negative effect on the overall economy. This mechanism could create a downward cycle, making it more difficult to address the household debt problem. Ominously, the current situation in Thailand is beginning to resemble SCB's Scenario 2 above. The process of debt reduction is more a result of decreased credit rather than income growth. The Thai economy may face pressure from reduced lending, leading to a slowdown in overall economic activity. Such a situation also makes restructuring of existing debt more difficult, as household debt repayment capacity has not improved.

The impact of household debt on individuals at the most basic level is a reduction in quality of life if debts remain unpaid or if households are overwhelmed with debt. This can erode mental and physical health, as well as relationships with others. Widescale indebtedness may also have broader social consequences, such as younger generations not wanting to have children due to the inability to bear the financial burden. This problem will exacerbate the demographic structure of Thailand, where the aging population is expected to surpass all other age groups in size, creating a society dominated by elderly people with insufficient social welfare support.

Government Policies and Measures to Address Household Debt

Looking at past debt relief policies, many governments have implemented similar strategies.

During the Thaksin Shinawatra's administration (2001-2006), the government launched the "Farmer Debt Suspension Project," which allowed farmers to suspend loan repayments to the Bank for Agriculture and Agricultural Cooperatives (BAAC) for three years. Additionally, the "Village Fund" allocated 1 million baht to each village to provide "capital" for villagers to borrow for their livelihoods. However, many of these funds encountered "bad debt" issues, with some even facing "bankruptcy."





During the Abhisit Vejjajiva's administration (2008-2011), which was affected by the global "Subprime Crisis," the government implemented "debt suspension" and "debt restructuring" measures to assist the public and SMEs. Interestingly, this government began to focus more on "increasing flexibility" in debt repayment rather than offering blanket "debt forgiveness," a strategy that may be more sustainable but still limited by budget constraints.

The Yingluck Shinawatra administration (2011-2014) used the "Agricultural Loan Program," which provided low-interest loans, and the "Debt Clinic" aimed at acting as a "center" for coordinating between debtors and financial institutions. However, problems arose with a lack of "transparency" in managing the programs and the "inaccessibility" of these programs to those in need.



During the Prayut Chan-o-cha administration (2014-2023), which faced the COVID-19 crisis, the government declared 2022 as the "Household Debt Relief Year," covering various types of debt such as personal loans, home loans, business loans, agricultural loans, nano-finance, and credit card debt. The government provided sustainable debt management consultations through three main steps.



- Addressing existing debt problems, targeting groups such as student loan debtors, financial
 institution debtors, hire-purchase debtors, civil servant debtors, and credit card and personal
 loan debtors, as well as those with limited access to financing
- Generating income through loans for occupational development and low-interest loans via specialized financial institutions
- 3. Building financial resilience by promoting financial literacy, aiming to reach all-age groups and creating awareness, skills, and a system for financial skill development. In addition, there are three concrete debt relief projects: the Debt Clinic for bad credit card debt, unsecured personal loans, and the Debt Exit Fastlane for all types of debt.

The Srettha Thavisin government (2023) announced a comprehensive debt relief plan, which was set as a national agenda in late 2023. The plan targeted four groups of debtors: Group 1 consisted of debtors affected by COVID-19; Group 2 included those with regular income but significant debt burdens that exceed their repayment capacity; Group 3 was for those with unstable income, leading to irregular debt repayment; and Group 4 involved long-standing NPL. The assistance included temporary debt suspension measures to ease the burden for some groups.¹¹



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The government of Ms. Paetongtarn Shinawatra (2024-the present) — The first policy focuses on a comprehensive debt restructuring, particularly for housing and vehicle loans, to assist both formal and informal debtors. The policy is grounded in the philosophy of maintaining financial discipline and preventing moral hazard among debtors, while also promoting financial literacy and encouraging new forms of savings that align with the Thai lifestyle. The policy will be implemented through state-owned financial institutions, commercial banks, and the asset managegement companies. The "You Fight, We Help" Program consists of two main measures. Measure 1, "Pay on Time, Keep Your Assets," aims to assist debtors with housing loans, vehicle loans, and SMEs with moderate debt levels, allowing them to retain their collateral, such as homes, vehicles, and businesses. This will involve debt restructuring by reducing installments and interest burdens, with the paid installments going toward principal repayment. Measure 2, "Pay, Close, End" is designed to help individual debtors with NPL and low debt levels. This will involve a lenient debt restructuring approach to transform the status of NPL into fully settled debts. Debtors will undergo a restructured payment plan, allowing them to pay a portion of the debt to settle and pay off the debt more quickly. "Is

The debt relief measures of the various administrations still focused on solving the issue of "debt" itself. Many measures were aimed at providing short-term relief to debtors, such as debt moratoriums, debt restructuring, and access to new loans at lower interest rates, whether addressing informal or formal debt. However, the difference in the measures during the terms of General Prayut, Mr. Srettha, and Ms. Paetongtarn is that the Prayut government emphasized promoting credit sources for vocational development, financial literacy, and debt clinics. In contrast, the Srettha government focused on making changes at the contractual level with legal implications, such as abolishing loan guarantors of the student loan, changing in repayment hierarchy, and setting car loan interest rates, and debt collection fees. Meanwhile, the "You Fight, We Help" measure in Ms. Paetongtarn's era was questioned regarding whether helping debtors in this manner could lead to a rise in NPLs and distort financial discipline.

An analysis by Dr. Anusorn Tamajai, Dean of the School of Economics at the University of the Thai Chamber of Commerce, concluded that the debt moratorium measures implemented by nearly every government have only alleviated the household debt crisis but have not addressed the root causes of the debt. If these measures are not implemented carefully and are used repeatedly, they could lead to increased moral hazard in the financial system, accumulating risks of a financial system crisis in the future. What all governments have failed to do is to change the economic structure in order to increase a household's ability to repay debt through higher incomes. Mr. Anusorn expressed the view that,

"Debt relief measures must focus on income distribution and equitable economic benefits, creating high-income job opportunities for people. Industrial businesses must increase value through knowledge and innovation, transforming products to increase their price and value."

Most academics agree that this is a major challenge for the government to address if it is to prevent households from falling back into debt. Although many businesses are experiencing a labor shortage, wages have not increased significantly. Furthermore, lowering loan interest rates may not directly solve the problem, as financial institutions will be reluctant to lend when there is a high risk. This essentially pushes low-income individuals with weak financial standing to borrow from non-formal lenders instead. Nonarit Bisonyabut, Senior Scholar at the Thailand Development Research Institute (TDRI), stated that the government's debt relief policies "have not yet gone far enough." What is missing is the issue of fostering discipline and understanding the risks of incurring debt, which should be addressed by the government.¹⁵

Prospects for Successfully Addressing Thai Household Debt

The Thai household debt problem is not merely an individual issue—it affects society and the nation. Debt accumulation does not stem from a single factor like overspending alone; all stakeholders involved are important variables. Therefore, solving the problem requires a holistic approach—before falling into debt, while in debt, and when debt becomes problematic—with cooperation from all sectors: the government, creditors, debtors, the private sector, and other stakeholders.

For debtors, financial discipline is essential. This includes assessing one's financial status and the necessity of taking on debt; incurring debt slowly, minimally, and only when necessary; using borrowed money for its intended purpose; and repaying debt on time. Debtors should also track their income and expenses. If debt restructuring is required, they must comply with the new terms responsibly.

For creditors, lending should be aligned with the debtor's repayment capacity and should not encourage unnecessary borrowing. Creditors should provide sufficient information to support informed decision-making and offer incentives for responsible debtors to repay early—such as reduced interest rates based on risk levels. They should also have mechanisms in place to assist debtors beginning to experience repayment difficulties, such as restructuring debt in line with reduced income.

For the government, sustainable debt resolution must be elevated. This includes improving tax collection systems, developing appropriate welfare programs, enhancing national data integration, and facilitating equitable access to credit for different population groups. Income and repayment behavior data should be compiled to better support debt resolution—both through legal reforms (e.g., bankruptcy and rehabilitation laws) and networks to assist in debt management. Public financial education should be strengthened to promote discipline and behavioral change among debtors. Financial institutions must also lend responsibly, comprehensively, and across all types of debt. What the government should not do is to implement broad-based and prolonged debt moratoriums, as they lead to rising interest burdens for debtors during the pause, and may erode financial discipline if people become accustomed to not repaying. It also reduces liquidity for financial institutions, hindering their ability to lend to other borrowers. Moreover, the government should not erase or alter debtors' credit histories, as this would leave financial institutions without sufficient background to assess borrowers, causing reluctance to lend or resulting in higher interest rates, ultimately making it harder for debtors to access formal credit. ¹⁶

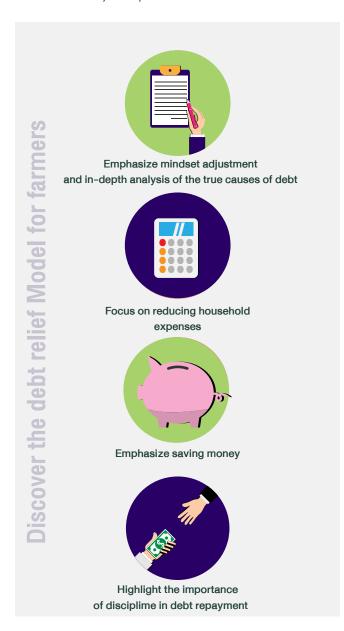
Civil Society and Community-based Models of Addressing Debt at Community Level

In addition to addressing debt issues at the macro level, civil society may also explore debt solutions at the community level, where several concrete and successful models already exist. One such model is the community savings cooperatives, such as the Sufficiency Economy Learning Center in Ban Nong Or-Nong Sim, Trakarn Pheut Phon District, Ubon Ratchathani Province. This approach began with group formation and the development of a robust savings management system. The initiative helped generate income-generating occupations for members to ensure sufficient and consistent income for both spending and saving. The system provided accessible emergency funding sources with low interest rates and used personal relationships as a system to monitor the household financial situation. If models like this receive government support, they could strengthen the community credit system and align with the way of life of local people, who often lack the credit access required by formal financial institutions. Such models can also help reduce reliance on non-formal predatory loans to some extent.

There are also debt relief models specifically tailored for "farmers," many of which are being implemented in various areas. Their key goals are to reduce expenses, ensure steady income, and build savings. Four such models have been proposed by independent scholar Dr. Rungthong Kramanon:

- Model One focuses on "shifting the mindset and analyzing the root causes of debt" through household accounting, aiming to eliminate debt. During 1-3 years, no new debt should be accumulated. The model emphasizes "cost reduction" (e.g., using locally-grown organic substances instead of chemical inputs), "cutting expenses" by adjusting personal habits, and increasing income through diversified agriculture that generates daily income rather than seasonal earnings. This includes mixed farming after the rice-growing season, off-season crops, or crops suited to local conditions. Immediate action and regular follow-up are essential, along with building networks to share experiences and explore solutions together.
- Model Two emphasizes "reducing household expenses" by relying on available local resources—such as growing vegetables for household consumption or producing household items like soap, shampoo, or multipurpose cleaners. It also stresses maintaining discipline in repaying debts and avoiding new ones.
- 3 Model Three aims to "build savings" by generating supplemental income or taking up a second job aligned with one's skills, with the goal of establishing annual savings accounts.
- Model Four focuses on "instilling discipline in debt repayment" by allocating a portion of income toward repaying debt, regardless of how much one earns. This involves taking up side-jobs to generate income and immediately applying that income to debt repayment.

Meanwhile, Dr. Sommarat Chantarat from the Puey Ungphakorn Institute for Economic Research, Bank of Thailand, emphasizes that effective financial planning plays a vital role in improving the quality of life for farmers. This includes "promoting savings," keeping household accounts, and securing various types of insurance such as rice crop insurance or life insurance—like credit life insurance or savings life insurance. Effective debt solutions for farmers must involve enhancing their financial literacy and encouraging continuous self-improvement through state-run programs or other relevant initiatives. The focus should be on hands-on practice that fosters learning and empowers farmers to manage their finances independently, with government policies serving as additional tools to help them eventually escape debt.¹⁷



Summary

Household debt is a major issue that hinders Thailand's economic development and is both an economic and social problem that erodes the quality of life of Thai people. Although past governments have attempted to address this issue through various measures such as debt moratoriums, debt reduction, debt restructuring, and seeking cooperation from financial institutions to support capable borrowers, these approaches merely treat the symptoms rather than the root causes. Household debt is directly tied to the country's macroeconomic conditions: an aging society, stagnant domestic markets, labor shortages, and an outdated industrial structure that has failed to upgrade its technology and investment to match the demands of the modern digital era. These factors have led to a slowdown in the economy, affecting employment and income growth. When income falls short of expenses, households are forced to take on more debt. On the other hand, the debt problem also stems from a lack of financial discipline and the inability of individuals to adapt by acquiring new skills and continuously developing themselves to remain relevant in the labor market.

Therefore, resolving household debt requires a paradigm shift in government policy to focus on economic strategies that generate income for the people, emphasize human resource and labor skill development, and promote investment across different regions to raise household income levels. It also involves expanding access to credit in ways that do not compromise financial disciplines such as utilizing savings cooperatives, village funds, and various community-based groups or organizations to broaden credit access beyond simply injecting liquidity into financial institutions. The ultimate goal is to achieve "reduced expenses, steady income, and savings" for households throughout the country.

4 Outstanding Accomplishments for Health

1. Honoring Dr. Sanguan as a Statesman of Thai Public Health

Dr. Sanguan Nittayarumphong



On January 19, 2025, the Heart to Heart Foundation, in collaboration with the National Health Security Office (NHSO), held an event titled "In Remembrance of 16 Years of Dr. Sanguan Nittayarumphong" to ho or Dr. Sanguan Nittayarumphong for his significant role in advocating for the Thai Universal Health Coverage policy. Dr. Sanguan used the "Triangle that Moves the Mountain" Theory as the primary strategy to drive the policy. This approach involved creating knowledge networks, linking them to social movements, and connecting them with the political sector. On this occasion, Mr. Srettha Thavisin, the Prime Minister at that time, left a message for Dr. Sanguan, the statesman of Thailand's public health, from the Universal Health Coverage to the 30 Baht for All Health Services.

Dr. Sanguan graduated with a Bachelor of Medicine degree from the Faculty of Medicine Ramathibodi Hospital, Mahidol University. He then began his medical career in rural areas. Later, he became the president of the Rural Doctor Society and was a co-founder of the Rural Doctor Foundation, playing a leading role in the social movements of rural doctors. He eventually rose to significant positions within the Ministry of Public Health, becoming the first Secretary-General of the NHSO. He was the initiator and driving force behind the Universal Health Coverage program, ensuring that all Thai people have the right to access basic public health services equally. The Sanguan played the key role in pushing forward the 30-baht universal healthcare.

The legacy that Dr. Sanguan left for Thailand, aside from the Universal Health Coverage Scheme — which is the most significant legacy he gave to the Thai people — also includes inspiring medical professionals and public health workers to serve the public's best

interests. He became an exemplary figure of someone who sacrificed for the greater good and the nation. Although Dr. Sanguan has passed, his work continues to inspire future generations to work toward the development of society and the country. Public health networks have therefore organized various activities to commemorate his contributions, such as:

- January 18th of every year (the anniversary of his passing), activities are held to commemorate Dr. Sanguan's contributions to public health in Thailand.
- Naming of meeting rooms and buildings: For example, the
 "Sanguan Nittayarumphong Meeting Room" at the NHSO
- Award and scholarship presentations to individuals or organizations with outstanding achievements in public health or the promotion of universal health coverage
- Academic activities including academic conferences and seminars related to health systems and universal health coverage

Production of documentaries and books

At the event "Commemorating 16 Years of Dr. Sanguan Nittayarumphong," a discussion titled "Reaching the SAFE Goal for Universal Health Coverage for All Thai People" was held. The next step for Thailand's universal health coverage is SAFE, which stands for Sustainability, Adequacy, Fairness, and Efficiency. For Sustainability, the focus is on developing primary healthcare, emphasizing health promotion to reduce long-term healthcare costs. For Adequacy, the policy of "50 districts, 50 hospitals" in Bangkok aims to increase access to services in urban areas. Mental health services will be expanded with psychiatric departments in nearby hospitals, and comprehensive care for drug addiction treatment will be provided. In terms of Fairness, priority will be given to border areas and other specific regions, as well as boosting morale among public health workers. As for Efficiency, the focus will be on maximizing the effectiveness of budget spending by improving service management efficiency at the health region level. Pilot programs for Value-Based Health Care will be introduced, and efforts will be made to improve cost accounting for healthcare facilities.

2. The Thai Rural Doctors Movement Receives the Ramon Magsaysay Award

On August 31, 2024, the Ramon Magsaysay Foundation of the Philippines held the 66th Ramon Magsaysay Award Ceremony, recognizing outstanding individuals who have made significant contributions to humanity in Asia. The awardees included Karma Phuntsho from Bhutan, Miyazaki Hayao from Japan, Nguyen Thi Ngoc Phuong from Vietnam, Farwiza Farhan from Indonesia, and the Rural Doctors Movement from Thailand. The Ramon Magsaysay Foundation is often referred to as the Nobel Peace Prize of Asia, having been awarding prizes since 1957 in honor of the late President Ramon Magsaysay's dedication to individuals and organizations that have benefited society in Asia.

The Rural Doctors Movement in Thailand has played a continuous role for over half a century (48 years) in addressing social inequality. Key mechanisms include four organizations: the Rural Doctor Society, the Rural Doctor Foundation, and the Sampran Group. Notably, the Rural Doctors Movement is widely recognized for its role in creating Thailand's universal health coverage system and for its efforts in monitoring and preventing corruption. The Ramon Magsaysay Award is therefore a significant driving force and source of inspiration for the health system reform in Thailand. To date, 24 individuals and organizations from Thailand have received the award, including Her Royal Highness Princess Maha Chakri Sirindhorn, Prof. Dr. Prawase Wasi, Prof. Krisana Kraisintu, and others.

On November 16, 2024, four representatives of the Thai Rural Doctors Movement—Dr. Vichai Chokevivat, Dr. Chuchai Supawong, Dr. Kriengsak Vacharanukulkieti, and Dr. Supat Hasuwannakit—traveled to receive the

Ramon Magsaysay Award at the Ramon Magsaysay Auditorium in the Philippines, with approximately 30 representatives from the Rural Doctors Movement attending the event to witness and congratulate the awardees. This marked the first time in 66 years that the Ramon Magsaysay Foundation presented the award to a movement, as this was the work of a large group of individuals—a collective effort led by young doctors and other personnel working both in rural and urban areas. This movement, driven by cooperation among government, civil society, local authorities, and the private sector, has been working for decades, producing tangible results that continue to this day and into the future. It could be described as the "Public Health Movement for the Poor." On this occasion, the Ramon Magsaysay Foundation invited Dr. Vichai Chokevivat to deliver a public lecture titled "The Path to Inclusive Health Care Following the Footsteps of Thailand's Rural Doctors Movement."

The Rural Doctors Movement has been honored for its dedication and success in various areas, including:

- Development of a health care system in rural areas. Rural doctors and other relevant personnel work selflessly in underserved areas, focusing on expanding access to health services to reach impoverished communities in remote regions.
- Promoting equity in the health system, which helps reduce the disparity in
 access to health services between urban and rural areas. It also serves as a
 remarkable example of the push for the universal health coverage system
 (the 30 Baht for All Health Services), working with all sectors, including civil
 society.
- Creating community-level health care networks, with the Rural Doctors
 Movement working with local agencies such as health volunteers and
 community hospitals, playing a significant role in promoting health and
 preventing disease in communities.
- 4. Protecting fairness in the health system. This movement has been a vocal advocate for public health policies and has fought against inappropriate interventions by those seeking to exploit the health system for personal gain.

Thus, the Rural Doctors Movement has played a significant role in inspiring health networks in various countries to develop health care systems, improve the quality of life for people by reducing rates of illness and death through treatment and disease prevention, and develop medical personnel by expanding training opportunities and enhancing the capacity of public health staff.³



From left: Dr. Kriengsak Vacharanukulkieti, Dr. Supart Hasuwannakit, Dr. Vichal Chokevivat and Dr. Chuchai Supawong represented the Rural Doctors Movement in the Award Ceremony in the Philippines

3. Thailand's Methamphetamine Withdrawal Medication Wins International Innovation Award

Opium Abstinence Medicine in Effervescent Tablet Form



Source: https://www.hfocus.org/content/2024/07/30970

Thailand received an international award for its innovation in traditional Thai medicine, "opium withdrawal medicine in effervescent tablet form," for treating drug addiction, commonly known as the traditional Thai herbal medicine for methamphetamine addiction. This innovation was developed collaboratively by Dr. Preecha Nootim, Director of the Bureau of Thai Traditional Medicine and Herbal Development, Pharm. Theerathorn Sungrai, and Asst. Prof. Dr. Maleeruk Utsintong from University of Phayao. They received a Special Award from the Taiwan Invention Association for an innovation with the potential to enhance the quality of human life, as well as a Silver Medal at The 49th International Exhibition of Inventions Geneva, held in Geneva, Switzerland, in April 2024. Additionally, they received the NRCT Honorable Mention Award from the National Research Council of Thailand (NRCT).1

A study involving 519 drug-dependent patients who received the methamphetamine abstinence medicine found that within 7 days, cravings were reduced by 59.2%, fatigue by 57.4%, insomnia by 47.7%, headaches by 45.9%, and body aches by 32.3%. In 2024, the Department of Thai Traditional and Alternative Medicine, through the Thai Traditional and Integrated Medicine Hospital, began using the "opium withdrawal medicine, effervescent tablet type" as an alternative treatment for individuals addicted to amphetamines or methamphetamine. The medicine, developed from traditional Thai formulations, is intended to support rehabilitation and recovery, helping drug-dependent individuals return to a productive life. This initiative is carried out in collaboration with relevant partners, offering mobile clinics for screening and dispensing herbal medicine to patients with drug addiction.

The methamphetamine abstinence medicine—or medicine for methamphetamine addiction—is one method used to assist drug users, particularly those experiencing withdrawal symptoms or intense cravings. The aim of this treatment is to mitigate the harmful effects of drug addiction and help patients reintegrate into society. This medicine is especially important given the widespread abuse of methamphetamine in Thailand, particularly among youth and laborers. Its use has led to serious health and social consequences, including hallucinations, psychiatric disorder, violence, crime, and overall decline in quality of life. When individuals stop using methamphetamine, they often face withdrawal symptoms such as irritability, depression, insomnia, and sudden cravings. Therefore, a proper treatment process is essential. This medicine focuses on three key aspects of rehabilitation: reducing withdrawal symptoms, reducing drug craving, and rehabilitating the brain and nervous system.

In Thailand, the medications used to help individuals quit methamphetamine include: Benzodiazepines to reduce anxiety and insomnia, but must be used with caution due to the risk of addiction; Flumazenil used in certain cases to reduce the effects of drug dependence; Nootropics such as Piracetam or Citicoline to improve brain function; and Vitamins and dietary supplements to restore physical health, such as vitamin B complex and amino acids.

In addition to medications, integrated therapy is also used. This includes psychological and social support processes such as: Counseling to address behavioral issues and reduce the risk of relapse; Group therapy to create peer support among individuals with similar experiences; and Community rehabilitation to promote engagement in activities that enhance life skills and potential.²

The methamphetamine withdrawal aid is primarily composed of various Thai medicinal herbs such as 'Yahom Nawagoth, Curcuma longa (turmeric), and other herbal ingredients. These components are known for their properties in alleviating drug cravings and supporting physical recovery. The herbal remedy helps to reduce drug cravings, alleviate physical symptoms such as insomnia and restlessness, enhance treatment effectiveness and minimize the side effects of chemical-based drugs. Additionally, it is low-cost and environmentally-friendly due to its natural herbal composition. The use of this remedy promotes traditional Thai medicine and preserves Thai wisdom. Therefore, the effervescent opium withdrawal tablets should be widely implemented as a treatment and rehabilitation option for the large number of methamphetamine users in Thailand.

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



On February 5, Deputy Prime Minister Somsak Thepsuthin gave a statement following the first 2024 meeting of the National Mental Health Committee, emphasizing the mental health of people across all age groups. Key policy areas include:

- 1. Addressing violence among adolescents and individuals with poor emotional control through promoting positive attitudes, respecting rights, strengthening family institution, enhancing preventive measures, reducing high-risk locations, enforcing laws with a focus on support rather than punishment, and implementing care systems for individuals exhibiting violent behavior
- 2. Managing patients with serious mental illness with high risk to violence (SMI-V) and homeless psychiatric patients by actively identifying and monitoring cases, initiating treatment, expanding access to services, ensuring continuous care, and reintegrating patients into communities
- 3. Tackling issues of rape and sexual assault by implementing proactive identification and monitoring, providing treatment, increasing service accessibility, maintaining ongoing care, and community reintegration
- 4. Addressing drug addiction and psychiatric disorders through not only legal suppression but also integrated treatment, rehabilitation, and post-reintegration follow-up to reduce relapse and prevent violent incidents. Additional committees will be established in Bangkok due to the connection between mental health issues and drug abuse. The Department of Mental Health, as the agency responsible for treatment and rehabilitation, requires significant funding but currently lacks a dedicated support fund.

The Department of Mental Health believes that the Mental Health Act B.E. 2551 and its related subordinate legislation should be reviewed. Key recommendations include: Budgetary matters by adding a new section to establish a Mental Health and Psychiatric Fund; In terms of personnel, it recommends to include administrative officers or police officers as designated officials under the Mental Health Act; and Legislative provisions by reviewing clauses that would allow the issuance of subordinate legislation for implementing mental health promotion initiatives. As for the proposed Mental Health Fund, the idea is to source funding from seized assets in drug-related cases handled by the Office of the Narcotics Control Board (ONCB). It is suggested that up to 50% of the value of damages caused by drug trafficking could be allocated to the fund, since drug abuse is a major contributor to mental health problems.

Currently, Thailand is facing an increasing mental health crisis, with the number of psychiatric patients, such as those with depression and anxiety disorders, that has continued to increase each year. According to data from the Department of Mental Health (2022), it was found that approximately 10-15% of the Thai population experiences mental health issues that require care. However, Thailand faces limitations in its mental health service system, particularly in terms of resources, budget, and mental health professionals, such as psychiatrists and psychologists, whose numbers are insufficient to meet the growing demand. This problem has economic and social consequences, affecting labor productivity and quality of life, and is also linked to other societal issues such as substance abuse, domestic violence, and crime.

The establishment of a Mental Health and Psychiatric Fund should play a crucial role in supporting the treatment and rehabilitation of psychiatric patients who require long-term care. It would cover medical expenses for underprivileged groups, such as those who are economically disadvantaged or homeless. The fund would also promote the prevention of psychiatric problems through activities such as mental health campaigns in schools, communities, and the workplace, and support access to psychological services at the primary care level. Additionally, it would aid in personnel development by allocating budget for the training of mental health professionals and psychologists, thereby increasing their numbers, as well as supporting research to develop more appropriate treatment approaches. Moreover, the fund would help reduce disparities in access to services by expanding mental health services to hospitals at all levels, including community hospitals, and alleviate the financial burden on families with members suffering from psychiatric disorders.

The Mental Health Development Policy of the Department of Mental Health for the 2025 fiscal year states that it will push for the legal mechanisms for mental health to drive the mental health agenda. This includes advocating for amendments to the Mental Health Act, adding a section on the establishment of the National Mental Health Fund, and integrating mental health efforts through the Mental Health Act, the Narcotics Act, and other relevant legislation.²

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Feature Article



Birth rate freefall, how should we adjust and cope?



Birth rate freefall, how should we adjust and cope?



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.

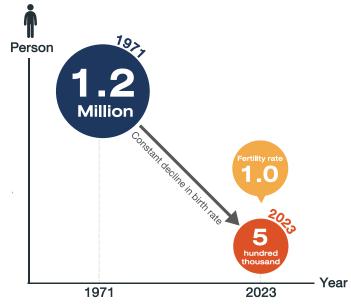
It took the world approximately 190,000 years to build a population base of 1 billion people, and only 200 years to grow from 1 billion (1084) to 8 billion (2022). However, this growth rate is now rapidly and clearly declining. The United Nations projects that the global population will peak at 10.4 billion in the mid-2080s and will decline thereafter. 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. 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. 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 increasing 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.

Thomas Benjamin Wild ESQ



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), 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." However, there has yet to be a clear and concrete push in this direction.

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 "models" 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. 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.

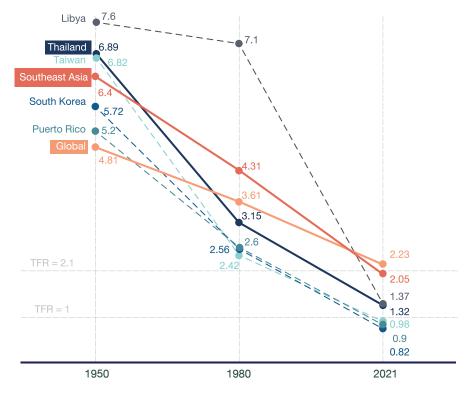
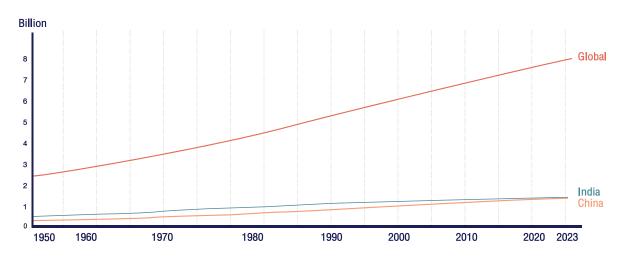


Figure 1: Trends in the decline of the TFR globally, and by some countries: from 1950-2021

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 2021¹⁴

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.



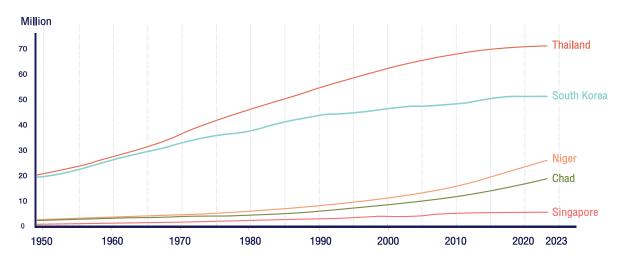


Figure 2: Trends in global and national population growth and some countries from 1950 to 2023 Source: Our World in Data^{16}

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

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

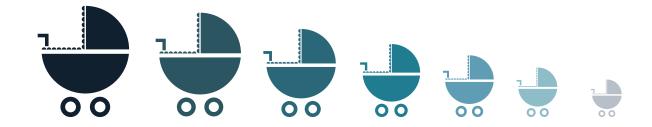
This question carries complex undertones and reflects how society has changed. What people really want to know is not just "what" but also have another question, do we even have to think about it?"

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.

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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.



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. 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). That paper synthesized pro-natalist policies from Western countries, including research studies. 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.



Policy

Fee of early childhood care service

Less than 6% of household income

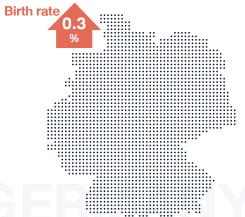
Maximum of 3,000 Norwegian Kroner

Birth rate
0.7
%

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



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



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



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 -

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

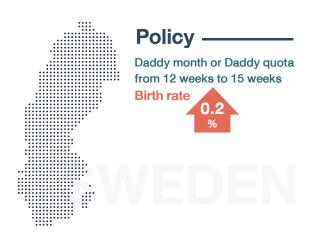




In the United States, the Family and Medical Leave Act (FMLA) was enacted in 2003 as a federal policy enforceable in all states. It grants 12 weeks of unpaid leave per year for the care of a newborn, adopted child, or a sick family member. While the leave is unpaid, employers are required to guarantee 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. 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.

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. 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 Sanzde-Galdeano in 2010, found no effect at all, 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

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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,



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.

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.

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. 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. 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. Only 100 at the surface of the surfa

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.

Appendices

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Lessons Learned from 'The iCon': How to Avoid a Ponzi Scheme

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"Blackchin Tilapia" and Dealing with Alien Species in Thailand

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- 5 Articles 78-79 of the Enhancement and Conservation of National Environmental Quality Act, B.E. 2535
- 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.
- 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
- 8 Article 18 of the Public Health Act, B.E. 2535 states: "Collecting, transporting or disposing of sewage or waste within the area of any local government shall be the authority of such local government. In carrying out the operations under paragraph one, the local government may do so in conjunction with other government agency or other local government under joint agreement. However, for the benefits of the public as a whole, the Minister shall have the power to issue a Ministerial Regulation.

by the advice of the Committee, prescribing rules, procedures and conditions for the joint operation. In case of reasonable cause, the local government may assign to any person the task under paragraph one on its behalf under its control and supervision or may permit any person to carry out the activities of collecting, transporting or disposing of sewage or waste under section 19. The provision of this section and section 19 shall not apply to the management of hazardous waste in accordance with the laws on factory. However, the operators of the factory having hazardous waste and the operators engaging in collecting, transporting or disposing of such hazardous waste are required to notify the local competent official of the operation in writing.

- 9 Bangkok, Pattaya, Provincial Administrative Organizations, Municipalities, Sub-district Administrative Organizations
- 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.
- 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. 2546; 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.
- 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
 - 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.
- Local administrative organizations must oversee activities within their jurisdiction to ensure compliance with regulations for collecting, transporting, and disposing of hazardous waste from community
- 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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- For vehicle loans, the contraction rate was 5.8% for three consecutive quarters, reflecting public concerns about the economic situation, which led to a decline in both car and motorcycle sales in the country. Additionally, with the rising levels of bad debt, financial institutions have become more cautious in granting loans or offering lower loan limits. For other types of personal consumption loans, growth slowed to 4.1% from 5.0% in the previous quarter. Personal loans, which make up more than 70% of personal consumption loans, grew by 4.4%, compared to 4.2% in the previous quarter. However, personal loans under supervision slowed down from 10.4% to 6.3%, while credit card loans contracted by 1.1%. Despite the overall slowdown in debt issuance, household borrowing still needs close monitoring because 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.
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- 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 promotina 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
- 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.
- 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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Feature Article

Birth rate freefall, how should we adjust and cope?

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Criteria for the 2025 Thai Health Report

Part 1: Health Indicators

Process of Consideration

- 1. Select key population-related indicators through joint deliberation by the Steering Committee and the project working group.
- 2. Contact subject-matter experts who possess expertise in the selected indicators, have access to reliable data sources, and can provide up-to-date data collected annually.
- 3. Establish a timeline for drafting articles, ensuring that the primary working group members for each category understand the writing guidelines, the objectives of each indicator section, and the preliminary schedule for research and content development.
- 4. Draft the content of the health indicators.
- 5. Conduct brainstorming sessions to review the draft indicators, assessing their relevance, comprehensiveness, and avoiding redundancy. This is done through meetings of the Thai Health Report working team and the Steering Committee.
- 6. Have the indicators reviewed by experts who examine the entire set of health indicators and provide recommendations for revisions.

Content Development Criteria for Indicators

- 1. Identify the key message of each category to ensure a focused and coherent presentation.
- 2. Gather statistical data for each selected indicator, emphasizing annual data to illustrate trends, and include the most recent survey results to reflect the current situation.
- Present the content in a clear and reader-friendly format that is easy to understand for readers of all ages.

Part 2: 10 Health Milestones in the year and 4 achievements to support Thai health

The annual situations include ten prominent health situations and four noteworthy contributions to Thai health, collectively referred to as the "10+4 Key Situations." The criteria for selecting and ranking these situations are as follows:

Criteria for Selecting Key Situations

- 1. Situations that occurred during 2024 or were previously reported but are revisited to highlight developments or changes as lessons for Thai society.
- 2. Issues that have significant impacts on the health and safety of the Thai population at large.
- 3. Policies that have clearly been implemented or enforced during the year and have affected public health.
- 4. Novel events that have never occurred before.
- 5. Events that recurred frequently throughout the year.

As for the outstanding contributions by Thai individuals or groups, these showcase successes in innovation, advances in health-related sciences, or the discovery of new approaches that benefit the health of Thai society and its people overall.

Part 3: Feature Topic

The feature of each edition takes one of two forms: target group—oriented or issue—oriented topics. The chosen topic may alternate each year and is often derived from the past year's ten key situations or from particularly noteworthy health indicators.

Criteria for Selecting the Feature Topic

- 1. The topic must be of policy significance.
- 2. It must offer clear benefits to the public.
- 3. It should encompass diverse issues and perspectives.

Work Process

- 1. The Steering Committee meets annually to select the special feature topic.
- 2. The Thai Health Report team develops an outline for the report.
- 3. Relevant experts are contacted and interviewed to collect information for the report.
- 4. The working group synthesizes and refines the academic content, ensuring it is suitable for public communication, and verifies its accuracy with scholars and experts in the field.
- 5. Experts review the draft report and suggest revisions.

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Thai Health Report Team



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