

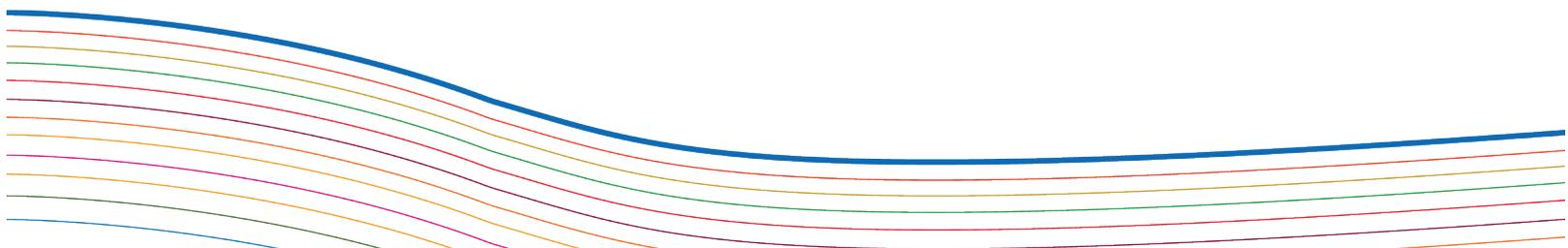


UNDP Insurance
and Risk Finance
Facility



Inclusive insurance and risk financing in Thailand

Snapshot and way forward 2023



Why this report ?

This report summarizes the key findings of an inclusive insurance and disaster risk finance country diagnostic carried out by the UNDP's Insurance and Risk Finance Facility (IRFF) and UNDP Thailand. The objective of this summary report is to present a high-level overview of the following information for Thailand:

- 1** **Key risks,** especially climate risks
- 2** The current state of **inclusive insurance**
- 3** The current state of **disaster risk finance**
- 4** **Recommendations to advance** inclusive insurance, disaster risk finance and overall development

This summary is intended to serve as a starting point for discussion and collaborative action planning on inclusive insurance and disaster risk finance between UNDP and key stakeholders, including insurance sector actors, government agencies and other development sector actors.

IRFF goals

Impacts: Reduced vulnerability, enhanced resilience of countries and communities and strengthened prospects for sustainable development.

Outcomes: Country and community long-term resilience improved by development and delivery of integrated insurance, risk finance and investment solutions, from products, tools and services all the way leading to market transformation.

Contact IRFF for questions:
If you wish to discuss the findings and recommendations of this report, reach out to:

irff@undp.org

Key messages



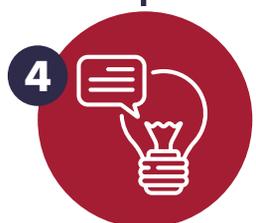
Risks: Floods, drought, storms (including cyclones), fire, earthquake and tsunamis.



Inclusive insurance: The Office of Insurance Commission (OIC) as the insurance sector regulator issued a microinsurance framework in 2011. Four main types of microinsurance products are available in the market: crop, personal accident, student accident and residential fire, while motorcyclist accident insurance is also available but from the low number of claims this policy is hardly used. In 2020, 443,000 microinsurance policies were issued, of which 420,000 for personal accident insurance.



Disaster risk finance: The government relies heavily on its budget and borrowings to deal with disaster risk impacts. Risk transfer solutions are limited but include insurance for public assets and a national crop insurance scheme.



Key recommendations include:

- Support the development of demand information on inclusive insurance
- Build insurers' capacity to develop more innovative inclusive insurance products
- Review the regulatory framework for microinsurance
- Develop a unified database on disaster risks and risk financing
- Enhance coordination between national and sub-national governmental agencies on disaster assessments and risk financing
- Develop a broader disaster risk financing strategy.

Thailand's development and risk profile

Key macroeconomic and development indicators



Thailand is classified as an **upper-middle income country**.¹



52%

of Thailand's **70 million people** live in urban areas,⁵ including about **22%** in the Bangkok greater metropolitan area.⁶

91.5%

of Thai households had access to formal financial service providers, according to a 2020 Bank of Thailand survey, including **20%** that used life insurance and **38%** that used non-life insurance.²



66%

of GDP in 2021 came from the service sector,⁷ especially from tourism-related sectors.⁸ Agriculture contributed **4.3%**.⁹

6.2%

of people lived in poverty in 2019, down from **48.6%** in 2000.³ However, the COVID-19 pandemic had a profound and persistent impact on the economy and Thailand has not fully recovered, in particular from the collapse of the tourism industry.⁴



20%

of people are projected to be **over 60** in 2022, making Thailand an aged society; it has been an aging society since 2005, putting pressure on social systems, in particular health care.¹⁰

Key risks and hazards

Flood

Thailand is one of the **top 10** most flood affected countries in the world.¹¹ Its complex river system creates high flood risks, especially in the central region, and coastal flooding is also a danger. Flooding has huge economic and human impacts, causing damage and losses to crops, livestock, fisheries, buildings, equipment, machinery and the tourism sector, among others.

1.1 million people are affected by river flooding every year and **US\$1.6 billion** is caused in urban damages annually.

\$2.6 billion in annual losses on average is caused by all types of flooding.¹²

13 million people were affected by the 2011 great flood alone, with over 680 deaths and an estimated **\$46 billion** in damages and losses.¹³ Studies showed that after the flood, higher-income groups received more government compensation than lower-income groups.¹⁴

Drought

The El Niño phenomenon has made drought one of Thailand's major disaster risks.¹⁵ Annual median probability of severe meteorological drought is around **4%**.¹⁶ Drought particularly impacts the rice and sugar cane sectors.¹⁷

600 million Thai baht (THB) (\$20 million)¹⁸ is the average annual economic damage caused by droughts, which occur almost every year.¹⁹

An estimated **42 million people** were affected between 1981 and 2020.²⁰



Fire

During the dry season, forest fires can occur in the northern region. According to the Thai space agency, there were **3,809 fire hotspots** in Thailand as of March 2020.²¹ Toxic fumes from fires have become a major health concern.

Nearly **THB 11.4 billion (\$380 million)** of economic damage is caused by wildfires each year; however, the amount of damage is trending significantly downward.²²

Up to **200,000 people** were made ill by toxic fumes from fires in eight provinces across the northern region in 2021, and fumes caused an estimated **32,000 premature deaths** in the country in 2019.²³

Earthquake and tsunamis

Situated on 14 active fault lines, Thailand's northern region is a high-risk zone for earthquakes.²⁴ In the past 20 years, Thailand has been affected by **243 earthquakes**, originating both in Thailand and in other countries. Of these earthquakes, 41 were considered strong (higher than magnitude 6 on the Richter scale).²⁵

About **8,000 lives** were lost in Thailand in the tsunami caused by the 2004 Indian Ocean earthquake.²⁶

Storms, including cyclones

An average of three tropical cyclones (typhoons) and thousands of windstorms occur every year between October and April. Storms also cause floods and landslides.²⁷

More than THB 5.8 billion (\$200 million) of damages were inflicted on the Thai economy by storms between 1989 and 2018, an average of about **THB 200 million (\$7 million)** annually.²⁸

Inclusive insurance:²⁹ Status

Context

The Thai inclusive insurance market remains underdeveloped, though microinsurance has been formally introduced and regulated.

5 main types of microinsurance products are available in the Thai market: motorcyclist accident, personal accident, student accident, residential fire and crop insurance.

443,000 microinsurance policies were sold in 2020, of which personal accident accounted for **93%**.³⁰

Enabling environment³¹

Highlights from the enabling environment for inclusive insurance in Thailand

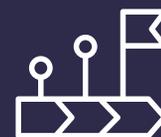
Policies / Plans

Insurance Development Plan Vol 4 (2021–2025)

One of the key strategies in the OIC's Insurance Development Plan Vol 4 (2021–2025) is "cultivat[ing] a risk management culture for individuals and businesses". The OIC has also set a goal of promoting courses on insurance and ensuring insurance education is incorporated into the education system at all levels. The plan does not have explicit objectives for inclusive insurance, but it does include microinsurance among products that should be promoted in order to "develop a diversity of insurance products that are necessary and meet the needs of people".³²

Government healthcare programmes

Access to health insurance in Thailand is provided through social security programmes aimed at creating health security for all Thai citizens³³ of all income levels. These government programmes each have different structures and target different groups of beneficiaries. The **Universal Coverage Scheme (UCS)**, administered by the National Health Security Office (NHSO), is a non-contributory scheme that covers any Thai citizen not covered by another scheme, such as the **Social Security Scheme (SSS)** (covering private sector employees) and the **Civil Servant Medical Benefit Scheme (CSMBS)** (covering government employees).



The National Savings Fund (NSF)

aims to promote saving for retirement at an early age. It had **2.45 million people** registered in 2021, most of whom are farmers (48%) and self-employed people (30%). Members received death benefits from a funeral welfare fund, but the NSF does not provide basic income security cover.

Regulations

Insurance Acts

Thai insurance business is governed by two main Acts: **the Life and Non-Life Insurance Acts, B.E. 2535 (1992)**. The Acts set out basic regulatory principles, including on formation and licensing, restrictions on shareholders and directors, deposit, reserve and capital requirements, restrictions on investment of funds and approval of policy wordings by the regulator.



Inclusive insurance regulations

In consultation with the life and non-life insurance associations, the OIC issued **product guidelines** for underwriting microinsurance in 2014. The OIC has been supportive of pilot microinsurance products in the market.



Stakeholders

Office of Insurance Commission (OIC)

The OIC was established by the **Insurance Commission Act, B.E. 2550 (2007)** with a mission to regulate and develop insurance business, as well as to protect the insurance benefits and rights of the people. Under the **Life and the Non-Life Insurance Acts, B.E. 2535 (1992)**, the OIC and the Minister of Finance are responsible for issuing various notifications, declarations and regulations to accomplish that mission.

The OIC has been relatively active in promoting the development of inclusive insurance. It issued a microinsurance framework in 2011 and has developed and promoted microinsurance products including life insurance, residential fire insurance and personal accident insurance. It has also participated in trainings with the Access to Insurance Initiative (a2ii)³⁴ and it made the promotion of microinsurance a part of its strategy for 2016–2020.³⁵

Other government bodies supporting insurance for micro, small and medium-sized enterprises (MSMEs)

The Thai government recognizes MSMEs as the foundation of the economy and provided a set of measures, including insurance products, to assist MSMEs during the pandemic. To provide insurance for MSMEs against operational risks, the Office of Small and Medium Enterprise Promotion (OSMEP), the Bank of Thailand (BOT) and the Export-Import Bank of Thailand (EXIM) offered export risk insurance to mitigate exchange rate risk.³⁶

Thai General Insurance Association and Thai Life Assurance Association

In collaboration with the OIC, the country's insurance associations, the Thai General Insurance Association and the Thai Life Assurance Association, have developed a series of microinsurance products. The Thai General Insurance Association is also supporting the expansion of crop insurance. More collaboration between the associations and the government is needed to implement effective sustainable insurance products.

Bank for Agriculture and Agricultural Cooperatives (BAAC)

BAAC was set up in 1966 to provide financial support for farmers and farmer organizations. It has recently started to support the development of crop insurance, initially developing its own product and later acting as a distribution channel and source of financial information for a government-subsidized product.

Supply-side snapshot

Overall insurance coverage (traditional and micro): Fast facts

5.3% penetration rate (gross premiums / gross domestic product) had been achieved in the insurance market in Thailand by the end of 2020, following modest growth in the past 5 years.³⁷

70% of the market was represented by the life insurance sector as of 2020, based on **THB 600 billion (\$20 billion)** in gross direct premiums, while non-life insurance accounted for **30%**, or about **THB 253 billion (\$8.4 billion)**.³⁸



55 general insurance companies operated in Thailand as of 2021, including 4 healthcare insurers and 1 reinsurer.³⁹ The life insurance market consists of **22 companies** but is highly concentrated, with 5 large life insurers accounting for **69% of the market**.⁴⁰

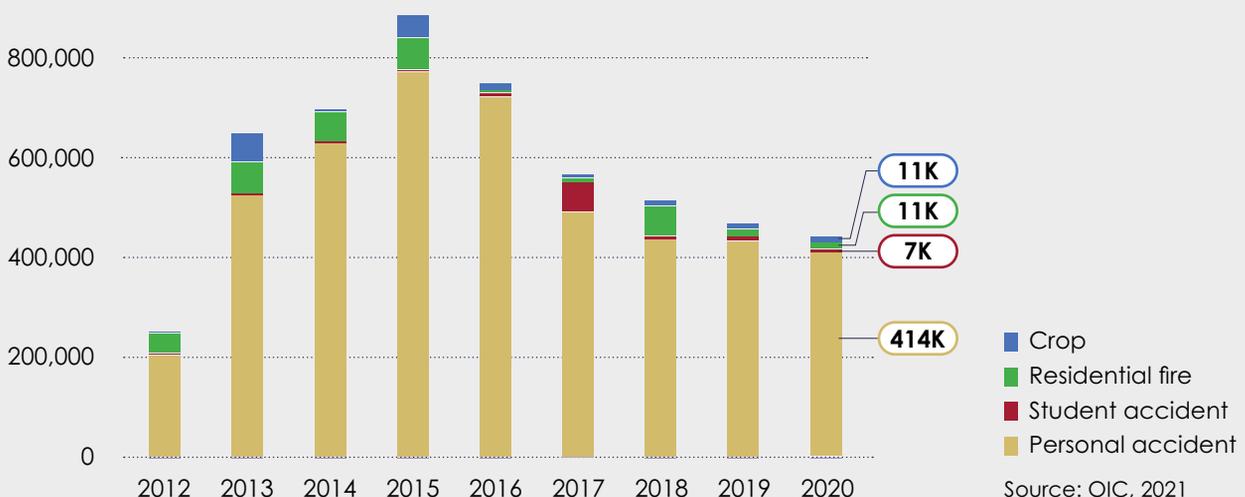
Microinsurance: Fast facts

Insurers in Thailand are still **hesitant** about entering the microinsurance market. However, the OIC's support for pilot developments since 2012 has encouraged many insurers to develop and offer simple microinsurance products. For example, the OIC advised 19 insurers to offer the personal accident Sukjai-Plus policy designed for holiday travel, which covers life and medical expenses from accidents.⁴¹

4 main types of non-life microinsurance products are available in the Thai market: crop, personal accident, student accident and residential fire insurance with motorcyclist accident insurance available in addition.

443,000 of these policies were purchased in 2020, accounting for **0.6%** of all non-life policies.⁴² The breakdown of policies by type is shown in the figure below.

Number of microinsurance policies, by type ('000s)

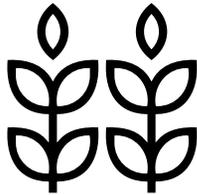


Source: OIC, 2021

Microinsurance products



Personal accident is the most popular microinsurance product, with the highest number of policies sold. It is primarily event-based, covering traffic accidents over short periods of time during peak holidays, such as Songkran (Thai New Year) and New Year. Since 2015, the uptake of these policies has been decreasing, suggesting that the target market is seeing less need for them.



Crop insurance covers farmers of rice (since 2011) and maize (since 2019) for flood, drought, cold weather, windstorm, hail, fire, pests and elephant invasion. It serves as a top-up to the government disaster relief programme, under which farmers are paid a fixed allowance that is a percentage of the cost of cultivation. In 2021, the disaster relief programme compensated around **33%** of costs for rice farmers, and the insurance top-up covered approximately an additional **33%**.⁴³ Premiums are government subsidized and farmers who are clients of BAAC receive an additional subsidy. In 2020, **72%** of rice cultivation and **28%** of maize cultivation were insured.⁴⁴

Specific products for women

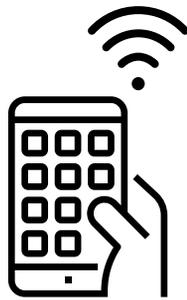


Insurers are starting to develop insurance products (not necessarily microinsurance) designed to meet women's unique needs. Insurance products for women include healthcare insurance covering illnesses suffered by women, such as breast and cervical cancer. Also, life insurance with additional healthcare insurance covers cancers affecting women and surgical treatments for accidents and burn injuries.⁴⁵

Distribution



The insurance industry in general still relies heavily on insurance agents, brokers and bancassurance,⁴⁶ but insurers have made efforts to expand the types of channels used for microinsurance. For example, as well as through agents and brokers, the Sukjai-Plus policy was available at convenience stores, at the Government Savings Bank and in post offices.



Most of the Thai population has access to digital infrastructure, representing an opportunity for insurance distribution.

In 2018, Smartphone penetration was **92%** (compared to **79%** for the region of the Association of Southeast Asian Nations, ASEAN, and **61%** for the world), with **66%** 4G penetration, but only **30%** of consumers used financial services on a mobile phone.⁴⁷

In 2020, **86%** of active mobile phones were smartphones.⁴⁸

In 2019, Mobile internet was used by **86%** of the Thai population and **15%** of people used fixed-line broadband internet.⁴⁹

However, some poorer and more vulnerable groups still lack access to reliable internet connections and smartphones and have low levels of digital literacy.

Demand assessment



According to a 2013 demand study supported by the Asian Development Bank (ADB), people consider the most important risks to be those that impact on income generation, such as accidents, extended illnesses, job losses or damage to productive assets.⁵⁰ No updated demand studies have been conducted among the inclusive insurance target market.



Some concerns have been raised about the sustainability of the government programmes and sector initiatives in view of the aging population, emerging diseases, the sharp increase in health care costs and the country's limited fiscal space. This could mean that the demand for health insurance will eventually rise.

Disaster risk financing:⁵¹ Status



Disaster risk assessments⁵²

In Thailand, assessments of disaster risk are performed at national and sub-national levels.

At the national level:

- **The Department of Disaster Prevention and Mitigation (DDPM)** runs the Central Disaster Management Centre, which is responsible for conducting overall national disaster risk assessment and supporting disaster risk assessment at each level of Thailand's administrative structure, including within relevant agencies.
- **The Fiscal Policy Office (FPO)**, responsible for fiscal risk management, analyses the impact of disasters on the Thai economy and the government's fiscal balance (e.g., revenues, expenditures and fiscal debts). It assesses the impacts of disaster events for the government, off-budget funds, state-owned enterprises and local administrations. FPO also determines the size of the budget gap using revenue sensitivity analysis, scenario analysis and a fiscal early warning system.

Existing legal and institutional frameworks and policies

Laws and regulations: The Disaster Prevention and Mitigation Act 2007 (DPM Act 2007) is the foundation of the disaster management system and stipulates DDPM as the core government department responsible for handling national disaster management work. Under the Act, disasters can be classified into four levels: small, medium, large and catastrophic. Each level has a designated key incident commander (respectively: local administration, provincial administration, Minister of Interior and Prime Minister/Deputy Prime Minister).

Regulations of the Ministry of Finance, Re: Official Advance Money for Aiding Victims of Disasters in Emergencies, B.E. 2556 (2013), and its Amendment (No.2), B.E. 2559 (2016), are legal instruments that provide for government agencies and local governments to access contingency fund advances to help victims of disasters in the immediate aftermath of a disaster event, before the regular budget for disaster relief is approved. When a disaster emergency takes place, the Ministry of Finance allows other government agencies that have access to the contingency fund to spend contingency fund advances with the approval of the relevant executive of each government agency.

The Public Asset Insurance Screening Committee's Resolution of 29 March 2021 on the self-insurance of public assets states that all government buildings and properties should be self-insured, with some exceptions. In other words, all damages and losses of public assets should be covered by the government budget, and insurance is procured on an as-needed basis, which may require the approval of the Public Asset Insurance Screening Committee, a committee appointed by the Ministry of Finance.

Institutional stakeholders and policies: DDPM is the main government agency that oversees disaster risk management. DDPM's purpose is to act as an effective mechanism to prevent damage and loss and mitigate calamity due to man-made and natural disasters. Among other things, it has a mandate to assist disaster victims and aid recovery.

The National Disaster Prevention and Mitigation Committee (NDPMC), chaired by the Prime Minister, is the main policymaker. It is responsible for setting the direction and approving the National Disaster Prevention and Mitigation Plan, developing an integrated disaster prevention and mitigation system (including government agencies, local administrations and private sector actors), giving advice and support on disaster prevention and mitigation operations to DDPM, and imposing regulations governing compensation and expenditures for disaster prevention and mitigation (with approval from the Ministry of Finance). However, the role of NDPMC in compensation and expenditures for disaster prevention and mitigation is not elaborated in detail under the DPM Act 2007.

The **National Disaster Prevention and Mitigation Plan** was developed by NDPMC in 2015 and offers a framework and guidelines for handling national disaster risk management actions for all relevant agencies. At the provincial level, as well as within the Bangkok Metropolitan Administration, responsible government agencies must develop their own disaster prevention and mitigation plans, consistent with the National Disaster Prevention and Mitigation Plan.⁵³ Local, provincial and national government contingency funds are the only disaster risk financing sources included in the plan.



Existing disaster risk finance mechanisms and instruments

The government relies heavily on its budget and borrowings to deal with the impacts of disaster risks. Ex-ante financing is not mainstreamed, even though initial efforts have been made, in the form of the government's crop insurance programme and policy for public asset insurance. Including risk transfer mechanisms and instruments within the government's comprehensive disaster risk financing approach may be seen as less of a priority because contingency fund advances for disaster relief and emergency assistance have historically seen little uptake.

Thailand's disaster risk finance mechanisms and instruments



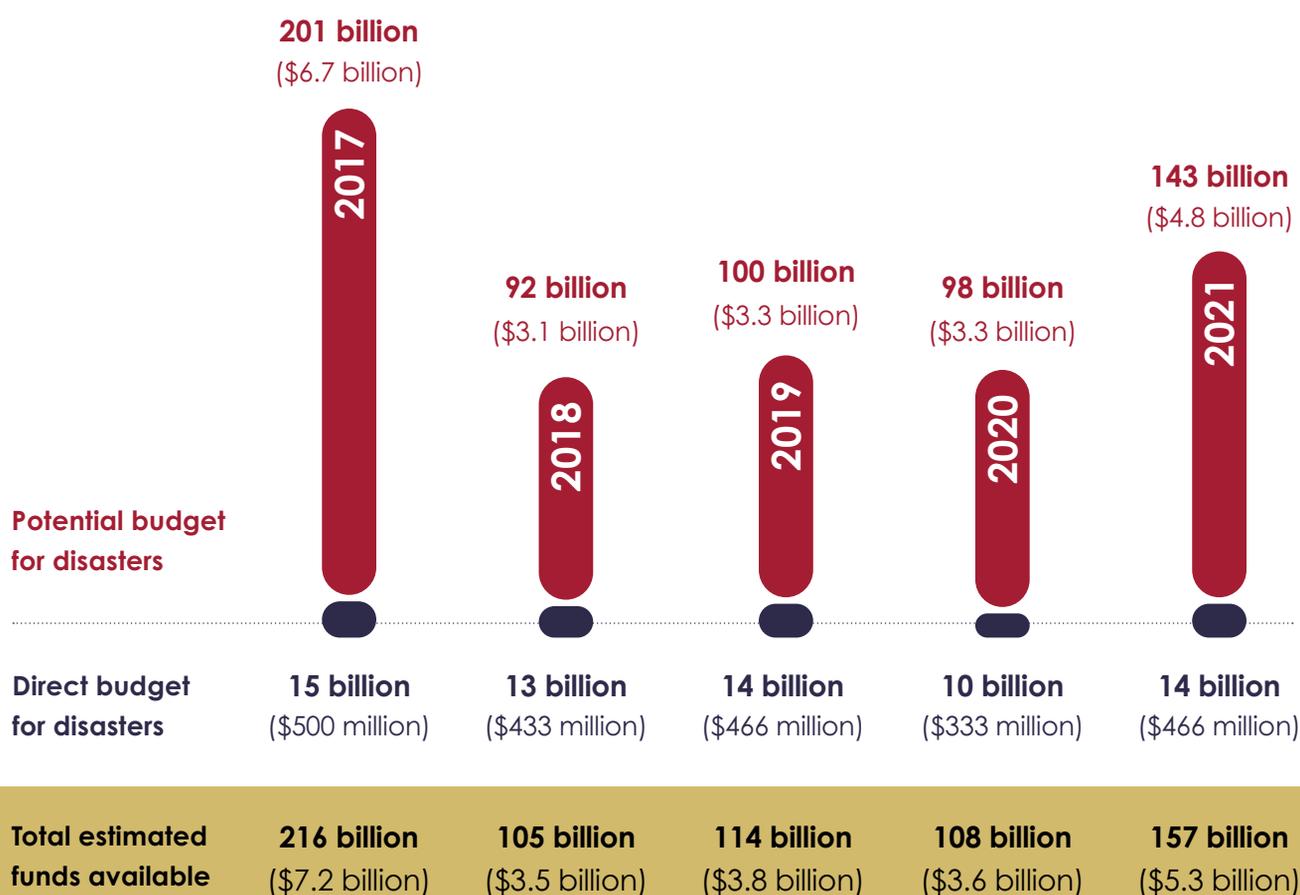
Source: Adapted from World Bank, Thai Flood 2011: Rapid Assessment for Resilient Recovery and Reconstruction Planning (Bangkok, 2012).

Funding gap analysis

Insufficient data are available to analyse the extent of the funding gap in case of disaster. In terms of potential expenditures, historical data on disasters are available on the DDPM website, but they are not easy to access and are presented in a format that is not easy to analyse. Data on the total costs of disaster damage are fragmented and no single unified data source exists. Similarly, in terms of available financing sources, data on the total risk finance budget are not readily available, as not all parts of the risk finance budget are clearly labelled.

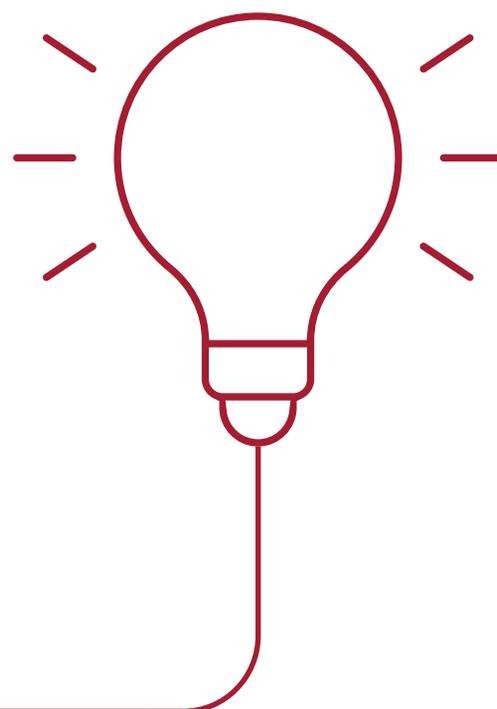
The table below shows estimated funds available for disasters in the prior five-year period. The government's budget will continue to be challenged in addressing the impacts of higher frequency but lower impact events, such as the country's frequent floods (estimated at **\$2.6 billion** annually). For more catastrophic, less frequent events (such as the great flood of 2011, which caused an estimated **\$46 billion** in costs and losses), the Thai government will always require additional sources of funds to cover the extent of the damages, which will ultimately not cover all losses.

Thailand's Budget Allocation Strategy for Disaster Management, 2017–2021 (THB billions)



Source: Thai Bureau of the Budget.

Way forward for inclusive insurance and disaster risk financing



Developing successful inclusive insurance and disaster risk finance requires three components:

1

a better understanding of the market

2

a supportive enabling environment

3

a stronger offer from suppliers that develop better access for individuals, institutions and government

The following recommendations are based on these three criteria.

1

Understanding the market for inclusive insurance and risk financing

The existence of demand for inclusive insurance products and for risk financing tools for government

1.1

No recent demand studies exist to indicate the inclusive insurance target market's need for insurance.

Support the development of public demand information for inclusive insurance.

- The OIC and the insurance associations should undertake an updated demand study to understand the needs, perceptions, distribution channels of interest and motivations of inclusive insurance target markets. Key segments may include MSMEs, informal sector workers, women and smallholder farmers.
- A feasibility study should be conducted on developing women-specific insurance products.
- Efforts should be made to help insurers make use of demand data rather than developing generic products for all to use.

1.2

Coordinated insurance awareness and information efforts are very limited.

Build awareness and trust in the market.

- The OIC and private insurers (through the associations) should create microinsurance awareness programmes.
- Specific goals should be developed for inclusive insurance target segments under the Insurance Development Plan Vol. 4's strategy of "cultivating a risk management culture for individuals and businesses".
- Existing government schemes and institutional arrangements within social protection programmes should be leveraged to conduct outreach on insurance literacy.
- Trusted agencies such as the National Saving Fund, the Government Savings Bank and BAAC could act as channels to increase insurance knowledge and thus penetration.

1.3

Data on disasters and losses is fragmented and difficult to access.

Develop a unified database on disaster risks and risk financing.

- DDPM should build records and databases of risks and disasters and their resulting impacts, including the full range of costs: mitigation, preparation and resilience, response, reconstruction and adaptation costs.
- This cost information should be leveraged to improve disaster cost models.
- Methodologies should be developed for damage quantification that are accessible to non-specialist audiences and that allow for unified figures across different sources on loss of life and economic losses due to disasters.

2

Enabling environment for inclusive insurance and risk financing

The need for legal, regulatory, policy and macro-level frameworks to support the development of inclusive insurance and disaster risk financing

Regulatory and policy framework for inclusive insurance

2.1

Despite the existence of microinsurance product guidelines, most insurers are not offering inclusive insurance products.

Support the development of the microinsurance regulatory framework.

- UNDP should facilitate a Regulatory Impact Assessment with regard to the microinsurance product guidelines. This should specifically include information on the regulatory burden imposed on insurers.
- The OIC should clarify the definitions of inclusive insurance and microinsurance.
- The Ministry of Finance should conduct regular workshops between the OIC and industry on how to work within the existing microinsurance regulatory framework and should continually gather feedback from the industry on how the regulatory environment can continue to improve.

2.2

The prevalence of digital technology opens up new opportunities for inclusive insurance by reducing costs and increasing access.

Support the use of digital technologies to increase efficiency and access to insurance.

- UNDP with the OIC and the industry associations should support a study on digital technologies, including insurtechs and fintechs, and their specific potential to support access to inclusive insurance.
- Industry associations should support insurers, using capacity building and tech hacks, in improving the efficiency of insurance operations and increasing access to insurance via data analytics and digital technology.

Disaster risk assessments and fiscal impact

2.3

Thailand is starting to promote the development of a disaster prevention and mitigation plan at both national and sub-national levels.

Enhance the coordination between national and sub-national governmental agencies on disaster assessments and risk financing.

- DDPM should support the strengthening of systematic assessments of disaster risks at sub-national levels and make the resulting information available to national and local government departments and agencies, as well as to insurers, reinsurers and disaster risk professionals.
- The availability and utilization of a range of risk mitigating and financing instruments at sub-national levels should be supported.

2.4

Currently, there is no formal procedure to estimate disaster risk and hence the level of budget needed, other than a rule of thumb of 2.5%–3% of the total budget allocated for emergencies and disaster management.

Develop a process to ensure budget formulation takes into account differing levels of disaster risk.

- Local actuaries should assist DDPM and FPO to construct a unified database of risk financing from related parties, to reflect a more accurate picture of the government's fiscal burden.
- NDPMC, together with FPO, DDPM and local agencies, should develop a national disaster risk financing strategy based on large infrequent events in order to formalize planning, financing and monitoring of priorities based on a risk layering approach.

3

Supply and distribution of inclusive insurance and risk financing tools

The existence of inclusive insurance and risk financing products and tools, along with providers to offer them.

Inclusive insurance supply and distribution

3.1

The health financial risk protection schemes available for the poor and vulnerable are provided through the government's social security system, which will experience strain as the population continues to age.

Explore opportunities for the private insurance sector to complement the public health care system.

- The Ministry of Public Health and OSMEP should assess gaps in the public health care systems with respect to the needs of inclusive insurance target segments.
- Incentives should be provided for insurers to offer valuable, low-cost insurance to support health care financing needs.

3.2

The range of microinsurance products on offer is limited.

Build insurance industry capacity to develop a wider range of innovative inclusive insurance products.

- The associations, using the Insurance Client-Centric Cycle (I3C) process developed by Access to Finance Rwanda, should provide a series of introductory trainings to interested insurers to help them develop effective client-centric inclusive insurance, not generic microinsurance products.
- UNDP, working with the associations, should guide committed insurers through an intensive multi-year programme that includes hands-on training, one-on-one technical assistance for product development and minimal financial support for implementation.
- Insurers should explore the use of credit-linked insurances for MSMEs, among other new covers.
- The OIC should actively promote the use of client-centric and efficient mobile technology among insurers and their clients for knowledge sharing, microinsurance information access, sales, servicing and claims processes.

Disaster risk financing mechanisms and instruments

3.3

The risk financing strategy in the country is highly reliant on risk retention, where contingent budgets are the main financing resources for post-disaster relief and recovery.

Develop a broader disaster risk financing strategy.

- FPO and DDPM should develop a multi-layered approach to risk financing beyond fiscal allocations.
- Innovative risk transfer products, such as catastrophe bonds or parametric insurance, could expand government capacity in handling disaster risk, and the feasibility of using them should be explored.
- A feasibility study should be completed on possible financial mechanisms to ensure the sustainability of a dedicated government disaster fund. For example, just as an excise tax on alcohol was used to fund the Thai Health Promotion Foundation, an excise tax on dirty fuels could be a potential source of financing for the disaster fund.

3.4

The national crop insurance scheme covers only two crops and much of the agriculture base is still unprotected.

Review and recommend improvements for crop insurance scheme.

- The Ministry of Agriculture and Cooperatives and BAAC should conduct feasibility studies on expanding coverage to more types of agriculture products.
- The government should be assisted to advocate and work with local and foreign insurers to improve the crop insurance scheme.
- The OIC, the Thai Reinsurance Public Company and the Asian Reinsurance Corporation should work together (led by the OIC) to consider the use of parametric insurance to facilitate payout approval processes and improve response times for disaster victims.

3.5

The government has little concern about the level of budget required to purchase insurance for all government buildings and other assets, and thus the use of insurance for public assets is low and most government assets are self-insured.

Scale up public asset insurance through greater participation by the private sector and improving data systems.

- The Public Asset Insurance Screening Committee should conduct a cost-benefit analysis on the use of private insurance for additional public assets.
- The State Enterprise Policy Office should include insurance as a mechanism for state-owned enterprises to mitigate disaster risks, as part of their mitigation plans for the upcoming National Economic and Social Development Plan 2023–2027.
- Pilots for specific localities should be developed, taking into consideration scale and type of hazard.

Endnotes

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Copy editor

Justine Doody

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Nattawarath Hengviriyapanich

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