UNDP Insurance and Risk Finance Facility

Inclusive insurance and risk financing in Indonesia

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 Indonesia. The objective of this summary report is to present a high-level overview of the following information for Indonesia:

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, 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

1

Risks: Floods, tsunamis, landslides, heatwaves, droughts, earthquakes and volcanic eruptions. Between 2007 and 2018, annual economic losses due to disasters were estimated to be between US$2.2 billion and US$3 billion.

2

Inclusive insurance: The insurance regulator has issued two microinsurance circulars and has collaborated with the insurance associations to advance microinsurance. All three insurance associations (covering life, general and takaful) have developed microinsurance products, and individual insurers also offer various coverages. There were an estimated 29.77 million microinsurance policyholders in 2021, but rural areas remain underserved. Four key government-subsidized schemes offer insurance for crops, livestock and fishing, and the government's health insurance programme covers 248.77 million people.

3

Disaster risk finance: A disaster risk finance and insurance strategy was adopted in 2018, aimed at reducing reliance on the national budget and increasing the use of other financing instruments for disaster risk finance. Instruments under development include a dedicated Disaster Pooling Fund and a State Asset Insurance Programme.

4

Key recommendations include:

- Strengthen the enabling environment for sovereign risk finance and inclusive insurance
- Engage the insurance industry in product development and delivery
- Integrate risk finance and inclusive insurance into national development planning
- Strengthen government and insurance industry capacity in advocacy and research on risk finance and inclusive insurance to increase the community's insurance literacy.

Indonesia's development and risk profile

Key macroeconomic and development indicators

273 million people lived in Indonesia in 2021, making it the world's 4th most populous nation.[1] 57% of the population is urban.[2]

$1.06 trillion

was the size of Indonesia's GDP in 2020, giving Indonesia the largest economy in South-east Asia.[3] However, COVID-19's economic impact saw Indonesia downgraded to lower-middle-income status in 2021, after more than 20 years of steady economic growth.[4]

5.31% GDP growth

in 2022,[5] indicating that Indonesia's economy is now recovering, supported by increased commodity exports and an accommodating fiscal policy.[6]

Over 50%

reduction in the poverty rate has been seen since 1999, to under 10% in 2019 before the COVID-19 pandemic hit.[7]

49%

of population was employed in 2021 in the services industry, the leading industry in Indonesia, followed by the agriculture sector at around 29% and the industrial sector at around 22%.[8]

60%

of the working population are still informally employed, disproportionately women.[9]

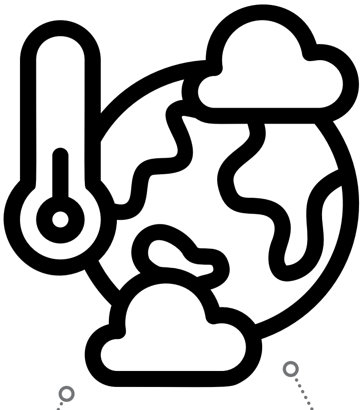
51%

of the adult population (age 15+) had a bank account at a financial institution in 2021, evenly divided between men and women.[10]

Hazard context

In 2021, the WorldRiskIndex ranked Indonesia 38th in the world in terms of its exposure and vulnerability to extreme natural disasters.[11] The World Bank put Indonesia 12th out of 35 countries facing high mortality risk from multiple hazards, with approximately 40% of the country's inhabitants at risk.[12]

Situated in the Pacific Ring of Fire, Indonesia has 127 active volcanoes and experiences frequent earthquakes, tsunamis and floods. The country is highly vulnerable to the impacts of climate change, including more regular extreme events such as floods and droughts, as well as long-term changes from sea level rise, shifts in rainfall patterns and increasing temperature.



Between 2007 and 2018, recorded disaster events caused the loss of 7,375 lives and displaced 55 million people, with annual economic losses of approximately $2.2 billion to $3 billion (equivalent to 0.2% to 0.3% of 2018 GDP).[13] The 2004 Indian Ocean tsunami was particularly grave in terms of human and economic costs, causing an estimated $4.45 billion in losses in Indonesia alone.[14] Between 2014 and 2018, the central government spent between $90 million and $500 million annually on disaster response and recovery, while subnational governments spent an estimated additional $250 million.[15]

Key risks and hazards

Flood

- Indonesia is affected by regular flooding and coastal inundation associated with storms, landslides and cyclones. High precipitation associated with the La Niña phenomenon increases the risk and intensity of hydrometeorological hazards.[16]
- Floods affect 1.5 million people every year, and annual urban damage is estimated at $1.4 billion.[17]
- About 27% of the population (76 million people) live in high-risk flood zones. Of these people, 20 million live in poverty.[18]
- Cities are particularly vulnerable to floods due to their high concentration of people and assets, as well as proximity to rivers and coasts.[19] Reported flood events in 92 Indonesian cities tripled from 50 in 2006 to 146 in 2017.[20]
- By the 2030s, climate change is expected to increase the population affected annually by 400,000 people and increase urban damage by $6.1 billion.[21]

Tsunami

- More than 4 million Indonesians live in areas where they are at risk of being impacted by tsunamis.[22]
- During the 2004 Indian Ocean Tsunami, 167,000 people were killed in Indonesia alone, and more than 500,000 were displaced after thousands of homes were washed away.[23]
- On average, a large tsunami hits Indonesia every 5 years, mostly on the islands of Sumatra and Java. Due to coastal warning systems, tsunamis now usually cause more damage to infrastructure than to lives.[24]

Key risks and hazards (cont.)

Landslide

- The government estimates that 40.8 million Indonesians are exposed to landslide risks. The most affected areas are in West Java, Central Java, East Java, West Sumatra and East Kalimantan.[25]
- Due to the country's growing population and increasing urbanization, landslides have become more common, rising from 112 events in 2008 to 515 in 2015.[26]

Heat wave

Indonesia regularly experiences high maximum temperatures and is one of the most vulnerable countries to extreme heatwaves (three or more days where the daily temperature is above the long-term 95th percentile of daily means). Climate change will dramatically increase the likelihood of heatwaves.[27]

Drought

- Two drought types affect Indonesia: meteorological (associated with precipitation deficit) and hydrological (associated with deficit in surface and subsurface water flow).[28]
- Large parts of Indonesia experience droughts habitually. West Java, East Java, Central Java, Yogyakarta, Bali and Nusa Tenggara have been classified as the most vulnerable to the impacts of extreme droughts.[29]
- Meanwhile, other areas, such as Sumatra and Kalimantan, have much lower than normal rainfall during La Niña years, which contributes to a severe escalation in fire events.[30]
- Droughts are expected to increase in frequency and intensity, given the association of accentuated drought with El Niño events.[31]

Earthquakes

- Located at the intersection of three tectonic plates, Indonesia experiences an average of 20 earthquakes every day. Most are too weak to be felt.
- On average, Indonesia experiences about one 6.0 magnitude or higher earthquake per year that causes casualties and damage.[32]
- About 62% of the population live in areas prone to earthquake.

Volcanic eruption

- Indonesia is home to 500 volcanoes, of which 127 are active and have erupted in recorded history.[33]
- More than 5 million people live or work within the "danger zone" of a volcano.[34]
- At least 1 significant volcanic eruption happens in Indonesia every year, but usually, it does not cause casualties or serious damage, since most active volcanoes are in isolated regions and are closely monitored.[35]

Inclusive insurance[36]: Status

Enabling environment[37]

Highlights from the enabling environment for inclusive insurance in Indonesia

Stakeholders

Financial Services Authority, *Otoritas Jasa Keuangan* (OJK)

- OJK regulates the insurance sector in Indonesia. It provides licences, supervises the operations of insurance companies and promotes inclusive insurance through the implementation of the Financial Services Sector Master Plan.
- In 2013, OJK, together with the insurance associations, launched the Grand Design Development of Microinsurance Indonesia to encourage the availability of microinsurance products and to increase public understanding of insurance products.

Insurance associations

- There are three insurance associations in the country: the Indonesian Life Insurance Association (AAJI), the Indonesian General Insurance Association (AAUI) and the Indonesia Sharia Insurance Association (AASI).
- All three associations have developed microinsurance programmes.

Other government ministries

- The Ministry of Agriculture is responsible for implementing subsidized crop and livestock insurance.
- The Ministry of Marine Affairs and Fisheries is responsible for implementing subsidized insurance for fishermen and small fish cultivators.
- The Ministry of Finance allocates funding to these ministries.

Regulations

Inclusive insurance regulations[39]

- Two main regulations form the regulatory framework for microinsurance: OJK Regulation 23/POJK.05/2015 on Insurance Products and Marketing of Insurance Products (which also defines microinsurance) and OJK Circular 9/SEOJK.05/2017 on Microinsurance and Microinsurance Marketing Channels.
- The regulatory framework for microinsurance aims to make sure that low-income families understand policies and have the financial capability to purchase products through the pillars of Sederhana (Simple), Mudah (Easy), Ekonomis (Affordable) and Segera (Fast).

Insurance Law

Law No. 40 of 2014 on Insurance (the Insurance Law) is the main legislation that governs the insurance sector. Several implementing regulations relating to insurance have also been issued.

Other relevant regulations

- Circular 19/SEOJK.05/2020 on Marketing Channels for Insurance Products states that companies can only market insurance products directly through insurance agents, bancassurance distribution channels and non-bank financial institutions. Insurers can market microinsurance products through these channels as well.
- Indonesia plans to introduce separate digital financial service regulations that will cover m-insurance (insurance distributed via a mobile phone in partnership with a mobile network operator, MNO).[38]
- OJK plans to develop insurtech regulations and revise OJK Regulation 70/POJK.05/2016, on Business Implementation of Insurance Brokerage Companies, Reinsurance Brokerage Companies and Insurance Loss Appraiser Companies, to also include insurtech brokers and intermediaries.
- In 2018, OJK launched a regulatory sandbox aimed at promoting digital financial innovation.

Policies / Plans

National Strategy for Financial Inclusion (SNKI)[40]

- The SNKI, established by Presidential Regulation No. 114 of 2020, is a national strategy that contains goals, objectives and targets for inclusive finance to reduce poverty and inequality and improve the welfare of the Indonesian people. The strategy includes the development of the microinsurance market.
- A National Council for Financial Inclusion (DNKI) has been formed and tasked with coordinating and harmonizing the implementation and monitoring of the SNKI.

Indonesia Financial Services Sector Master Plan 2021–2025

The Financial Services Sector Master Plan aims to strengthen the governance, risk management and market conduct of financial institutions. It contains only one reference to microinsurance, in relation to supporting programming for micro, small and medium enterprises.[41]

Financial education initiatives

In 2019, OJK developed a unit and a Learning Management System portal to deliver online insurance literacy courses with the general public as the target audience.

Supply-side snapshot

Overall insurance coverage (traditional and inclusive): Fast facts[42]

3.13%

insurance penetration (insurance premiums as a proportion of GDP) was achieved in 2021.

38.6%

of the market was made up of life insurance, at INR 205 trillion ($13.8 billion) in 2021. Non-life insurance was 17.2% of the market or INR 91 trillion ($6.1 billion). Public insurance programmes accounted for the remaining 44.2% of the market, at INR 235 trillion ($15.8 billion).

530.9 trillion Indonesian rupiah (INR) ($35.7 billion)[43]

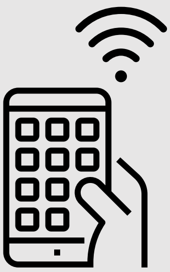
was the total amount of gross written premiums (GWP) in 2021, including social insurance programmes. The compound annual growth rate was 5.4% for the 5-year period up to 2021.

149

insurers were registered, along with 196 insurance and reinsurance brokers, in 2021 in Indonesia.

Distribution

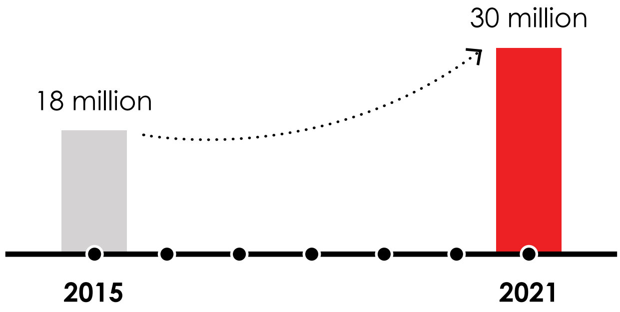
Financial institutions (not including microfinance institutions) are the dominant distribution channel, accounting for 39% of products, followed by agents (21%) and brokers (14%). Microfinance institutions and MNOs are the least used, but these channels could be expanded, particularly to extend microinsurance coverage to rural areas.[44]



Digital distribution is increasing in potential, as Indonesia has become one of the fastest-growing digital economies in South-east Asia. With 204.7 million internet users, Indonesia's internet penetration rate was 73.7% in 2021.[45] Smartphones account for 70% of the country's internet traffic[46] and 66% of the population own a mobile phone.[47] Digital insurance is also growing; the OJK authorized six new insurance companies to provide insurance digitally in August 2020.[48]

Inclusive insurance: Fast facts

- The number of microinsurance policyholders has grown from 18 million in 2015 to almost 30 million in 2021.[49]



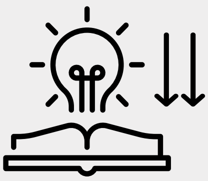
- Life insurance is the coverage held by the highest number of people, followed by credit-life, then personal accident, and finally health microinsurance, possibly because it covers only hospital cash, while universal health insurance is extended by the government.[50]

- Among the insurance associations, AAUI offers microinsurance programmes through a consortium of its members: Warisanku (accidental death), Rumahku (home), Stop Usaha Erupsi (volcano) and Stop Usaha Gempa Bumi (earthquake). AAJI has introduced Si Peci (life insurance) and AASI released Si BIJAK to cover life and non-life insurance.
- Individual insurers have offered various microinsurance products for dengue fever, earthquakes, fire, travel and personal accidents. These companies include Asuransi Central Asia, Sompo Insurance, AXA Mandiri, Sinarmas Insurance, Sequis Life and BRI Life.
- Several donor-led initiatives are working with insurers to examine the feasibility of developing agriculture index insurance and climate/disaster risk insurance. Parametric insurance products have been set up to cover drought risk for rice farmers; for example, the Syngenta Foundation for Sustainable Agriculture (SFSA) has developed a Weather Index Insurance product to protect smallholder farmers in the event of insufficient rainfall.[51]
- Insurers consider key challenges in microinsurance to be lack of internal support for microinsurance at company level and lack of access to appropriate distribution channels, which is amplified by a rural population scattered across thousands of islands. Key factors that could spur companies into selling microinsurance include greater availability of demand information to support product development.[52]

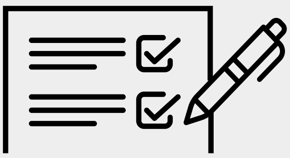
Government-backed insurance schemes:

- The Social Insurance Administration Body (BPJS) administers two programmes: health and employment social security. The health insurance programme covered 248.77 million people in 2022.[54]
- The government supports several insurance programmes through subsidies, including rice farming insurance (AUTP), livestock insurance (AUTS/K), small fish farmer insurance (APPIK) and fisherman insurance premium assistance (BPAN). The state-owned enterprise, Asuransi Jasindo, leads the insurance consortium that provides these programmes.
- An important challenge for these programmes is that potential beneficiaries are sceptical about the benefits of insurance. OJK found, for example, that farmers had problems paying the premiums they were required to pay on top of the government subsidy for crop insurance. They were unconvinced of the benefits and worried about the prevalence of delayed claims payment.
- Another challenge is that many of these schemes are not financially sustainable, given that in some cases claims totals are higher than premiums paid.

Demand



Public awareness of insurance is low, especially in rural areas, for reasons that include low financial literacy, cultural factors and having other, more urgent financial needs. Customers have little trust in insurance products, possibly due to agent behaviour and inadequate claims processes.



Results from a 2019 OJK financial literacy survey show that the literacy rate for insurance specifically was only 19% (up from 16% in 2016), while overall financial literacy was just 38%.[53]

Rural populations are less likely to purchase insurance and prefer Sharia-compliant (takaful) microinsurance for funerals.

Disaster risk financing [55]: Status

Disaster risk assessments[56]

Risk assessments for spatial plans, disaster management plans (both local and national) and disaster risk reduction action plans are required under Indonesian law (see figure). However, current risk assessments are not probabilistic.

Orders on Risk Assessments Usage Based on Existing Law and Regulations (UU No. 24/2007, PP No. 21/2008, Perpres No. 8/2008, Permen ATR. BPN 1/2018)

- Risk assessments are required in disaster management
- Risk assessments are made at the national and local level
- Risk assessments are required in spatial planning at all levels of government
- Risk assessment guidelines are provided by BNPB
- Disaster management plans (national and local) are made based on risk assessments with 5 year terms
- National and local DRR action plans (national and local) are made with 3 year terms

Risk Assessments Guidelines

Guideline for all levels of government and communities based on **Perka BNPB No. 02/2012**

Existing Risk Assessment Database and Tools

BNPB: InaRISK and IRBI (Disaster Risk Index) Report

BNPB: Disaster risk studies (Kajian Resiko Bencana), of natural disasters at the local level.

Other geospatial disaster risk data (Keputusan Kepala BIG No. 38/2021)

- Badan Pengawas Tenaga Nuklir: nuclear disasters risks
- Badan Informasi Geospasial : multiple hazard risks
- Kementrian ESDM: earthquakes, eruptions, land movements, and tsunamis

Plan Related to DM & DRR

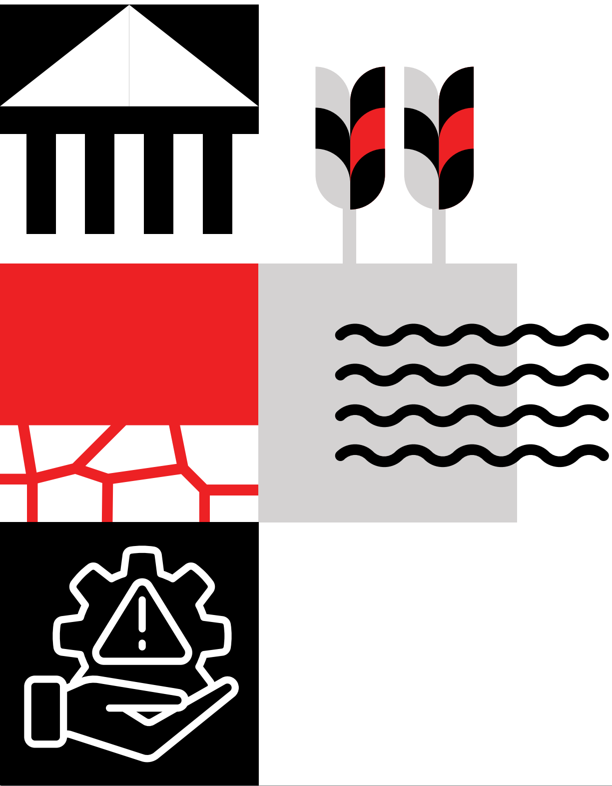
- National Plan for Disaster Management (Renas PB) by BNPB
- Local Plan for Disaster Management (PB Daerah) by BPBD
- National and Local Spatial Plan (RTRW) by corresponding governments
- National DRR Action Plan (RAN PRB) by BNPB
- Local DRR Action Plans (RAD PRB) by BPBD

Source: Analysis of Law No. 24 of 2007, Government Regulation 21 of 2008, President Regulation No. 8 of 2008, Ministry of Agrarian Affairs and Land Agency 1 of 2018 and Head of BNPB regulation No. 2 of 2012.

Existing institutional, legal and policy frameworks

Institutional structure:

- The Ministry of Finance formulates policies and strategies, provides financing for disaster management, allocates funds to disaster management-related programmes in other ministries or agencies, and formulates and implements disaster risk financing strategies.
- Responsibility for disaster management primarily lies with the National Agency for Disaster Management (BNPB) under Presidential Regulation No. 8 of 2008.
- The Regional Agency for Disaster Management (BPBD) is responsible for disaster management at the local government level, assisting the BNPB. Capacity at this level is limited.
- Local governments are responsible for allocating adequate funds for disaster management, integrating DRR into development plans and implementing them, protecting citizens and evacuees and coordinating with other governments and ministries/agencies on disaster management policies, plans and implementation.



Relevant laws and regulations:

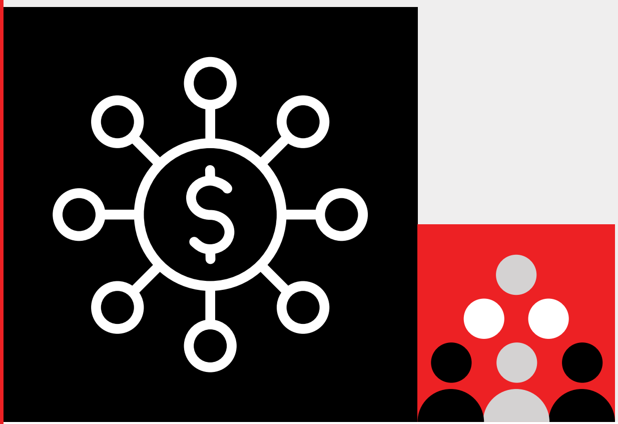
- Law No. 24 of 2007 on Disaster Management and most other DRM-related regulations reference national and local budgets as the primary financing sources for disaster recovery, but legislation also allows for contributions from international donors as well as crowdfunding in times of emergency. BNPB's rehabilitation and reconstruction regulation allows for other sources, such as insurance and trust funds.
- Regulation No. 17 of 2010, General Guidelines for the Implementation of Post-Disaster Rehabilitation and Reconstruction, mentions insurance as an alternative funding source.
- Ministry of Finance Regulation No. 97 of 2019 on State-Owned Property/Buildings Insurance was first implemented in 2020 after serious flooding in Jakarta.
- Presidential Regulation No. 75 of 2021 establishes a Disaster Pooling Fund (PFB).

Disaster risk finance strategy:

In 2018, Indonesia adopted its first National Disaster Risk Financing and Insurance (DRFI) Strategy during the Sendai Symposium for Disaster Risk Reduction and the Future. Through the DRFI Strategy, Indonesia adopted a more proactive approach to disaster risk financing, trying to reduce reliance on the national budget and shift to other financing instruments. The Strategy also involved a commitment to investing more in pre-disaster activities.

A $14 million grant from the Global Risk Financing Facility (GRiF) is co-financing efforts to help build the Government's technical capacity in managing funds to protect the most vulnerable groups.[57]

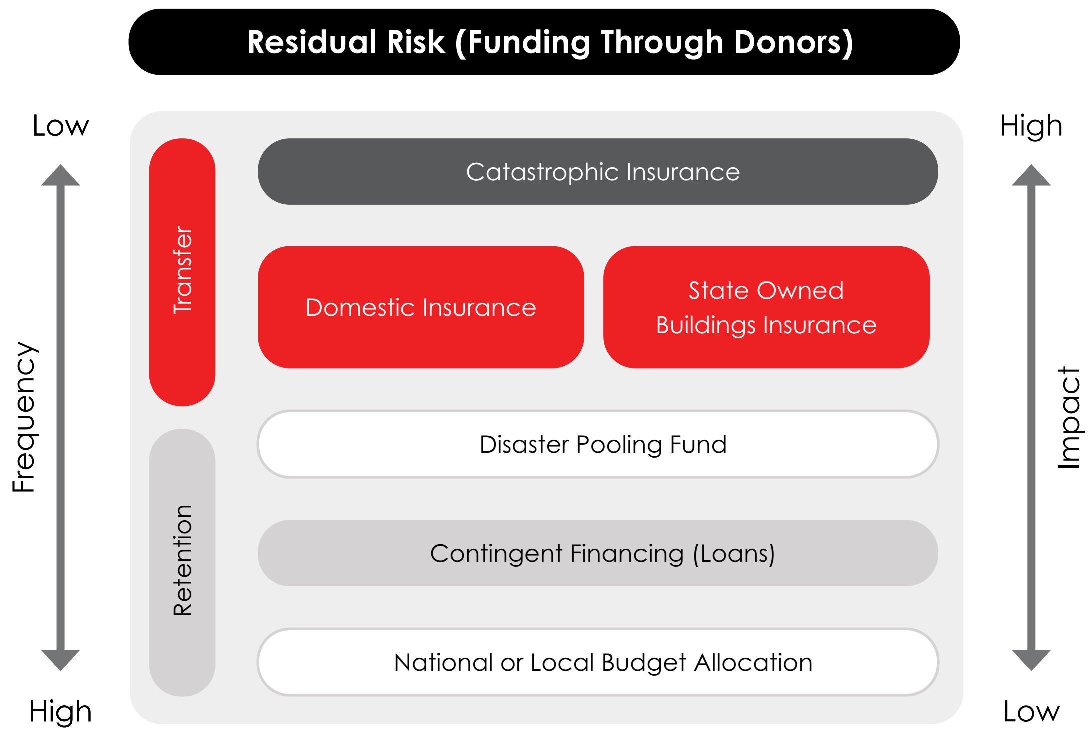
Disaster risk finance mechanisms and instruments



In addition to the existing national and local budget allocations, the DRFI Strategy contains a mix of instruments that enable the Indonesian Government to minimize disaster risk, such as outlining a disaster risk funding strategy to apply to central and local government budgets, as well as transferring risk to third parties through insuring government and community assets.[58] Instruments under development include:

- In 2021, the Government established the PFB as a dedicated disaster reserve fund, supported by a $500 million investment loan from the World Bank.[59] Over time, the PFB will leverage domestic and international insurance and capital markets to increase its financial capacity.
- The State Asset Insurance Programme is being implemented and scaled up. This national programme has insured over 5,000 public assets of more than 70 line ministries with a total sum insured of $2.5 billion.[60]
- Work is also under way toward integrating Indonesia's efforts with the Southeast Asia Disaster Risk Insurance Facility, an initiative of the members of the Association of Southeast Asian Nations (ASEAN) plus three (China, Japan and the Republic of Korea).[61]

An overview of Indonesia's approach to risk finance instruments is provided in the figure below.[62]



Way forward for inclusive insurance and disaster risk financing

The following recommendations are provided for supporting the development of inclusive insurance and sovereign disaster risk finance in Indonesia.

1 Recommendations for the development of inclusive insurance

1.1 Lack of consumer awareness and trust is seen as a key challenge.

Support sector-wide consumer education efforts.

- The effectiveness of existing and previously implemented insurance awareness programmes should be assessed.
- Insurers should be supported to offer client-centric products and to increase their capacity to implement client-centric marketing and information strategies.
- Insurance players and development partners should collaborate to implement insurance awareness strategies and programmes, particularly among marginalized populations, that build consumers' ability to identify valuable insurance solutions.
- A strategy should be developed to embed insurance and risk management literacy in the national education curriculum, while strengthening non-formal programmes (i.e., specific training/certification facilities) to improve literacy in areas that formal education cannot reach.

1.2 Readiness to engage in digital financial services is high.

Identify strategies to leverage technology for insurance.

- Research-backed strategies should be elaborated to help the Government leverage technology for insurance literacy and inclusion.
- A feasibility report should be developed on ways in which fintech and insurtech could increase insurance reach.

1.3 There is no specific mandate or regulation on inclusive insurance, only on microinsurance.

Continue to improve the enabling environment for inclusive insurance.

- A regulatory impact assessment should be conducted on the 2015 and 2017 microinsurance circulars.
- The Government should be supported to improve legislation and regulations for inclusive insurance.

1.4

Government-backed programs are unsustainable and value is not clear to the target market.

Evaluate and refine the government insurance schemes.

- Subsidized insurance products should be evaluated to recommend options to improve the schemes' sustainability and value.
- The feasibility of insurance schemes based on an Area Yield Index should be examined and options should be developed to modify the AUTP, AUTS and APPIK programmes.

1.5

Insurance outreach is low in rural areas.

Provide inputs needed for expanding distribution.

Initial research, market intelligence and training should be provided to expand the insurance industry's reach and distribution channels in rural and remote areas.

1.6

Property microinsurance coverage offered by the private sector is too low for reconstruction following a disaster, and most families opt to wait for post-disaster government aid.

Support the development of a public-private partnership for property microinsurance.

- A feasibility report should be developed on product options to assist low-income people to insure their homes against disaster.
- The Government, donors and private sector should work together to pilot a national property insurance scheme targeting low-income groups.

2 Recommendations for the development of sovereign disaster risk finance

2.1

Current risk assessments are not probabilistic.

Develop probabilistic risk assessment methods for loss estimation, fiscal risk assessments and financial preparedness.

2.2

Capacity of Indonesia's regional disaster management agencies is low.

Strengthen BPBD's capacity to utilize insurance and create high-quality DRR programmes through training.

2.2

A national Disaster Risk Financing and Insurance Strategy is being implemented.

Support the effective implementation of the DRFI Strategy.

- The Ministry of Finance should be supported to refine implementation based on experience to date.
- Local governments should be provided with support to sensitize them to the DRFI Strategy.

Endnotes

1 World Bank, "Population total – Indonesia", Databank. Available at https://data.worldbank.org/indicator/SP.POP.TOTL?locations=ID.

2 World Bank, "Urban population (% of total population) – Indonesia", Databank. Available at https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS?view=chart&locations=ID.

3 International Monetary Fund, World Economic Outlook database, October 2021. Available at https://www.imf.org/en/Publications/WEO/weo-database/2021/October.

4 Nada Hamadeh, Catherine Van Rompaey and Eric Metreau, "New World Bank country classifications by income level: 2021-2022", World Bank Blogs, 1 July 2021. Available at https://blogs.worldbank.org/opendata/new-world-bank-country-classifications-income-level-2021-2022.

5 Stefanno Sulaiman and Fransiska Nangoy, "Indonesia 2022 GDP growth races to 9-year high on commodities boom", Reuters, 6 February 2023. Available at: https://www.reuters.com/markets/asia/indonesia-2022-gdp-growth-races-9-year-high-strong-exports-2023-02-06/.

6 World Bank, "Indonesia Country Overview", April 2022. Available at https://www.worldbank.org/en/country/indonesia/overview.

7 Ibid.

8 International Labour Organization, "Country Profiles", ILOSTAT database. Available at https://test-ilostat.pantheonsite.io/data/country-profiles/.

9 International Labour Organization, "Informal economy in Indonesia and Timor-Leste". Available at https://www.ilo.org/jakarta/areasofwork/informal-economy/lang--en/index.htm.

10 World Bank, *The Global Findex Database: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19* (Washington, D.C., 2021). Available at https://www.worldbank.org/en/publication/globalfindex.

11 The WorldRiskIndex provides an assessment of the disaster risk of 193 countries, resulting from seven extreme natural events or negative climate change impacts: earthquakes, tsunamis, coastal floodings, riverine floodings, cyclones, droughts and sea level rise. See Katrin Radke and Daniel Weller, *The WorldRiskIndex 2021* (Berlin, Bündnis Entwicklung Hilft, 2021). Available at https://reliefweb.int/attachments/8629d457-6584-3f5f-93d2-beeb20aae083/2021-world-risk-report.pdf.

12 World Bank, "Indonesia: Vulnerability", Climate Change Knowledge Portal. Available at https://climateknowledgeportal.worldbank.org/country/indonesia/vulnerability.

13 World Bank, "Indonesia Disaster Risk Finance & Insurance (P173249): Project Information Document", 3 June 2020. Available at https://ewsdata.rightsindevelopment.org/files/documents/49/WB-P173249.pdf.

14 Center for Excellence in Disaster Management and Humanitarian Assistance, *Indonesia Disaster Management Reference Handbook* (Joint Base Pearl Harbor-Hickam, 2021). Available at https://www.cfe-dmha.org/LinkClick.aspx?fileticket=BcQ7lZPdVD4%3d&portalid=0.

15 World Bank, "How Indonesia Strengthened its Disaster Response with Risk Finance and Insurance", 17 November 2021. Available at https://www.worldbank.org/en/news/feature/2021/11/17/how-indonesia-strengthened-its-disaster-response-with-risk-finance-and-insurance.

16 Center for Excellence in Disaster Management and Humanitarian Assistance, *Indonesia Disaster Management Reference Handbook*.

17 World Resources Institute, Aqueduct Global Flood Analyzer tool. Available at https://www.wri.org/data/aqueduct-global-flood-analyzer.

18 Jun Rentschler, Christoph Klaiber and Jian Vun, "Floods in the neighborhood: Mapping poverty and flood risk in Indonesian cities", World Bank Blogs, 14 April 2021. Available at https://blogs.worldbank.org/eastasiapacific/floods-neighborhood-mapping-poverty-and-flood-risk-indonesian-cities.

19 Jian Vun, Jolanta Kryspin-Watson and Kevin Simulya Alyono, "Urban flood resilience in Indonesia: New approaches through an urban design lens", World Bank Blogs, 17 September 2019. Available at https://blogs.worldbank.org/eastasiapacific/urban-flood-resilience-indonesia-new-approaches-through-urban-design-lens.

20 Ibid.

21 World Resources Institute, Aqueduct Global Flood Analyzer.

22 UN Office for Disaster Risk Reduction, *Disaster Risk Reduction in Indonesia – Status Report 2020* (Bangkok, 2020). Available at https://www.undrr.org/media/48530/.

23 Center for Excellence in Disaster Management and Humanitarian Assistance, *Indonesia Disaster Management Reference Handbook*.

24 Ibid.

25 Ibid.

26 Ibid.

27 World Bank Group and Asian Development Bank, *Climate Risk Country Profile: Indonesia* (Washington, D.C. and Manila, 2021). Available at https://www.adb.org/sites/default/files/publication/700411/climate-risk-country-profile-indonesia.pdf.

28 Center for Excellence in Disaster Management and Humanitarian Assistance, *Indonesia Disaster Management Reference Handbook*.

29 UN Office for Disaster Risk Reduction, *Disaster Risk Reduction in Indonesia – Status Report 2020*.

30 Center for Excellence in Disaster Management and Humanitarian Assistance, *Indonesia Disaster Management Reference Handbook*.

31 Ibid.

32 Ibid.

33 Ibid.

34 Ibid.

35 Ibid.

36 Inclusive insurance is a broader term denoting all insurance products aimed at the excluded or underserved market, rather than solely microinsurance, or those products specifically aimed at the poor or low-income market. For this definition, see International Association of Insurance Supervisors, "Issues Paper on Conduct of Business in Inclusive Insurance", IAIS Issues Papers (Basel, 2015).

37 The enabling environment refers to the regulations, public policies, stakeholders and other infrastructure that support inclusive insurance growth.

38 Microinsurance Network, "Inclusive Insurance in Indonesia", Country Briefing Note (Luxembourg, 2022). Available at https://min-media.s3.eu-west-1.amazonaws.com/INDONESIA_COUNTRY_BRIEF_EN_VF_c4feb42b97.pdf.

39 A2ii, "Inclusive Insurance Regulations Map". Available at https://a2ii.org/en/map.

40 Indonesia, Government of Indonesia, "Strategi Nasional Keuangan Inklusif" [National Strategy for Financial Inclusion]. Available at https://snki.go.id/strategi-nasional-keuangan-inklusif/.

41 Indonesia, OJK, *The Indonesia Financial Services Sector Master Plan 2021-2025* (Jakarta, 2020). Available at https://ojk.go.id/id/berita-dan-kegiatan/publikasi/Documents/Pages/Master-Plan-Sektor-Jasa-Keuangan-Indonesia-2021-2025/The%20Indonesian%20Financial%20Services%20Sector%20Master%20Plan%202021-2025.pdf.

42 Indonesia, OJK, *Insurance Statistics 2021* (Jakarta, 2022). Available at https://ojk.go.id/id/kanal/iknb/data-dan-statistik/asuransi/Documents/Pages/Statistik-Perasuransian-2021/Statistik%20Perasuransian%20Indonesia%202021.pdf.

43 Conversion rate: US$1 = INR 14,871. This rate is used throughout this document.

44 Microinsurance Network, "Inclusive Insurance in Indonesia".

45 Simon Kemp, "Digital 2022: Indonesia", Kepios, 15 February 2022. Available at https://datareportal.com/reports/digital-2022-indonesia.

46 Ibid.

47 Indonesia, Statistics Indonesia, "Percentage of Population Owns Cellular Mobile Phone by Province and Urban Rural Classification 2019-2021". Available at https://www.bps.go.id/indicator/2/395/1/percentage-of-population-owns-cellular-mobile-phone-by-province-and-urban-rural-classification.html.

48 Microinsurance Network, "Inclusive Insurance in Indonesia".

49 OJK data provided for the purposes of this diagnostic study, 2022.

50 Microinsurance Network, "Inclusive Insurance in Indonesia".

51 Syngenta Foundation for Sustainable Agriculture, “Indonesia gets new weather insurance”, 24 April 2019. Available at https://www.syngentafoundation.org/news/recent-news/indonesia-gets-new-weather-insurance. See also Syngenta Foundation for Sustainable Agriculture, “AIS Indonesia”. Available at https://www.syngentafoundation.org/ais-indonesia.

52 Farzana Ismail, Natasha Su Sivarajah and Queenie Chow, *Milliman Research Report: Asia Microinsurance Supply-side Study* (Seattle, Milliman, 2020). Available at https://www.milliman.com/-/media/milliman/pdfs/articles/asia-microinsurance-supply-side-study.ashx.

53 Indonesia, OJK, “Booklet Survei Nasional Literasi dan Inklusi Keuangan 2019” [Booklet of the 2019 National Financial Literacy and Inclusion Survey 2019]. Available at https://www.ojk.go.id/id/berita-dan-kegiatan/publikasi/Documents/Pages/Survei-Nasional-Literasi-dan-Inklusi-Keuangan-2019/BOOKLET%20Survei%20Nasional%20Literasi%20dan%20Inklusi%20Keuangan%202019.pdf.

54 Shilvina Widi, “Hampir 70% Penduduk Indonesia Punya Jaminan Kesehatan pada 2022” [Nearly 70% of Indonesia’s population will have health insurance in 2022], DataIndonesia.id, 22 November 2022. Available at https://dataindonesia.id/ragam/detail/hampir-70-penduduk-indonesia-punya-jaminan-kesehatan-pada-2022.

55 Risk finance for this diagnostic primarily refers to sovereign disaster risk. As such, it can be defined as financing mechanisms governments have put in place or use before or after an event to respond to disaster-related financial contingencies.

56 The disaster risk assessment process includes identifying hazards and reviewing the technical features of threats regarding location, intensity, frequency and probability. The assessment also factors in the analysis of exposure and vulnerability, including the physical, social, health, environmental and economic dimensions, and evaluation of coping capability of the country against possible risk scenarios. See UNDRR, “Understanding Disaster Risk”, Preventionweb. Available at https://www.preventionweb.net/understanding-disaster-risk/component-risk/disaster-risk.

57 World Bank, “How Indonesia Strengthened its Disaster Response with Risk Finance and Insurance”, 17 November 2021. Available at https://www.worldbank.org/en/news/feature/2021/11/17/how-indonesia-strengthened-its-disaster-response-with-risk-finance-and-insurance.

58 Indonesia, Ministry of Finance Fiscal Policy Agency, “Indonesia Calls for Stronger Collaboration in Disaster Risk Reduction”, Press Release, 28 May 2022. Available at https://fiskal.kemenkeu.go.id/files/siaran-pers/file/1653732157_press_release_gdppr_-_eng.pdf.

59 Swiss State Secretariat for Economic Affairs and World Bank, *Sovereign Disaster Risk Financing and Insurance in Middle-Income Countries Program Review (2017-2022)* (Washington, D.C., 2022). Available at https://www.financialprotectionforum.org/publication/sovereign-disaster-risk-finance-and-insurance-in-middle-income-countries-program-review.

60 Ibid.

61 World Bank, “How Indonesia Strengthened its Disaster Response with Risk Finance and Insurance”.

62 Indonesia, Ministry of Finance, “Strategi Pembiayaan dan Asuransi Risiko Bencana” [Disaster Risk Financing and Insurance Strategy]. Available at https://fiskal.kemenkeu.go.id/publikasi/pembiayaan-dan-asuransi-risiko-bencana.

Acknowledgements

Author
MicroInsurance Centre at Milliman (Katie Biese, Queenie Chow, Jemma Maclear, Michael J. McCord, Merideth Randles and Mariah Mateo Sarpong) based on the full diagnostic report written by Dr. Saut Sagala (lead consultant)

Coordination and review
Theresa Sila Wikaningtyas and Abdul Wahib Situmorang (UNDP Indonesia)

Editing and peer review by UNDP IRFF
Jan Kellett, Lauren Carter, Russell Ivan Leith, and Diana Almoro

Copy editor
Justine Doody

Graphic design
Nattawarath Hengviriyapanich

United Nations Development Programme (UNDP)
UNDP is the leading United Nations organization fighting to end the injustice of poverty, inequality, and climate change. Working with our broad network of experts and partners in 170 countries, we help nations to build integrated, lasting solutions for people and planet. Learn more at undp.org or follow at @UNDP

UNDP Insurance & Risk Finance Facility
The Insurance and Risk Finance Facility (IRFF) is part of UNDP's Sustainable Finance Hub (SFH) and it is a flagship initiative dedicated to insurance and risk finance. The IRFF manages UNDP's global representation in the insurance space. It is a one-stop shop for innovative solutions for UNDP Country Offices, programme countries and partners. This includes issues related to insurance and risk finance, networking, partnership development, policy and guidelines, technical assistance, project implementation, capacity-building and financing opportunities. More information available at irff.undp.org

UNDP Sustainable Finance Hub
SDG financing is one of the four elements of UNDP's SDG integrator role, and it is a cross-cutting enabler for the success of all UNDP's thematic areas of work. UNDP, having a long track record of working in public finance and private sector development, through the Sustainable Finance Hub, in collaboration with partners, supports governments, the private sector, civil society and philanthropy to mobilize and align public and private flows of finance with the SDGs and national priorities across different development contexts, including fragile and conflict-affected countries and Small Island Developing States.

United Nations Development Programme
One United Nations Plaza
New York, NY 10017

www.undp.org

Supported by the

Federal Ministry
for Economic Cooperation
and Development