







# **KEY DEVELOPMENT - PROPORTIONAL TREATIES**

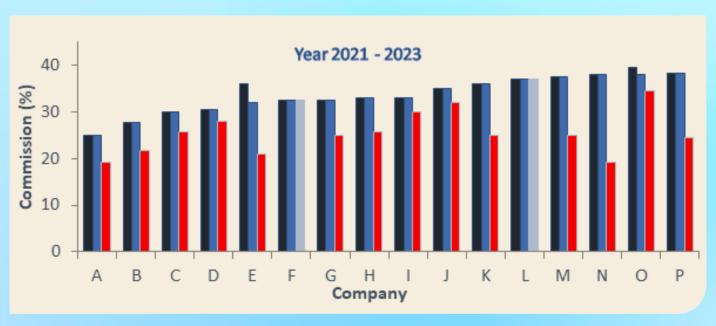


Diagram 1: Development of Commission over the past 3 years as at January 2023 - FIRE

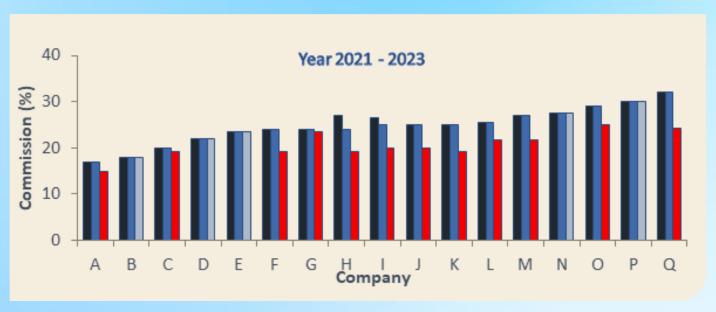


Diagram 2: Development of Commission over the past 3 years as at January 2023 - ENGINEERING

The commission development for Fire treaties has been significantly impacted by the GMF. As per Diagram 1 above, most of the companies' fire commission has been reduced, to help the treaties to recover from the losses faster and also to help to cushion the impact of an expected rising retrocession cost. Some treaties have changed the commission level from Original Gross Rate (OGR) to Original Net Rate (ONR) basis with the concern of high volatility in the profitability of the business ceded by giving out huge amount of fixed treaty commission. Certain treaties maintain commission as expiring for smaller based clients as shown in Diagram 1.

Similar to fire treaties, commissions level for most of the Engineering treaties have shown a downward movement. The revision in commissions is mainly due to deterioration in the claims experience and leveraging on the calamity GMF loss.

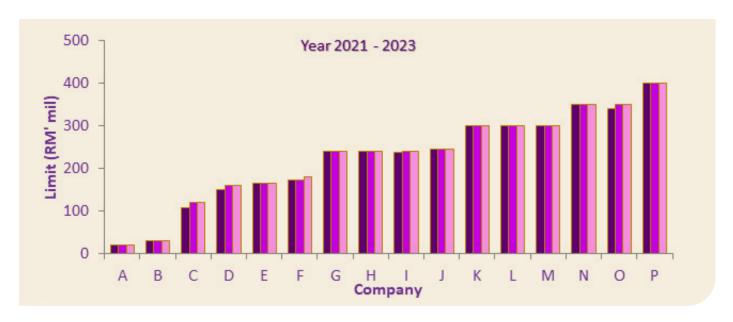


Diagram 3: Development of Treaty Limit over past 3 years as at January 2023 – FIRE

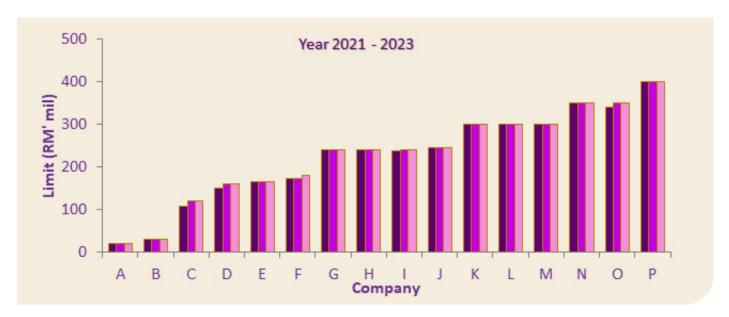


Diagram 4: Development of Treaty Limit over past 3 years as at January 2023 – ENGINEERING

Diagram 3 & 4 show that Fire Proportional treaty limit has levelled off in the last renewal, while for Engineering, 2 of the companies' treaty limits have reduced and 1 of the companies' treaty limits have increased. The increases were not significant, nevertheless the reduction in treaty limit is mainly due to the deterioration in the claims experience for the 3 engineering treaties.

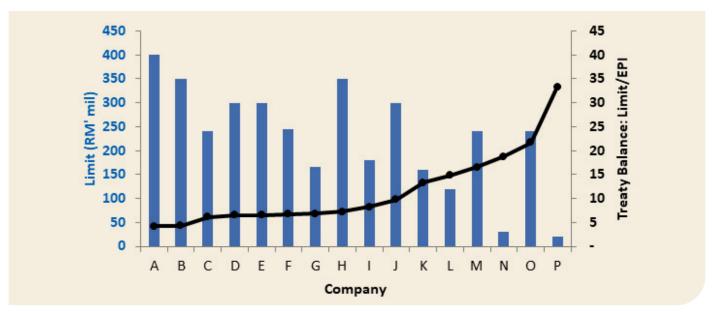


Diagram 5: Limit vs Estimate Premium Income (EPI) 2022/2023 as at January 2023 - FIRE

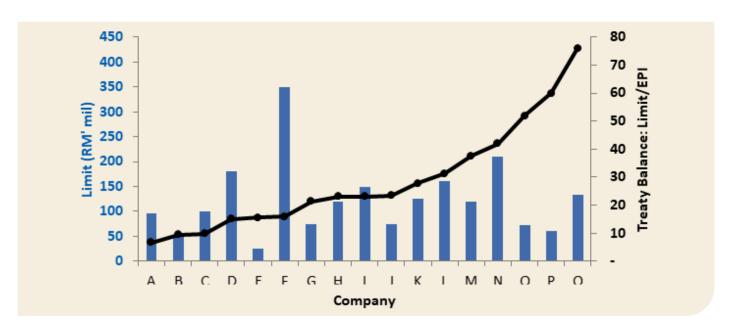


Diagram 6: Limit vs EPI 2022/2023 as at January 2023 - ENGINEERING

The major considerations while underwriting Treaty from a Reinsurer's perspective is the Treaty balance, which is the ratio of the total premium receivable by a Reinsurer under a Surplus treaty to the Reinsurer's maximum liability for any one claim. For Fire treaty, most of the companies in Malaysia are sitting in the range of between 5 to 20, except an outlier with treaty balance ratio more than 40. However, that company's treaty limit is relatively low compared to the others.

As for Engineering treaty, the much higher treaty balance ranging from 10 to 80 shows that Engineering is more unbalance compared to Fire class of business. As Engineering is non-tariff class and with the nature of non-renewable risks such as Construction All Risks (CAR) and Erection All Risks (EAR), the premium rate could be extremely competitive whilst the sum insured could vary from low to extremely high. However, in recent renewals, we observed that the Engineering rates has been hardening due to the unfavourable performance experienced by the industry.

### **KEY DEVELOPMENT - NON-PROPORTIONAL TREATIES**

### **Non-Motor**

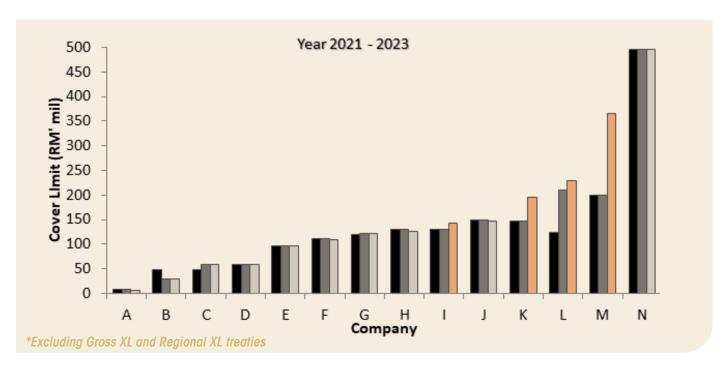


Diagram 7: Development of Cover Limit over past 3 years as at January 2023 – NON MOTOR

The Non-proportional treaties cover limit is the reflection of the companies' portfolio. As shown in the Diagram 7 above, there are 4 companies increased the cover limit in the last renewal. The increased is contributed by the higher flood exposure, business growth and merger and acquisition.

As Flood modelling tools are common and readily available in the Malaysia market where companies are now able to monitor their aggregates more closely and efficiently, the company will consider revising their cover limit in accordance with the identified return period exposure from the modelling tool.

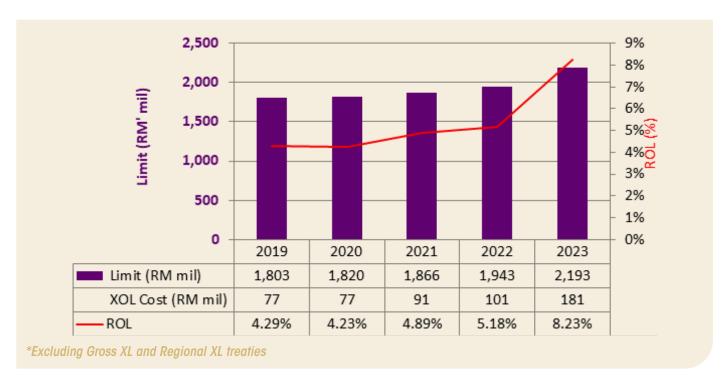


Diagram 8 : Development of Rate on Line (ROL) & XOL Spend over past 5 years as at January 2023 – NON MOTOR

From Diagram 8, we could observe that the trend of the ROL for Non-Motor classes has been increasing over the years together with the increase in cover limit and XOL cost, with current year being the highest compared to the last 5 years due to the GMF loss. Also, the increase in the flood accumulation exposure has resulted in higher pricing contributing to the rising costs.

#### Note:

1 Data presented in this article represents the actual domestic insurance companies which are Malaysian Re's cedants. The identities are kept anonymous to safeguard the privacy and confidentiality.

# Great Malaysia Flood (GMF): Challenges and Improvement

# **Opportunities for Catastrophe Claims Management**

In December 2021, Malaysia experienced an unprecedentedly massive flood that damaged living quarters, vehicles, business premises, manufacturing, and agriculture sector as well as public assets and, unfortunately, caused at least 54 dead. This massive flood happened due to the Tropical Depression 29W which was formed on 16 December 2021 and brought long periods of sustained downpours affecting many parts of Malaysia. According to the national disaster management agency (NADMA), the heavy rainfall has caused floods in 33 districts of the 9 states i.e. Perak, Selangor, Kuala Lumpur, Kelantan, Terengganu, Pahang, Negeri Sembilan, Sabah and Melaka. [1]

The Department of Statistics, Malaysia calculated that the overall losses from the floods amounted to approximately RM6.1 billion. Klang, Petaling and Hulu Langat districts (all in Selangor state) suffered the most financial loss. A significant number of business premises and manufacturing factories were badly affected, and the Insured loss was difficult to ascertain at an early stage due to the extent of the severity of this extreme precipitation and flooding event.



# Impact to Malaysia Insurance and Takaful Industry

Malaysia Insurance Companies and Takaful Operators (ITO) received a heavy influx of claims notifications. ITO staff worked tirelessly to register the claims and assign adjusters to assess and settle the claims.

Malaysian Re, being the lead reinsurer in the market, constantly engages with the ITO to update the accumulation loss from the market. At the initial phase, most claims were registered at initial or blind reserve; once the adjusters were able to assess the details of the loss, the reserves were able to be updated. Most ITO practices fast track settlement for residential claims which help expediting the settlement of residential claims.

However, one issue became quickly apparent: Due to the high volume of claims notified and short of manpower, there were considerable delays in assessing the quantum of loss and updating the reserves for commercial and industrial claims.

Having identified this issue, Malaysian Re initiated a market briefing in collaborations with the National Insurance Claims Society (NICS) to serve our continuous engagement with ITOs, particularly with the Claims Manager to understand how claims develop and discuss the ways and means to lessen the Impact to the Insurance & Takaful industry.

Adjusters were invited to present case studies where claims were effectively mitigated restoration by employing techniques. Some of the initiatives implemented such as prior appointment nominated adjusters and creation WhatsApp groups with

companies were also effective to expedite instruction and communication between insurance companies and adjusters.

It was also discussed during the meeting that more than 90% of insurers do not have Business Interruption (BI) cover and majority of those with BI cover are only for the basic cover without Supplier's and Customer's Extensions. Furthermore, it was highlighted that BI due to power disruptions is not necessarily covered under Public Utilities Clause. The issues faced in evaluating the BI claims were lack of information and documentation submitted by the insured.

In September 2022, the market loss was estimated to be at about RM2.7 billion. 90% of the residential claims have been closed. however there is still a small number of newly reported residential claims; the insurers approached it by asking for justification of late reporting, and no fast-track claims were allowed. However, only about 30% of Commercial Claims have been closed. Based on ITO's feedback, this is due to the excessive number of claims that were required to be surveyed and followed up for assessment. Having had the periodical bordereaux meeting with adjusters, whereby discussions were held on issues faced and alternative approach to finalize the offer or negotiate a quantum of loss for settlement (such as could certain documents be waived or substituted with alternative approach based on the materiality level), the situation then subsequently improved... Generally, ITOs observed that their incurred claims position has been stabilized and they would put the attention to closing the commercial claims.

# Best Practice for Catastrophe Claims Management: Take-away from Malaysian Re 2021 Claims Rendezvous





In December 2022, Malaysian Re took the initiative to organize an industry-level Claims Rendezvous of which ITOs claims managers gathered and discussed about the challenges in effectively managing catastrophic claims. The issues in the claims management chain where highlighted; this includes the shortage of adjusters, the methods to encourage new joiners into the adjusting and claim profession, the conventional versus modern claims management concept and training method, as well as the digital aspect and advancement of claims system to enable the Business-to-Customer and Business-to-Business claims submission. One typical example is for claims within the mandate that is given to the nominated adjuster, the adjuster goes for a survey at site, obtains information and assesses the claims on-site, upload the data to insurers and get the claimant to sign for discharging the claim on the spot.

There was a forum discussion on game changers on Catastrophe Claims Management Post GMF, brainstorming topics such as is there a need to redesign claim process, simplify required documentation & assessment of claims? and effective ways to monitor the end-to-end (ETE) process i.e., from setting up initial reserve to final settlement

#### The recommendations of best practices in catastrophe claims management includes:

- Cross-departmental collaboration when a catastrophic event and large volume
  of claims notification are expected. It could be part of the Catastrophe Claims
  Management Response or Human Capital Development policy which encourage staff
  to cross learning with some processes of other department. If need be, staff which are
  trained would be able to support some claims processing.
- Leverage on technology such as WhatsApp video call or Tik Tok video instead of doing site surveys for small value claims. Digitize the reports and use Loss assessment software where pre-agreed range of replacement pricing is embedded.
- Adopt global claims management best practices: working with a panel of adjusters to
  estimate Maximum Probable Loss for the affected area or the event on an overall basis
  instead of estimating reserves for individual cases. This is such that the overall reserves
  do not fluctuate.
- Set up Claims Task Force to monitor the development of the event claims and discuss concerted efforts and actions for managing the claims effectively; or Large Claims Committee to oversee the timelessness and technicalities of handling large claims to ensure that the losses are mitigated wherever possible, and the claims can be settled for the best customer experience.

# Lessons Learned and Moving Forward

Malaysian Re will continue to work with ITOs to evaluate the overall claims management process and determine the challenges such that proper controls can be put in place for an efficient handling of claims handling. Malaysian Re will collaborate with industry associations to hold forum discussions for a more robust approach through simplifying the process, deployment of technology and strengthening the workforce for the Flood Emergency Response Plan.

In the event of a catastrophe, adjusters can act as an emergency triage team for insurers to contact with claimants once they report damage and provide emergency services if needed. Insurers can entrust adjusters to lead and work collaboratively with builders, suppliers, experts including restorers, forensic scientists and forensic accountants to find the best solution to mitigate the impact of loss to claimants as well as the insurance and takaful industry. After all, adjusters play an important role by providing bespoke claim reports and recommendation for tackling the issues that can shorter the life cycle of insurance claims which is critical to the industry.

The Restoration could help to save billions of losses; however, these operations are time sensitive and therefore, working arrangements should be in place so it can be deployed in a timely manner. This is especially since most business owners would like to get back to their business as fast as possible to retain their goodwill when a loss occurs. If there is a loss to property it could be claimable, but loss of customer and goodwill are not insurable.

Huge number of claims are reported during catastrophe, is it practical to evaluate each claim in detailed? Data analytic can be utilized to optimize the claims process such as using the average size of claims and area of loss to allow for fast-track claims but apply the control by flagging claims requiring closer investigation. Claims triage works more effectively with data analytic as we can group the claims according to characteristic or priority, and then assign the claims to be handled by the most appropriate staff. We can also analyze the claims trend to predict the potential issues and act beforehand.

Application Programming Interface (API) and Process Automation as Game Changers - Currently, most ITO have electronic Claims Solution to manage and process motor claims; some insurers use it for non-motor claims as well but not in the full scale. Hopefully an end-to-end integrated system to better suit the non-motor claims management would be introduced. The industry is looking forward to seeing better offers in accelerate the automation of non-motor claims.

<sup>[1]</sup> Malaysia: Flash Floods - Dec 2021, at page https://reliefweb.int/disaster/fl-2021-000209-mys

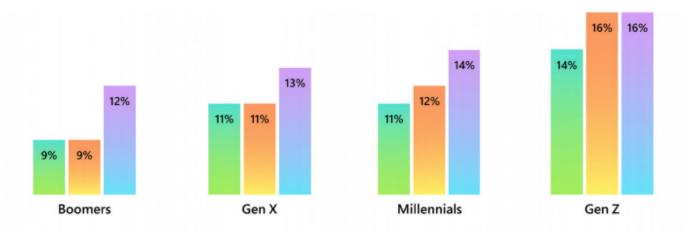
<sup>[2]</sup> Roles of Adjusters in Claims Management and Loss Experiences From Thailand And China for Malaysian Re Claims Rendezvous, from James Ong,

# **EMPLOYEE STATUS: DISCONNECTED**

#### Are you feeling disconnected at work?

A study conducted by Dr Sarah Wright (2005) at the University of Canterbury revealed how common it employees to experience Ioneliness at their workplace. Workplace culture is frequently overlooked as one of the potential triggers of loneliness, even though employees spend the majority of their day working. While this has already been a long-standing conflict, we were then hit by the COVID-19 pandemic which has undoubtedly accelerated

digitalisation trends. In the previous edition of Malaysian Re Foresights, the global pandemic's impact on mental health and digital transformation within companies was discussed. Further to those discussions, one of the impacts of the pandemic and lockdowns that is here to stay is the hybrid working arrangement that has been the new normal in most organisations. MNRB Group has recently adopted the hybrid work arrangement where the staff may either work in the office, work from home or work from anywhere.



Gen Z is More Likely to Say They're Struggling than Older Generations on These Aspects at Work



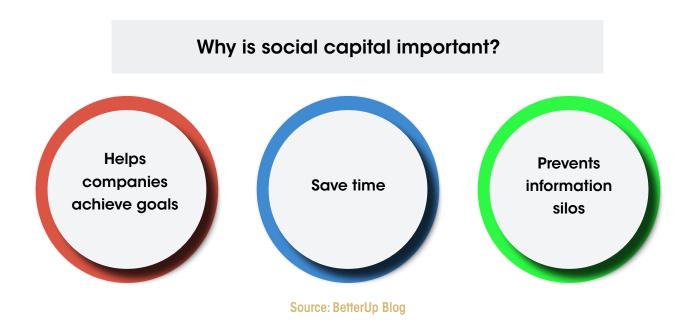
Source: Microsoft 2021 Work Trend Index Annual Report

#### It has been a while...

But do you remember bumping into colleagues daily and having random conversations about work or personal topics over lunch, or even meeting a new colleague in person? These informal interactions are essential for social capital, which is defined by Oxford Languages as the network of relationships among people who live and work in a particular society, enabling that society to function effectively. Another thing to consider is that younger employees or new hires may be experiencing the struggle of this social isolation more than those who have been working with the company longer. This statement can be supported by a survey in Microsoft's Work Trend Index Annual Report in 2021 where Gen Z reported more difficulties feeling engaged or excited about work, getting a word in during meetings, and bringing new ideas to the table compared to older generations.

#### Why is social capital so important?

Business success. As Steve Jobs once said, "Great things in business are never done by one person; they're done by a team of people." Social capital is essential in a team of people working towards achieving the company's goal and measure of success as it saves time and prevents information silos (Waters 2022) by increasing efficiency and productivity among the staff. As employees feel more engaged, this will also lead to lower absenteeism, lower turnover, and overall better company performance.



#### Improved bonding = Increased productivity

Social capital can be driven by strong workplace relationships. In modern or big workplaces, workloads are heavier, and deadlines are tighter. The need to rely on your team members or colleagues is essential. When a strong form of trust is built among the team, efficiency and productivity will increase which is critical to the bottom line. Team-building activities are fun and can be a tool in strengthening the bond between the employees. Employees are currently adapting to the digital working environment, but it should not be an excuse for them to forego teambuilding as it can be done virtually.

#### Time-out

Virtual team-building activities should be done to spark friendly, informal interactions among the team members so that everyone can have a break from the monotony of the daily grind. An example of virtual team-building is by scheduling weekly or monthly time-out sessions with the team via collaboration technologies, such as Microsoft Teams. Time-out sessions are where staff can simply engage in conversations that are non-work related. In addition, leaders or managers will be able to build trust and understanding with their employees. When mutual trust is achieved, it will be

easier for both sides to share their thoughts or issues in which they will be able to comfortably offer feedback towards one another. Sessions like this can be started with some basic icebreakers to minimise the awkwardness at the beginning. Apart from the icebreaking activities and coffee break sessions, time-out sessions can also be used to play online games such as *Pictionary, Uno!, Kahoot!* and many more that can be found available on the Internet. Each individual is also encouraged to start work meetings with a light question to the attendees, like "how was your weekend?".



Source: Brightful Blog

#### Count me in!

Another example of a great team-building initiative is by having meetups from time to time for the team to have a meal (e.g., lunch, dinner) or to play team-building games (e.g., escape room, bowling, etc) together outside of working hours. All employees should not feel reluctant but instead approach such initiatives with an open heart and mind, with the ultimate goal of building a better bond with their colleagues.

#### All in all,

Informal interactions between employees, that are at risk in the current hybrid and remote working styles, are not distractions nor the cause of deteriorating productivity. Organisations should understand that these interactions further strengthen

the employee connections that will fuel productivity and innovation within the team members. Both technology and remote working should not be treated as barriers to achieving desired productivity and unity between team members.

#### References

Wright, S. L. 2005, *Loneliness in the Workplace*, viewed 17 February 2023, <a href="https://www.academia.edu/38159485/Loneliness\_in\_the\_Workplace">https://www.academia.edu/38159485/Loneliness\_in\_the\_Workplace</a>.

Microsoft 2021, *The Next Great Disruption Is Hybrid Work—Are We Ready?*, viewed 17 February 2023, <a href="https://www.microsoft.com/en-us/worklab/work-trend-index/hybrid-work">https://www.microsoft.com/en-us/worklab/work-trend-index/hybrid-work>.</a>

Waters, S. 2022, Social Capital: How Building Relationships Boosts Retention, viewed 17 February 2023,<a href="https://www.betterup.com/blog/social-capital">https://www.betterup.com/blog/social-capital</a>.

Brightful Blog 2020, How to Play Pictionary Online, online image, viewed 17 February 2023, <a href="https://www.brightful.me/blog/how-to-play-pictionary/">https://www.brightful.me/blog/how-to-play-pictionary/</a>.

# **RISK IMPROVEMENT ON PERSONAL PROPERTY**

# **Special Rating Department, Market Services**

It is a common misconception that purchasing an insurance policy necessary because it protects the insured against the risk of loss. However, insurance policies protect the insured against financial losses, not from existing risk. According to the Malaysian Fire and Rescue Department, there were a total of 26,807 house fires in Malaysia in 2020. This is a drop from the previous year, when 30,948 cases were reported. In 2020, 180 fatalities were the result of house fires, while 412 people were injured.

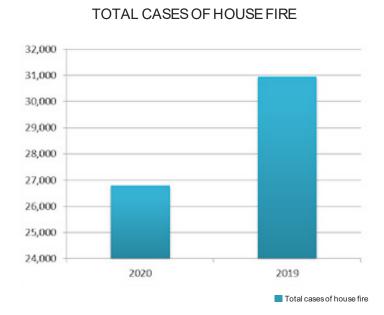


Figure 1.0:Total case of house fire in Malaysia

The common reason for inadequate assessment of the condition of their property is because consumers typically rely on their insurance provider to protect their assets but, in reality, it is the owner's obligation to minimise risk by designing a risk improvement strategy. Risk improvement is a strategy for assessing possible losses and taking steps to lessen the risks at a property. Here are some suggestions for better home risk management:

#### 1. Fire Safety

Install smoke detectors on each floor of your home, as well as in each bedroom. Inspect them on a regular basis and replace the batteries as needed. Have a fire extinguisher in the kitchen and practise using it.

Malaysian Fire The Protection Association (MFPA) and the Malaysian Fire and Rescue Department (BOMBA) oversee the usage and installation of fire extinguishers in Malaysia. Although there is no legal requirement to have a fire extinguisher, if you want to install one at home, make sure it is conveniently accessible, properly installed, and within its expiry date.

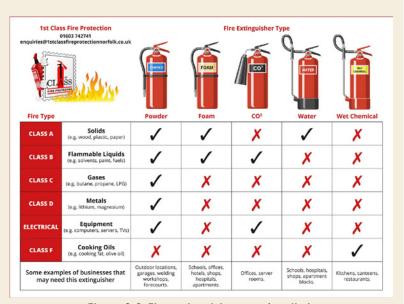


Figure 2.0: Fire extinguisher type for all classes

#### 2. Door

The Uniform Building By-Laws 1984 (UBBL) govern the regulation of house doors in Malaysia. The UBBL specifies the basic building standards and criteria, including the design and installation of doors in residential structures.

House doors must satisfy the following specifications, according to the UBBL:



Figure 3.0: Housing doors that comply with regulations

- Material: The door must be made of a strong and durable material, such as solid wood, metal, or composite materials.
- ii Size: A home door must be at least 900mm x 2100mm in dimension. The door must be large enough to provide simple entrance and exit and it must meet handicap access standards.
- iii Lock & Latches: The door must have a secure lock and latch that is in excellent functioning order. The lock must be able to be locked from the inside without the use of a key and opened from the inside without the use of a key in the event of an emergency.
- iv Glazing: If the door is glazed, the glass must be safety or shatterproof and meet all applicable safety standards.
- Fire Resistance: If the door is part of a fire-rated assembly, such as a fire-rated wall or door, it must be able to withstand fire for the time stipulated in the applicable fire safety rules.

#### 3. ELECTRICAL SAFETY

Examine electrical cables for damage and repair them if necessary. Do not utilise extension cables as permanent fixtures or overload outlets. Consider hiring an electrician to assess and fix the wiring in your house.

#### 4. HOME SECURITY

Put deadbolts on external doors and think about installing a security system or a camera to watch your home. Lock vour doors and windows and be aware of who has keys to your house.The regulation of house grilles in Malaysia is largely managed by the Uniform Building By-Laws 1984, which are enacted under the Street, Drainage, and Building Act 1974. The legislation requires all dwellings and structures

to have window grilles placed for safety and security. The thickness and height of the bars utilised in these grilles should be following the criteria set out in the Uniform Building By-Laws.

It is also important to remember that in the case of a fire, the grilles must be easily detachable to enable for a speedy departure. As a result, it is critical to ensure that grilles are built and fitted with safety in mind.



Figure 4.0: Grilles regulation compliant

#### 5. PEST CONTROL

Pest infestations may cause damage to Malaysian houses. Here are some examples of the sorts of harm that pests may cause:

- i Termites: One of Malaysia's most devastating pests. They may harm wooden structures like doors, window frames, and furniture, as well as inflict structural damage to a house's foundation and walls.
- ii Rodents: Rats and mice can eat through electrical lines, causing short circuits and perhaps starting a fire. They may also harm walls, furniture, and other home things.
- iii Ants: Cause electrical device damage by nesting within them. They can also harm timber structures like doors and window frames.



Figure 5.0: Showing the termites as one of destructive pests



Figure 6.0:This figure shows that the wooden structure has been damaged caused by termites



Figure 7.0: Showing the rodents who can chew through electrical wires



Figure 8.0:This figure shows the damage caused by rodents



Figure 9.0: Showing ants can cause damage to electrical appliances



Figure 10.0:This figure shows the damage caused by ants

#### 6. FLASH FLOOD

Heavy rain, inadequate drainage, and other factors can all contribute to flash floods, which can inflict major damage to homes and buildings. Keep in mind that flash floods are unexpected and deadly, and if you live in a flood-prone location, you should always be prepared for the worst-case situation.

These are some precautions that Malaysian homeowners may do to assist avoid flash floods:

i Maintain proper drainage: Keep debris such as leaves and twigs out of your home's drains and gutters, since they can clog the flow of water and cause floods. Proper drainage system cleaning and maintenance can assist prevent blockages.

- ii Rainwater System: Build a rainwater harvesting system that may collect rainwater from your roof and utilise it to irrigate plants or for other non-drinking uses. This can assist avoid floods by reducing the quantity of water that flows into the drainage system.
- iii Raise electrical devices: Particularly those in the basement or on the ground level. This can assist to protect them from damage during a flood.
- iv Prepare sandbags: In case of a flood, keep sandbags on hand and easily accessible. Sandbags may be used to build a barrier around your property, preventing water from entering.



Figure 11.0: showing that drainage must always be clean to prevent flash floods.



Figure 12.0:This figure shows that sandbags can be used in reducing losses due to flash floods

#### 7. PIPING SAFETY

Recently, on February 2023, Malaysians were shocked to learn that two children suffered serious injuries because of a pipe bursting caused by their neighbors' use of acid. One of the steps of ensuring safety use of housing pipes is covering the pipes with plaster ceiling.

#### House pipes must be covered for several reason:

- i Protection: Covered pipes give protection from leaking due to the physical damage or corrosion. It also can protect risk from external factors such as extreme temperatures, impact or moisture.
- ii Safety: Covered pipes can protect occupants of the home, especially children and pets, from harm caused by accidental contact with hot or sharp edges of exposed pipes.
- iii Aesthetics: Covering pipes can enhance a home's appeal. Exposed pipes can reduce a room's or space's overall aesthetic appearance.
- iv Energy efficiency: By lowering heat loss and enhancing hot water supply, insulating and covering hot water pipes can help a home become more energy efficient.



Figure 13.0: Showing the piping that is exposed to the hazard and does not follow the regulations



Figure 14.0: This figure shows that piping should be covered using plaster ceiling

To summarise, improving a house's risk profile is a vital duty that homeowners may take on to safeguard their property and secure the safety of their family. To summarise, improving a house's risk profile is a vital duty that homeowners may take on to safeguard their property and secure the safety of their family. By adopting these precautions, homeowners may greatly minimise the danger of property damage or loss, protect their families from harm, and perhaps cut their insurance costs by proving to insurers a reduced risk profile.

#### References

(1985, September 12). SUBSIDIARY LEGISLATION STREET, DRAINAGE AND BUILDING ACT 1974 [ACT 133] G.N. 5178/1984 UNIFORM BUILDING BY-LAWS 1984

(n.d.). Laman Portal Rasmi PORTAL RASMI JBPM. Retrieved February 23, 2023, from https://www.bomba.gov.my/)/

Kanak-kanak melecur terkena asid dari paip sinki. (2023, February 1). Harian Metro. Retrieved February 23, 2023, from https://www.hmetro.com.my/utama/2023/02/931769/kanak-kanak-melecur-terkena-asid-dari-paip-sinki

Tucci, L. (n.d.). What is Risk Management and Why is it Important? TechTarget. Retrieved February 23, 2023, from https://www.techtarget.com/searchsecurity/definition/What-is-risk-management-and-why-is-it-important

(n.d.). Malaysian Fire Protection Association: Home. Retrieved February 23, 2023, from https://mfpa.com.my/)/

# RENEWABLE ENERGY: SOLAR PHOTOVOLTAIC (PV) TECHNOLOGY WITH INSURANCE COVERAGE

# **Technical Services Department, Market Services**

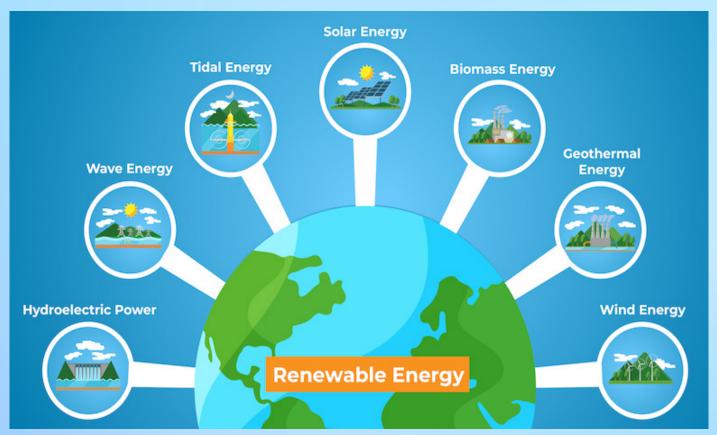


Figure 1:Types of Renewable Energy

Globalization and recent booming technology advancement have resulted in economic expansion, which has led to changes in emerging country consumption patterns. Unsustainable consumption behavior leads to resource exploitation due to such abrupt changes in consumption patterns.

Energy, which is more common as a daily necessity nowadays, is a critical factor in improving human life quality and boosting economic progress. As a result, the progress of a country is frequently linked to its energy consumption.

In light of this, renewable energy sources appear to be a viable solution to the problem of excessive energy usage (Lim & Lam 2014; Oladokun & Odesola 2015). Biomass, geothermal, solar, hydropower, wind and wave are examples of alternative energy sources (Figure 1) that are environmentally beneficial and renewable, and hence cannot be depleted over time.

Economic growth is a major goal for every society, so policymakers and environmentalists must work together to mitigate its adverse consequences. Environmental challenges and sustainable development have risen to prominence as key research topics, attracting significant attention of scholars, industrial entities, researchers, and practitioners.

Environmental pollution, such as the burning of fossil fuels for energy and automobile exhaust emissions, is putting society at an alarming state. Furthermore, non-renewable energy sources of electricity generation, including natural gas and fossil fuels, will be limited in the coming years. Because electricity usage is heavily reliant on it, this will be a big problem for civilization (Ashnani, 2014).

Hence, authorities are prioritizing the development of renewable energy in these recent years.

### SOLAR POWER GENERATOR CUM PRIVATE RESIDENTIAL HOUSE

The Malaysian government has implemented several policies and programs to encourage the use of solar PV. The Feed-in-Tariff (FiT) 2011 and the Net Energy Metering scheme (NEM) 2016 offered to provide financial assistance to solar PV customers as subsidies. The idea behind NEM is that the solar PV installation's energy will be utilized first, and any excess will be exported to TNB at the current displaced cost. The NEM 2.0 was established on January 1, 2019, in an effort to increase NEM adoption, and the real net energy metering was implemented, which permits excess solar PV generated energy to be exported back to the grid on a "one-for-one" offset basis (SEDA, 2020).

	NEM 3.0		
SUBJECT	NEM Rakyat	NEM GoMEn	NOVA
	Domestic	Government Building	Commercial & Industrial
Quota offered (MW)	100	100	300
Mechanism (roll-over)	NEM 1:1 (12 months)	NEM 1:1 (12 months)	SELCO + (1 month)
Commencement Date	1 Feb 2021	1 Feb 2021	1 April 2021
Offer Duration	3 years		
Offset Rate	Current Tariff	Current Tariff	System Marginal Price
Offset Duration	10 years		
Setting After 10 years		Self Consumption (SELCO)	
Installation Capacity Limit	Single Phase: 4kWac Three Phase: 10kWac	1MWac / 1 account	Net Offset : 1MWac Net Offset + : 5MWac Virtual Aggregation
Eligibility	Domestic Account Holder	Government Buildings	Non-Domestic Account Holder

Figure 2: Net Energy Metering (NEM) 3.0 scheme from https://www.seda.gov.my/reportal/nem/

A press statement by the Ministry of Energy and Natural Resources on December 29, 2020, introduced the new Net Energy Metering 3.0 program (NEM 3.0) to provide more opportunities for electricity consumers to install solar PV systems on the roofs of their premises to save on their electricity bill, in response to an overwhelming response from the PV industry. From 2021 to 2023, the NEM 3.0 will be in force, with a total quota allocation of up to 800 MW. The NEM 3.0 will be separated into three new categories as can be seen in Figure 2.

### House owners can sell electricity under FiT scheme

By installing a home solar system, house owners can now sell home solar electricity to TNB. SEDA Malaysia FiT incentive provides a fixed rate to the electricity generator (eg: the house owners) for every kWh of electricity generated and exported to the grid. This rate provided under FiT is at a premium over the electricity rate that is being paid to TNB as it is an incentive for the generation of renewable clean energy.

# HOW TO INSURE THE SOLAR PANEL UNDER HOUSEOWNER / HOUSEHOLDER POLICY

There is always confusion in the insurance market in insuring domestic solar panels. Whether to treat the panels separately or to include in the main cover/policy. It is important to consider the points below when insuring a policy.

- That the solar panel system can be covered under Householder Policy considering the solar panels as part of fixtures and fittings.
- Other alternative, the insured could also opt for All risk policy should the insured requires a wider cover.



# LED Solar Lamp Post by Kerajaan Selangor/ HOUSEHOLDER POLICY

Selangor had widens campaign to install LED Solar Lamp Post where RM5 million has been allocated for the installation of 560 lamp post throughout the state.



The project will be carried out in 2 phases.

Phase 1 - November 2022

Phase 2 - March 2023

10 Lamp Posts will be installed in each DUN (Dewan Undangan Negeri).

#### References

Oladokun, M. G., & Odesola, I. A. (2015). Household energy consumption and carbon emissions for sustainable cities–A critical review of modelling approaches. International Journal of Sustainable Built Environment, 4(2), 231-247; doi.org/10.1016/j.ijsbe.2015.07.005

Ashnani, M. H. M., Johari, A., Hashim, H., & Hasani, E. (2014). A source of renewable energy in Malaysia, why biodiesel? Renewable and Sustainable Energy Reviews, 35, 244-257; doi.org/10.1016/j.rser.2014.04.001

Mekhilef S, Safari A, Mustaffa WE, et al. Solar energy in Malaysia: current state and prospects. Renewable and Sustainable Energy Reviews, 2012, 16:386-396.

The Star. Malaysia can generate more electricity if all roofs use solar panels, says Yeo. 2019. https://www.thestar.com. my/news/nation/2019/05/14/malaysia-can-generate-more-electricity-if-all-roofs-use-solar-panels-says-yeo/#vAlzdstLzSgpkOym.99

Sustainable Energy Development Authority (SEDA) Malaysia, 2020, Net Energy Metering (NEM) 3.0 scheme from https://www.seda.gov.my/reportal/nem/

Sustainable Energy Development Authority (SEDA) from https://www.insurancebusinessmag.com/asia/news/breaking-news/allianz-malaysia-to-provide-cover-for-solar-energy-projects-212695.aspx

Write up on Domestic Solar in relating to HO/HH Policy - SRD & PIAM

Selangor Journal https://www.amirudinshari.com/posts/selangor-journal-selangor-widens-campaign-to-install-led-lights-solar-systems-in-all-buildings

# A Quick Overview of Federal Budget 2023

# By Business Development & Special Projects



The Prime Minister and Minister of Finance, Dato' Seri Anwar Ibrahim, presented the Revised Budget 2023 before the Parliament on 24th February 2023. This budget, with an allocation of RM386.14 billion, is the largest in the country's history and has been developed by the Unity Government to prioritize the wellbeing of the Rakyat and foster economic growth. The Revised Budget 2023 focuses on addressing the high cost of living, improving social safety nets, and strengthening the Micro, Small & Medium Enterprises (MSMEs) eco-system.

Upon reviewing the Revised Budget 2023, it is observed that the number of items directly related to the insurance and takaful industry is comparatively lower than that of the previous budgets, as shown in the table below.

Revised Budget 2023	Original Budget 2023	Budget 2022
Government will expand the scope of tax relief for life insurance premiums or takaful contributions to include voluntary contributions to EPF of up to RM3,000.	Government will expand the scope of tax relief for life insurance premiums or life takaful contribution by including voluntary contributions to EPF of up to RM3,000.	Increase Perlindungan Tenang Voucher to RM75 for Tenang products including life and personal accident takaful.  Voucher can also be used to purchase motorcycle comprehensive insurance for motorcycles 150cc and below.
PERKESO: Creation of additional protection through LINDUNG+ Program via collaboration with private insurance providers. Provides additional social security protection plans beyond the scope of protection under SOCSO such as income protection above RM5,000, medical treatment as well as protection for chronic diseases	The Government intends to continue MySalam to BKM recipients throughout 2023. This scheme is open to insurance and takaful companies to ensure the continuity of MySalam	Stamp duty exemption for the Perlindungan Tenang Product as well as other in- surance or takaful products with a premium or contri- bution value not exceeding RM150 for individuals and RM250 MSMEs
	Perlindungan Tenang Voucher Fund will be extended to the purchase of flood disaster protection products for residential homes.	MySalam scheme will be expanded to cover eligible BKM recipients and claims for medical device benefits will also be extended to dependents of eligible mySalam recipients
	Under Budget 2022, the Government continued to provide Personal Accident Coverage of up to RM100 million to benefit 40,000 LPP- SA new borrowers. For 2023, the Government agrees to provide RM100 subsidy to include insurance and takaful home content coverage worth RM20,000 as an effort to lighten the burden on borrowers impacted by disasters.	Farmers' Smart Card Takaful Protection Scheme to more than 920,000 PPK farmers with a premium of RM5 for a one-year term coverage

The Perlindungan Tenang Voucher Fund (PTVF) initially introduced in Budget 2021 has been a remarkable success for the industry. Perlindungan Tenang, launched in 2017 as the first national microinsurance program, initially experienced limited uptake, with only approximately 40,000 policyholders after four years, despite its affordably priced products, offering death/critical illness benefits ranging from RM10,000 to RM80,000, and other benefits for premiums ranging from RM30 to RM75 per year.



However, with the introduction of the PTVF of RM50 vouchers for Bantuan Keluarga Malaysia (BKR) recipients, now known as Sumbangan Tunai Rahmah (STR), the uptake of Perlindungan Tenang products surged astronomically, with policyholders increasing from 40,000 to 4 million within one year, and the penetration rate jumping from 0.44% to 44% of the B40 segment.

The cost-benefit ratio was favorable, with the government spending approximately RM200 million on the Perlindungan Tenang voucher, and in exchange, the insurance & takaful industry providing an estimated RM66.7 billion to RM213.3 billion in sum insured for the B40 segment through Perlindungan Tenang.

The expansion of the tax relief scope for voluntary EPF contribution is a commendable initiative aimed at encouraging taxpayers to replenish their EPF accounts following the withdrawal of RM145 billion by members during the pandemic. Currently, 64% of the 12.78 million EPF members have RM10,000 or less in savings, and 75% of these are Bumiputera members.

However, from the insurance and takaful industry's point of view, the inclusion of voluntary EPF could potentially crowd out the industry, as life and family takaful contributions will now have to compete with voluntary EPF contributions.

The proposed LINDUNG+ Program in the Revised Budget 2023 is eagerly anticipated by the industry. The program targets salaried workers earning more than RM5,000 per month in the M40 and T20 groups, which amount to around 9.6 million individuals. Assuming the same rate of contributions as the SOCSO scheme, which is 1.75% from employers and 0.5% from employees, with median monthly salaries of RM7.5k and RM12.5k for the M40 and T20 groups, respectively, the estimates for contributions are as follows:

M40: 6.4 million X (RM7.5k- RM5k /month) T20: 3.2 million X (RM12.5k - RM5k /month)

The potential total monthly contribution is RM900 million, or RM10.8 billion annually. Assuming the insurance premium is 3% of the total contribution in a 50-50 co-insurance arrangement, the total premium generated by the industry could potentially reach up to RM160 million annually. However, as of now, the mechanism for contributions and insurance arrangements is yet to be made public.

# **Opportunities for Insurance & Takaful Industry**

We have noted a decrease in direct items related to the insurance and takaful industry in the Revised Budget 2023. However, we believe that there are plenty of indirect opportunities that can benefit the industry. For instance, the 2023 federal budget proposals include a 2% reduction in personal income tax rates for individuals with taxable incomes ranging from RM35,001 to RM100,000 per annum. This initiative is expected to result in significant annual tax savings for individuals falling within this income bracket.

By providing tax relief to these individuals, the government aims to increase disposable income and consumer spending, which can stimulate economic growth. This, in turn, can potentially lead to an increase in demand for insurance and takaful products, indirectly benefitting the industry. Additionally, the reduction in personal income tax rates may also encourage individuals to invest in insurance and takaful products as a means of securing their financial future and enjoying tax benefits at the same time.

Therefore, while the Revised Budget 2023 may have reduced direct items related to the insurance and takaful industry, we believe that the initiatives proposed in the budget can still provide indirect benefits to the industry. The 2% cut in personal income tax rates for individuals earning between RM35,001 to RM100,000 annually will provide greater discretionary spending for the M40 group, which can translate to potential opportunities for the industry. For instance, young professionals who may have been hesitant to purchase their first home or life/family takaful products due to financial constraints may now have the means to do so.

The budget's target of creating 35,000 job opportunities for youth TVET graduates in Government-related companies can also benefit the industry. With more gainfully employed youths, there may be an increase in the purchase of first cars and early purchase of medical and life insurance due to the lower cost of entry at their

Taxable Income	Tax Rate
RM35,001 - RM50,000	8% to 6%
RM50,001 - RM70,000	13% to 11%
RM70,001 - RM100,000	21% to 19%
RM100,001 - RM250,000	24% to 25%
RM250,001 - RM400,000	24.5% to 25%
RM400,001 - RM600,000	25% to 26%
RM600,0001 - RM1,000,000	26% to 28%

age. Moreover, the introduction of the Peoples Income Initiative (IPR) as the first step towards a universal basic income model can also provide an opportunity for the industry to promote the Perlindungan Tenang products to the B10 Group, given the overwhelming benefits of financial protection.

The budget's reduction of the tax rate for MSMEs from 17% to 15% on taxable income for the first RM150,000 from assessment year 2023 is a welcome move to enable MSMEs to recover from the pandemic and strengthen their cash flow. However, it is important to note that only 15% of Malaysian MSMEs are currently protected from Business Interruption (BI) risks, despite 85% of them being exposed to such risks. This significant protection gap presents both risks and opportunities, and a portion of the additional RM3k tax savings can be directed towards purchasing necessary risk protection products.



In the wake of the Great Malaysian Flood 2021, flood mitigating projects have been given priority in the Revised Budget. The Budget aims to re-tender 6 projects, with a projected cost-saving of RM2 billion. The recent flood has exposed a significant protection gap, as only RM2.2 billion of the RM6.5 billion losses were insured, with the majority of the losses occurring in the economically prosperous Klang Valley. To address this protection gap, the government may re-consider the proposed flood coverage under Perlindungan Tenang or establish a national flood pool with the participation of insurers and takaful operators. Co-insurance or excess of loss structures can be explored, with Malaysian Re potentially serving as the pool underwriter and administrative manager.

Green Technology has received substantial allocation in the Revised Budget, with EVs receiving a significant share of the benefits. The government has extended the exemption of import duty on EV components for local assembly until December 31, 2027. Additionally, CKD EVs will benefit from excise duty and sales tax waivers, and manufacturers of EV charges will receive a 100% statutory income tax exemption. These exemptions and waivers will help to address two key factors inhibiting EV sales: limited availability of EV charges and affordability of EVs. The Budget initiatives will make EV chargers more accessible and lower EV prices in the market. The industry may also lobby for special tariffs on EVs to further support the take-up rate among consumers.

The government's commitment to preserving the environment through investment in green technology is evident in the proposed implementation of the Green Technology Financing Scheme, which has received an increased allocation of RM3 billion until 2025. The funding scope has also been expanded to cover EVs with a guarantee limit of up to 60%. In addition, BNM will provide financing of up to RM2 billion to support green tech start-ups, while Khazanah will invest RM150 million in green-friendly projects. With billions of Ringgit of public funds to be invested in funding and financing green ventures and projects, appropriate insurance and takaful products can mitigate financial risks ranging from construction to operations, assets, and properties.



According to the Sustainable Energy Development Authority of Malaysia (SEDA), in 2020, renewable energy accounted for 23% of installed power capacity in Malaysia, with a plan to raise it to 40% in 2035. The additional capacity will require building more solar power stations, which can be funded by debt raising. Suitable insurance and takaful products can cover financial risks associated with these investments in green energy.

The Revised Budget 2023 has placed a significant focus on ensuring food security for the country following a minor food shortage crisis in 2022 caused by disruptions from the Ukraine war. However, while the previous Budget 2022 provided the Farmers' Takaful Protection Scheme to over 920,000 PPK farmers at a premium of RM5 for a one-year term coverage, this scheme has been removed from the Revised Budget 2023.

To enhance the resilience of the agro-food industry, it is important to establish a comprehensive risk protection program that covers the entire value chain of production, logistics, and sales. For instance, during the production phase, farmers who experience crop destruction due to floods may face significant cash flow issues, hindering their ability to replant and leading to disruptions throughout the food security chain. However, farmers who have insurance coverage can recover their financial losses and have the resources needed to replant, minimizing disruptions and ensuring the stability of the entire food security chain. Therefore, a comprehensive risk protection program is crucial in safeguarding the food security of the country.

