ADB

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Regional: Strengthening the Enabling Environment for Disaster Risk Financing (Phase 1)

Asian Development Bank

ADB

Regional Forum on Strengthening the Enabling Environment for Disaster Risk Financing: Options for Enhancing Financial Resilience

25-26 September 2018
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Contents

Preface

Disaster risk presents a serious threat to inclusive and sustainable socio-economic development in Asia and the Pacific, requiring urgent action both to reduce disaster risk and to enhance the management of residual risk. As part of its program of work to address this issue, the Asian Development Bank (ADB) is working on a range of initiatives to improve the availability of timely financing for post-disaster response in its developing member countries (DMCs), covering both sovereign and non-sovereign disaster risk financing solutions. These initiatives are intended to speed post-disaster recovery and reconstruction, thereby limiting the socioeconomic consequences of direct physical damage. The initiatives include a regional technical assistance project focusing on the enabling environment for disaster risk financing (DRF)[1]. Using a common diagnostic methodology, the project has supported a series of country diagnostics in Fiji, Nepal, Pakistan and Sri Lanka to explore the current application of DRF solutions and related demand and supply constraints. The project has focused in particular on the opportunities and scope for expanding the penetration of disaster insurance and insurance-linked securities, which to date remain significantly underutilized in many of DMCs, as well as covering public financial management solutions.

The findings and recommendations from the analysis were presented at a regional forum held in Metro Manila on 25-26 September 2018. The objective of the forum was to share the findings and recommendations of the country diagnostics with a wider audience, facilitating cross-country learning and dialogue and providing an enhanced understanding of opportunities to strengthen the financial management of disaster risk in a larger group of countries. Innovative DRF solutions were also presented at this workshop. Participants were drawn from relevant government agencies, including ministries of finance, national disaster risk management agencies and insurance regulators, and other relevant stakeholders in disaster-prone DMCs.

[1] ADB. 2015. Technical Assistance for Strengthening the Enabling Environment for Disaster Risk Financing (Phase 1). Manila

Session 1 - Introduction to disaster risk financing and ADB's initiative to enhance disaster resilience

This session introduced concepts of disaster risk financing (DRF) and set its context in the Asia and Pacific region. Historically, the Asian Development Bank (ADB)'s developing member countries (DMCs) have suffered significant losses due to climate-related disasters. Between 2007 and 2016, disasters in ADB member countries resulted in an estimated 322,000 fatalities and affected 1.7 billion people[2]. Reported damage and losses have been to an extent of USD 487 billion, however, the actual figures are likely to be somewhat higher.

Efforts to address these alarming trends and their threat to sustainable development need to begin with the disaster risk reduction (DRR) and climate adaptation. However, it is recognized that disaster risk cannot be fully eliminated and therefore there is a need for smarter disaster response, including investments in robust planning, forecasting, monitoring and early warning systems to deliver relief and recovery to disaster affected communities in a timely manner. There is also a need for investments in financial preparedness which is a key to ensuring timely and adequate humanitarian relief, early recovery and reconstruction response efforts, in turn minimizing the social and economic impacts of disaster, while also ensuring the availability of financing to "build back better".

Approaches to disaster risk management have undergone a paradigm shift in the Asia-Pacific region over the last 10 to 15 years, shifting from a reactive to proactive approach. At the same time, significant progress and innovation has been achieved in disaster risk assessment and modelling capabilities, as well as in financial technologies, opening up new opportunities to enhance financial preparedness.

This progress has attracted considerable global attention, including in the G7 and G20 exchanges, the recent climate change conferences and they continue to shape the post-2015 development agenda. At ADB, the recently approved 'Strategy 2030' articulates a vision for a prosperous, inclusive, resilient and sustainable Asia and the Pacific. The third priority of this strategy affirms a commitment to "tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability"[3].

Enhancing financial preparedness for disasters is an integrated part of ADB's broader program of work to enhance disaster resilience which is detailed in the ADB Operational Plan for Integrated Disaster Risk Management (2014-2020), this component has the following objectives for disaster risk financing:

- Ensuring timely, adequate and assured flows of post-disaster funding;
- Applying the most cost-effective bundle of instruments via a risk layered approach;
- Smoothing recovery and reconstruction expenditure over time;
- Enabling building back better by enhancing resilience to future disaster events in reconstruction projects;
- Embedding incentives for risk reduction;
- Stimulating the development of commercial risk transfer markets.

[2] Data extracted from EM-DAT: The Emergency Events Database - Université Catholique de Louvain (UCL) - CRED, D. Guha-Sapir - www.emdat.be, Brussels, Belgium. Numbers affected include multiple counting of people affected multiple times by disasters.

[3] Asian Development Bank (2018), Strategy 2030

Currently, all ADB DMCs have some form of annual contingency budget allocations for unforeseen events, but these financial lines often cover only the humanitarian needs at most and cannot be accumulated over time. A small number of DMCs have arrangements to access contingent disaster grants or loans. Across the region, disaster insurance penetration is extremely low, for example, in 2016, the Peoples Republic of China faced severe flooding causing losses of around USD 22 billion; however, only 1.8% of those losses were reported to be covered by insurance[4].

Furthermore, it has been noted that international aid is typically confined to major disaster events. In consequence, a considerable share of disaster response falls by default on post-disaster budget reallocations, within the year of the disaster as well as in the subsequent years. However, substantial post-disaster budget allocations can take significant time to approve and veer prior spending priorities off the course. Ad hoc DRF arrangements inhibit government's planning and priorities, due to the lack of certainty on availability of funding. Opportunities to 'build back better', to build resilience to future events, may be foregone due to funding shortfalls. Liquidity constraints also delay early recovery and reconstruction, for example of hospitals and bridges, thereby exacerbating adverse economic and social impacts of disasters.

ADB is supporting DMCs in enhancing financial resilience to disasters through a number of activities in support of the strengthening of the enabling environment for DRF, strengthening national strategies, strengthening the technical knowledge and understanding, and in the development of DRF products.

Session 2 - Public financial management of disaster risk

Background

It is expected that by 2030, the average annual loss related to disasters is likely to reach USD 160 billion in the Asia and Pacific region, increasing the importance of disaster risk financing[5]. In this session, government efforts to enhance fiscal resilience to disasters were presented from the perspective of Cook Islands, Pakistan, Philippines and Thailand. Representatives from each of these four countries highlighted factors influencing the directions and actions that their governments have undertaken. Panelists shared their country experiences in public financial management of disaster risk and this was proceeded by a plenary question and answer session. Below is a summary of the key discussion points.

Discussion

- **Effective budget execution and expenditure tracking arrangements are critical in ensuring efficient and timely use of available DRF instruments.** Easily read, timely, government-wide financial accounts should be available on a monthly basis in order to allow governments to quickly determine available funds and needs after a disaster. This should also include a record of government financial commitments, arrears, and contingent liabilities. This is pivotal in ensuring that rapid liquidity made available through DRF instruments can be put to quick and effective use in the aftermath of disasters.

[4] Swiss Re (2017), Sigma 6

[5] UNESCAP 2018, https://news.un.org/en/story/2018/04/1008182

It is also important to avoid potentially unnecessary and costly budget reallocation, which is possible in cases where available funding is not well recorded.

- **Disaster risk understanding is central to effective public financial management of disaster risk.** The examples of established DRF instruments in the Cook Islands, Pakistan, Philippines, Sri Lanka, and Thailand demonstrate the importance of disaster risk understanding as a basis for the development of DRF instruments. For example, the Cook Island first began with a project jointly implemented by ADB and the World Bank in 2010, which developed a disaster risk assessment and modelling tools in a number of Pacific Island countries. Building on this initial work, the Cook Islands established a number of DRF instruments, including a disaster risk trust fund at the national level, a contingent loan facility with ADB and the Pacific Catastrophe Risk Insurance Company (PCRIC), a regional catastrophic insurance pool. Improved disaster risk understanding allowed the government to determine appropriate risk financing arrangements and also provided a basis for political support.
- **Disaster risk financing should be embedded within a central national policy framework to enable sustainable public finance allocations**. This also serves to ensure coordinated and holistic DRF approaches. For example, the Government of Pakistan, with support from ADB, established the National Disaster Risk Management Fund (NDRMF) to respond to the significant challenges posed by disaster risk in the country. One of the priority thematic areas of the NDRMF is the development of a national disaster risk financing strategy to guide the government's efforts in the advancement of DRF capabilities and introduction of DRF instruments. The Cook Islands' DRF initiatives listed above are supported by a dedicated section on resilience to disaster risks within the National Sustainable Development Plan (2016-2020). Similarly, in the Philippines, the Governments' National Disaster Risk Financing and Insurance Strategy (2015) frames government's approach for multiple DRF initiatives and the National Disaster Management Law stipulates allocations to disaster risk management reserves at national and sub-national levels of government.
- **Greater use of ex-ante instruments could alleviate ex-post budget reallocations.** There is growing recognition of the need to move from reliance on ex-post disaster financing instruments to predictable cost-effective ex-ante disaster risk financing instruments. However, at the current time there is heavy reliance on the former and insurance penetration remains relatively low in the Asia and Pacific region. The Government of Thailand established a Fund for Promotion of Catastrophe Insurance which backstops insurance contracts offered by insurance and reinsurance companies in Thailand, offering small- and medium-sized enterprise clients with catastrophe risk insurance. The purpose of this fund is to stimulate the market for catastrophe insurance and to increase the confidence of a previously reluctant insurance and reinsurance sector to engage in this business;.
- **Working together with development partners offer opportunities to leverage financing towards sustainable DRF instruments.** The establishment of PCRIC as an insurance company provided a mechanism to attract donor funding which could be leveraged for access to resources from insurance market. The Philippines City Disaster Insurance Pool (PCDIP) will be initially capitalized by a loan from ADB taken out by the Department of Finance. The Pakistan's NDRMF was also capitalized by a loan from ADB, along with other donor contributions.
- **Regional risk sharing offers cost-effective access to risk transfer schemes.** In the context of limited public finances, risk pooling offers an effective way in which insurance scheme costs could be reduced, leveraging natural diversification of weather across different regions within a country, as in the PCDIP, or across several countries, as in PCRIC.

Session 3 - Overview of country diagnostics methodology and key findings and recommendations from the four country assessments

Background

As has been noted in previous sessions, the establishment of disaster risk financing (DRF) instruments is critically important, however, these instruments can only be fully effective if an enabling environment is created for them. ADB is providing technical assistance support to the governments of Fiji, Nepal, Pakistan, and Sri Lanka through the *Strengthening of Enabling Environment for Disaster Risk Financing* project (TA 9007). This project aims to assess the existing enabling environment and opportunities for improvement for DRF in the four participating countries; Fiji, Nepal, Pakistan and Sri Lanka.

Under TA 9007, a diagnostic toolkit was developed to assess the enabling environment for DRF in the four countries and opportunities for enhancement, focusing in particular on insurance and capital market solutions. This was applied along with a complementing diagnostic toolkit separately developed jointly by ADB and the World Bank for the assessment of existing DRF arrangements, covering both risk retention and transfer. The assessment was undertaken along six axis:

i. Government policy regarding the development of disaster risk transfer instruments
ii. Social protection policy, exploring the degree to which social protection complements or crowds out market-based solutions
iii. Unlicensed competition
iv. Economic conditions and other support functions
v. Credibility of providers insurance and capital market providers
vi. Product appeal, including design, affordability, and availability.

This session presented the diagnostics methodology used in the country analysis of the state of the environment for disaster risk financing in the four country case studies undertaken under TA 9007 and drew out key findings and recommendations.

Discussion

- **Development of disaster risk data, models and maps with sufficient granularity are an important starting point in the development of an effective Disaster Risk Financing (DRF) strategy.** In the absence of risk information, it is difficult to develop a sound strategy for DRF. A government exposure database also provides important information to enable governments to make decisions on levels of insurance coverage and to understand their financial liability in the face of disasters.
- **Regulation plays an important role in developing as well as protecting the insurance market.** Various regulators in the Asia and Pacific region have introduced regulatory reforms during recent years, which has hugely helped in improving consumer confidence. For example, the Securities and Exchange Commission of Pakistan has recently introduced an online complaint system, and has set up a grievance handling cell, which also displays the complaint information on the website. Similarly, the Reserve Bank of Fiji has been carrying out the consumer awareness campaigns, which has resulted in improving the insurance penetration rate in the country, and also regularly

carries out a consultative process with individual insurers. Pakistan did not have any particular disaster management authority, but the Earthquake Reconstruction and Rehabilitation Authority (ERRA) was formed only after 2005 earthquake, later the National Disaster Management Authority (NDMA) formed and now the NDRMF has been created. In Pakistan, SECP and insurance sector are expected to develop the suitable disaster risk insurance products once the risk assessment has been completed by the NDRMF.

- **Governments have a role to play in increasing insurance coverage through incentives and law.** Government has a role to increase insurance coverage, for example through compulsory products, such as in Fiji where loan borrowers are required to have cyclone insurance cover, are helping increase insurance penetration. In Nepal, government is looking to drive private sector participation in disaster insurance, including micro-finance insurance, crop insurance and livestock insurance. This is integrated within the national action plan and national budget.
- **There is a window of opportunity to make significant changes in disaster risk management policy and structures after a catastrophic event, given the emerging recognition of the importance of change.** It has been noted that usually, catastrophe insurance is made mandatory only after a major disaster. Following the earthquake in Pakistan in 2005, the government created the National Disaster Risk Management Authority (NDMA). Similarly, the Government of Fiji commissioned work to establish crop insurance after tropical Cyclone Winston caused major destruction causing diversion of infrastructure investments to relief efforts. The Government of Nepal has made efforts to develop livestock and crop insurance.

Session 4 - Disaster insurance and reinsurance solutions in the agriculture sector

Background

Agricultural risk is increasing in Asia and the Pacific from a growing population coupled with the related impacts of natural hazards, land use changes, water scarcity and climate change. Governments around the world are increasingly interested in building more resilient agro-ecosystems. Insurance and reinsurance solutions can play a key role in this by transferring risk. At the same time, the market needs confidence that insurance schemes are transparent, fair and properly implemented. This session explored the challenges faced in insuring crops and livestock and the innovative approaches based on new technology that can help scale up sustainable agriculture insurance along the value chain.

Discussion

- **Various countries are now running national level crop insurance schemes.** Pakistan has a national crop insurance program for the crop loan borrowers. Sri Lanka, a unique country where two crops form more than 50 percent of agriculture output, has moved on to the format of coupon credit system. In Sri Lanka, the Agriculture Insurance Board is also responsible for the long-term life insurance annuity business as well. The Philippines Crop Insurance Corporation has

developed various crop insurance products which are implemented through a network of regional offices across the Philippines.

- **There is a need for a centralized coordinated approach to agricultural disaster insurance to enable aggregation of risk and effective diversification**. Impacts of climatic shocks in the agricultural sector are often correlated within geographical areas. There is therefore a need for the aggregation of risks and to understand peak accumulation of risks. Furthermore, there is a need to understand the level of residual risk and to bring in reinsurance companies to address this appropriately. Government line ministries, insurance regulator, agricultural insurance companies and national reinsurer play a key role in ensuring diversification of risk to ensure viable insurance contracts.
- **Financial technology offers an opportunity for greater outreach of agricultural insurance schemes.** In Bangladesh, crop insurance schemes utilize mobile banking as a distribution channel. The technology is being used for policy issuance, management, and claims administration, which has resulted in time and cost efficiency. This approach allows for greater outreach, in particular in the remote rural areas.
- **Participation of the private sector requires flexibility in insurance pricing, premium financing, and claims settlement.** In the diagnostic assessment conducted in Pakistan, it was observed that the pricing of premium, subsidization of premiums, and triggering of a claim were all managed by government, this is a systematic risk and is not conducive to attracting the private sector. Regulation plays a key role in managing the incentives and drivers of a business model.
- **Livestock insurance is very important for small farmers and also for women.** Livestock is an important asset, form of saving and source for food for poor farmers. This leaves livestock farmers vulnerable to impacts of climate related disasters. However, livestock insurance comes with challenges. The wide spread of livestock farmers in remote areas makes enrollment, education and disbursement of payout challenging. Weather-index insurance and financial technologies offer opportunities to offer insurance to livestock farmers.
- **Both indemnity and index-based insurance have their pros and cons.** It is important to develop need based, innovative and technology-driven insurance solutions for developing the crop and livestock insurance market, which will also bring down the transaction cost for insurance delivery. It is noted that the processes for claims assessment and loss adjustment are still expensive, for which it is important to bring down the cost. This may also result in the elimination of moral hazard to a huge extent.
- **Subsidies have proven essential in the establishment of some insurance schemes, providing the volumes required for a viable insurance scheme, but these should be designed in a manner that ensures sustainability of the schemes.** There are successful examples of embedding agricultural insurance subsidies with credit or with agricultural cooperatives. Agricultural insurance should not be deployed as a standalone product and should work to ensure that agricultural insurance is related to a broader strategy of optimal inputs, or better information on risk. Subsidies should not create a moral hazard, they should be leveraged to improve the risk behavior of the sector.

Session 5 - The role of regulation and supervision for enhancing innovative insurance, reinsurance and capital market solutions

Background

Evidence shows that innovation by insurance companies often results in significantly higher shareholder returns[6]. It is important for insurance companies to follow a systematic approach to decide where to innovate. The options may range from Value Chain Disruption, to new Macro Technologies such as block chain, cloud computing, big data, etc. Some of the strategic questions for insurers following the innovation journey may include: how to expand the business model with Fin-Techs; how to rebuild the value chain with Fin-Tech components; how to offer white label insurance services to fin-techs and web champions; how to become the "Apple of Insurance" and build excellent user experience, etc. This session sought to draw out initiatives undertaken by insurance and financial market supervisors to leverage insurance, reinsurance and financial institutions to offer affordable, sustainable, cost-effective financial solutions, including insurance, to governments, homeowners, SMEs, and agricultural producers.

Discussion

- **Insurance regulators have an important role in the development of the insurance market.** Insurance regulators could reduce the protection gap through by enhancing awareness. In India the Insurance Regulatory and Development Authority (IRDA) has developed an exclusive consumer education website available in 13 languages. In addition to this, recognizing the limited access to technology in the rural areas, IRDA is working though local NGOs and MFIs to support awareness raising and education with the objective of increasing insurance prescription. Insurance regulators also have a key role in encouraging innovation through the development of appropriate regulation frameworks for such innovation to flourish and for consumers to be protected. The insurance regulator, can directly be involved in the development of insurance products to address the protection gap, for example in India after the Chennai floods, IRDA developed simplified and standardized products.
- **Regulators in Asian countries often have excessively high capital requirements because they lack in-house capacity to undertake prudential supervision.** This results in inefficient deployment of capital. To overcome this, the Office of the Insurance Commission (OIC) in Thailand introduced a Risk Based Capital (RBC) regime in 2011. All insurers are required to have a capital adequacy ratio (CAR) of over 100 percent. The OIC in Thailand is also introducing stress-testing scenarios, requiring insurance companies to undertake financial, economic and disaster scenario stress-tests. This has led to greater awareness of risks among companies and encouraged them to determine optimal capital retention levels for their specific companies.
- **Since disaster risk insurance often involves cross border insurance and reinsurance, this requires perspective on information sharing and coordination among regulators, the multi-jurisdiction insurers and reinsurers.** After the Canterbury earthquake in 2010, despite the losses were paid by the insurance pool, there were huge number of disputes and complaints. Similarly,

[6] Source: BCG Study: Incubators, Accelerators, Venturing and more.

in New Zealand, the reinsurance has been made compulsory by the regulator for each one in thousand years event, as well as an earthquake levy has also been imposed.

- **While innovations bring new opportunities for the insurance industry, it also brings new risks and there is a need to mitigate the risks that these new innovations bring.** It is important that regulatory protection is made available against scams, privacy breaches, and cyber security threats.

Session 6 - Showcase of ADB disaster risk financing projects

Background

In this session four ADB disaster risk financing projects were presented:

Crop Insurance Pilot in Bangladesh

Since 2016, ADB has implemented a pilot weather-index crop insurance scheme to support farmers in 3 districts in Bangladesh. The scheme involved installation of weather stations, capacity building and drafting of supporting regulation. Since the pilot began nearly 10,000 farmers have been enrolled and over 900 government officials benefitted from capacity building through the project. Underwriting software was also developed for this project. The pilot project utilized Financial Technology for the collection of premium and payment of claims.

Pacific Contingency Financing Facility

In response to government demand for a predictable and timely financing source which could be drawn down on in the event of a disaster, avoiding budget dislocation or delays in mobilizing external resources. Established in 2016, the Pacific Contingency Financing project is a pre-agreed arrangement between ADB and a participating government where the financing is agreed in advance, but the disbursement of the fund is only in the event of a disaster and at that stage the loan repayment clause is implemented. If the trigger is not met and therefore there is no disbursement, governments are only required to pay the set commitment fee for participation in this project. Participating countries can determine how much of the fund they wish to draw down. The use of the contingent financing payments is in line with national budget support.

Pakistan National Disaster Risk Management Fund (NDRMF)

The Government of Pakistan has set up the NDRMF to respond to the significant challenges posed by disaster risk. The NDRMF is a government owned not-for-profit, non-bank financial intermediary with a corporate structure. It will provide grants for subprojects that contribute to enhanced resilience to extreme weather and geophysical hazards, and strengthen the government's ability to quickly respond to disasters triggered by natural hazards. The NDRMF will finance up to 70% of the cost of eligible subprojects. The NDRMF will finance the design and piloting of several specific disaster risk financing instruments as well. ADB has provided the Government of Pakistan with a $200 million loan which has been passed on as a grant to the NDRMF. Support from the Government of Pakistan, Australia and Switzerland has also been provided to the fund, with additional donors in the process of also coming on board.

Philippines City Disaster Insurance Pool (PCDIP)

Led by the Philippine Department of Finance and with support from ADB, PCDIP, is being designed as a city insurance pool, aiming to improve Philippine cities' financial resources for disaster risk by providing them with rapid access to post-disaster and emergency funding. PCDIP will function as a "pooled" insurance company from which cities purchase insurance to cover against major earthquakes and/or typhoons and will pay out based on a pre-defined attachment or probability trigger. This is known as "parametric" insurance. A payout will be made when a qualifying hazard event occurs. It provides a far quicker payout than traditional indemnity insurance as no onsite assessment is needed to determine the payout. Payouts are expected to be made within three weeks after the occurrence of an earthquake or typhoon. Once established, PCDIP will be the first city level disaster insurance pool.

Discussion

- **The presentations demonstrated a variety of potential disaster risk financing approaches and instruments which could be replicated in other countries.** The projects presented offer DRF solutions at the sovereign levels, sub-national and community levels. Countries should consider a holistic approach, addressing different levels of risk through a combination of several tools.
- **DRF solutions should be tailored to the needs and context of a country.** An understanding of the economic, political and cultural context of a country is important in order to develop appropriate DRF tools. For example, a government declaration of a disaster is a suitable trigger for Pacific Island countries, but it may not be the most appropriate trigger for countries with a reluctance to make such a declaration for political reasons. Alternative triggers could be considered. There are cases where there may be cultural or religious factors which pose a barrier to the deployment of insurance schemes in some country contexts. Development of religiously-compliant insurance scheme together with sensitization of the community may be necessary to pave the way for the success of such schemes.
- **A well-defined and coordinated institutional and policy framework is important for the success of DRF instruments.** DRF cuts across numerous sectors, requiring coordination of various stakeholders. In case of PCDIP, the current design proposes a composition of a board of directors with representatives from national government, participating cities and key stakeholder. Similarly, in Pakistan the NDRMF has a board with representatives from critical ministries from national government, provincial government, and donors. Such structures ensure that DRF efforts are well coordinated and complementary to each other, all moving towards an agreed goal.
- **Governments have been able to leverage development partner finances to establish sustainable ex-ante DRF schemes**. ADB's technical assistance to Bangladesh, for example, has enabled the piloting of weather-index crop insurance. This work has been key in demonstrating the viability and potential value of such a scheme. Similarly, Pakistan's NDRMF and Philippines PCDIP relies on initial capital provision through ADB loans, to establish DRF facilities with great potential to be scaled up. ADB's Pacific Contingent Financing project leverages ADB's banking structure to offers Pacific governments with predictable and timely financing. The Pacific Contingency Financing project also applies ADB's country classification system; providing higher income member countries with market-based financing, and lower income member countries with concessional finance. The 1.5% commitment fees for participation in the project are not charged to lower income countries.

- **ADB has in place a number of technical assistance projects supporting the development of disaster risk financing strategies and instruments.** ADB is available to implement similar projects in other developing member countries.

Session 7 - The way forward: opportunities to support disaster risk financing

Background

Disasters triggered by natural hazards are becoming more frequent and more harmful, in part due to climate change, presenting an increasing challenge to economic growth and sustainable development. They push an estimated 26 million people into extreme poverty each year and hamper sustainable economic growth. They also drive increasing inequality, as poor people are hit hardest and find it far harder to recover. This session focused on the way forward, sharing policy, practitioner and insurance industry insights on opportunities to enhance financial resilience to disasters through insurance and other disaster risk financing mechanisms.

Discussion

- **The insurance sector needs to be developed to enable governments to transfer a portion of their risk to this sector which is better positioned to absorb and manage extreme risks.** There is sufficient capital in the insurance market to address the disaster protection gap. Areas that require strengthening are on the demand side and on the enabling legal and regulatory environment. Government has a convening right which should be used to bring together stakeholders, including the regulators, to support the development of the insurance industry and in particular the development of insurance solutions for disaster risk. This includes efforts to create better understanding of disaster risk, development of the enabling legal and regulatory environment, as well as facilitating the link between the insurance industry and potential clients. Government could even consider mandating insurance coverage to begin addressing the large protection gap.
- **Improving financial literacy could increase understanding of DRF instruments.** There is a need for investments in the development of awareness of disaster risks and potential DRF solutions for governments, businesses and individuals.
- **Regional cooperation in data sharing offers great potential to advance understanding of risk and to improve DRF capabilities.** Data sharing and modelling capabilities could be advanced through regional cooperation and sharing of information. Similarly, sharing of technologies such as new types of data, such as big data, technologies which enable real-time decision-making could strengthen DRF efforts. UNESCAP have promoted sharing of data between countries, utilizing integrated space and in-season ground data for drought monitoring and early warning. UNESCAP has also established a new center in the Islamic Republic of Iran for disaster risk information management. According to the UNESCEP, on an average only 8% of the losses have been reported

to be insured. This is clearly to be seen as a business opportunity for insurance stakeholders, while at the same time it remains important to finance the public assets protection, as the absence of it might trigger a humanitarian disaster. The latest development in technology enables the sharing of data across the border.

- **Public-private partnerships offer opportunities for increasing access to direct or indirect disaster insurance.** The private sector is often not well positioned to have public sector clients and similarly not well positioned to engage with lower-income communities. Development partners are well positioned to bridge the gap between the public and private sector and to encourage the development of suitable products to address the government's context and needs and at the same time aligning with market incentives. For the individual levels, government and development partners are well positioned to encourage disaster insurance through their outreach capabilities at the community level, this is something the insurance industry often lacks. The Insurance Development Forum is an insurance led initiative to strengthen coordination between public and private actors in disaster risk insurance.
- **The faster pace of human development is causing rapid climate change, however, it is particularly affecting more the poorer segments of the population in developing countries.** Not surprisingly, in most of these countries the insurance sector does not appear to be much developed. It is important that efforts are made to build and improve the financial literacy, particularly the insurance literacy, among people in these countries and help them in understanding the importance of insurance and investments. At the same time, there is also the need to start sensitizing the stakeholders on the impact of climate change and its associated risks. There is also a critical need to develop the risk modelling capacity so that where data is available, it can be modelled adequately to benefit the development of suitable risk transfer solutions, including insurance.
- **The limited stakeholder coordination also remains a bigger challenge, as various ministries and government departments are required to be involved.** In the current scheme of rice farmers insurance in Indonesia, 80% of the premium is subsidized by the government, however, it is also important to increase the insurance supply capacity as currently the state-sponsored insurance scheme is only underwritten by the state-owned insurer, Jasindo. Interest has been indicated for Indonesia to have a Fund on the lines of something like FONDEN, or something like the Philippines City Disaster Insurance Pool (PCDIP). It was discussed that the concept of risk layering will remain important for Indonesia so that the country can utilize appropriate levels of risk protection.
- **As the data powers the risk model, which in turn powers the decision-making process, the risk exposure data remains important,** which is often needed to be procured at the level of local agencies. For example, for developing a parametric insurance product, the availability of localized data is critically important. It is recommended that regular stakeholder dialog is carried out to ascertain what data is available and how it can be improved and shared among the stakeholders.

Annex I: Agenda

Day 1: 25 September 2018
Venue: Auditorium A and B

08:30 - 09:00	Registration Master of Ceremony: Tuga Alaskary
09:00 – 09:20	Opening remarks - *Ma. Carmela D. Locsin Director General, Pacific Department Asian Development Bank (ADB)*
09:20 – 9:45	Session 1: Introduction to disaster risk financing and ADB's initiative to enhance disaster resilience ➢ *Presenter:* *Charlotte Benson Principal Disaster Risk Management Specialist, Sustainable Development and Climate Change Department (SDCC), ADB*
09:45 – 10:15	Coffee break and group photo session
10:15 - 12:00	Session 2: Public financial management of disaster risk ➢ *Moderator: Stephen Schuster, Principal Financial Sector Specialist, Public Management, Financial Sector and Trade Division, Southeast Asia Department (SERD), ADB* ➢ *Discussants:* ○ *Richard Walsh, ADB consultant* ○ *Garth Henderson, Financial Secretary, Ministry of Finance and Economic Management, Cook Islands* ○ *Beeneesh Ashraf Tahir, Section Officer, Financial Division, Ministry of Finance, Pakistan* ○ *Paola Sherina Alvarez, Assistant Secretary, Department of Finance, Philippines* ○ *Amornsak Mala, Senior Economist, Fiscal Policy Office, Ministry of Finance, Thailand* ○ *Chandima Anuruddha Kumara Galatumbage, Assistant Director, National Disaster Relief Services Center, Ministry of Irrigation and Water Resources & Disaster Management, Sri Lanka*
12:00 - 13:30	Lunch Venue: Executive Dining Room
13:30 – 15:00	Session 3: Overview of country diagnostics methodology and key findings and recommendations from the four country assessments ➢ *Moderator: Bruno Carrasco, Director, Public Management, Financial Sector & Trade Division, South Asia Department*

	(SAPF), ADB ➢ *Presenter: Rodolfo Wehrhahn, ADB Consultant* ➢ *Discussants:* o *Shanil Totaram, Manager, Financial Institution Supervision 3, Financial Institutions Group, Reserve Bank of Fiji* o *Hasnat Ahmad, Director, Policy, Regulation and Development Insurance Division, Securities and Exchange Commission of Pakistan* o *Ramkrishna Subedi, Joint Secretary, Ministry of Home Affairs, Nepal* o *Aratchige Don Leel Gaminda Kalansuriya, Director, Department of State Accounts, General Treasury, Sri Lanka*
15:00- 15:15	Coffee break
15:15 – 16:45	Session 4: Disaster insurance and reinsurance in the agriculture and microfinance sectors ➢ *Moderator: Michiko Katagami, Principal Natural Resources and Agriculture Specialist, SDCC, ADB* ➢ *Presenters:* o *Mayur Ankolekar and Arman Oza, ADB Consultants* ➢ *Discussants:* o *Nasreen Rashid, ADB Consultant* o *Md. Abdul Barek, Deputy General Manager, Sadharan Bima Corporation Bangladesh* o *Norman Cajucom, Senior Vice President, Philippine Crop Insurance Corporation* o *Fan Rong, Senior Officer, Department of Finance, Ministry of Finance PRC*
16:45 – 17:00	Day 1 wrap up
17:00 –18:30	Cocktail reception Venue: ADB

Day 2: 26 September 2018
Venue: Auditorium A and B

09.00 – 10:15	Session 5: The role of regulation and supervision for enhancing innovative insurance, reinsurance and capital market solutions ➢ *Moderator: Arup Chatterjee, Principal Finance Sector Specialist, ADB* ➢ *Presenter: Rodolfo Wehrhahn, ADB Consultant* ➢ *Discussants:* o *Yagnapriya Bharath, Chief General Manager, Insurance Regulatory and Development Authority of India* o *Prapapas Kulpawaropas, Director, Insurance Investment*

	Supervision Group, Office of the Insurance Commission, Thailand ○ *Shobhitrattan Ghandi, Insurance Development Forum/Vice President, Finance, XL Catlin*
10:15 – 10:30	Coffee break
10:30 – 12:00	Session 6: Showcase of ADB disaster risk financing projects *(Project representatives will be given 10 minutes each to present overview of ADB funded projects, output and development impact)* ➢ *Moderator: Thomas Kessler, Principal Finance Specialist (Disaster Insurance), SDCC, ADB Financial Sector Group* Presenters and discussants: ○ Crop Insurance Pilot in Bangladesh - *Md. Golam Mortaza, Senior Economic Officer, Bangladesh Resident Mission, ADB* ○ Pacific Contingency Financing - *Ananya Basu, Principal Economist, Urban, Social Development & Public Management Division, Pacific Department, ADB* ○ Pakistan National Disaster Risk Management Fund - *Lt. Gen. (Retired) Nadeem Ahmed, Chief Executive Officer, National Disaster Management Fund, Pakistan* ○ Philippines City Disaster Insurance Pool - *Benita Ainabe, Financial Sector Specialist (Capital Market), SEPF, ADB* ○
12:00 – 13:30	Lunch Venue: Executive Dining Room
13:30 – 14:30	Session 7: The way forward: opportunities to support disaster risk financing ➢ *Moderator: Representative from ADB (TBC)* ➢ *Discussants:* ○ *Bruno Carrasco, Director, SAPF, ADB* ○ *Irfa Ampri, Head, Regional and Bilateral Policy, Fiscal Policy Office, Ministry of Finance, Indonesia* ○ *Tiziana Bonapace, Director, Information and Communications Technology and Disaster Reduction Division, UNESCAP* ○ *Biggy Nguyen, Insurance Development Forum/Senior Client Manager, Swiss Re*
14:30-15:15	Coffee break
15:15 – 15:45	Wrap up
15:45 – 16:00	**Closing remarks** ➢ *Chiara Bronchi, Deputy Director General concurrently Chief Thematic Officer, SDCC, ADB*