



Insurance &
Risk Finance
Facility

COUNTRY DIAGNOSTIC ON **INCLUSIVE INSURANCE AND RISK FINANCE FOR NEPAL**

September 2023

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FOREWORD



Nepal is highly vulnerable to various environmental and geological risks, particularly seismic activity, and climatic challenges. Nepal ranks as the 10th most affected country globally in terms of extreme weather events, with significant impacts on both fatalities and economic losses. Earthquakes, floods, and landslides emerge as the most financially damaging hazards in Nepal. Expenditure data from 2012 - 2020 show that the Government of Nepal spent on average NPR 50 billion (approx. US\$ 0.4 billion) for post-disaster response annually. Despite development gains, climate change and emerging social concerns such as aging and urbanization are increasingly threatening economic and human development. Therefore, it is crucial that we explore ways to address and minimize the impact of these unforeseen shocks and disasters safeguarding both the development progress and the lives of the people of Nepal.

Insurance and risk finance can offer viable solutions in managing and mitigating the various risks in the country. It can help build financial resilience of communities, businesses, and governments while simultaneously reducing the vulnerability to the unforeseen financial burdens.

UNDP leads the Insurance and Risk Finance Facility (IRFF), a global initiative working with governments and the insurance industry, to put financial resilience at the heart of sustainable development. It seeks to strengthen policies and regulations that enable the resilience of both the country and communities to socio-economic and climatic shocks. It leverages the expertise of the insurance industry to come up with insurance solutions that help governments keep fiscal stability in the face of disaster impacts while making sure that socio-economic service delivery to citizens is not disrupted.

This country diagnostic on inclusive insurance and risk finance examines the enabling environment as well as market supply and demand elements of insurance and risk finance in the country. It not only analyzed the issues and identified gaps that need to be addressed but also highlighted opportunities in transforming the insurance market into a more inclusive one. The diagnostic study further emphasized the importance of collaboration among government, insurers, distribution channels, and development partners to deliver tailored solutions. We are grateful to the Ministry of Finance (MoF), Ministry of Agriculture and Livestock Development (MoALD), National Disaster Risk Reduction Management Authority (NDRRMA), Nepal Insurance Authority (NIA), and the insurance associations as well as other stakeholders for their active participation and contribution in the study.

The diagnostic reiterates that the country faces and will continue to face multi-faceted challenges. While acknowledging these challenges is crucial, it is equally significant to recognize as opportunities for collaborative action.

UNDP, in line with Nepal's commitment to climate action, is committed to continue working with the Government of Nepal, the local insurance industry and development partners to advance sustainable financing in the country and incorporate insurance and risk financing into broader development approaches that uphold the Leave No One Behind Principle.



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TABLE OF CONTENTS

Foreword	i
Abbreviations	vi
Acknowledgments	viii
Executive Summary.....	8
Background.....	9
Purpose of diagnostic study.....	9
Methodology.....	9
Nepal's development and risk profile	10
Development profile	11
Socio-economic development.....	11
Poverty reduction and vulnerable populations.....	12
Rural population and increasing urbanization.....	13
Political economy and governance.....	14
Digital ecosystem.....	14
Commitment to gender equality	15
Climate resilient development in Nepal	16
Risk and hazard profile.....	17
Geographic location, topography, and climate.....	17
Vulnerability to natural disasters and climate change.....	18
Earthquakes, floods, landslides (and other hazards).....	18
Sovereign risk finance in Nepal.....	20
Policy, legal, and institutional frameworks.....	20
DRR and DRM foundations.....	20
Disaster Risk Financing Strategy 2020.....	22
DRF National Strategy Implementation Plan 2078 (2021).....	23
Data and risk assessments.....	24
Sources of risk data relevant to DRF	24
Historical losses.....	26
Modelling and GoN's contingent liability of disasters.....	28
DRF instruments	29
Existing DRF instruments.....	29
Public financial management.....	32
GESI in DRF.....	33
Recommendations – DRF.....	34

Inclusive insurance in Nepal 36

Insurance market context	36
History	36
Industry players.....	36
Reinsurance.....	37
Actuarial capacity.....	37
Inclusive insurance	38
Enabling environment for inclusive insurance	38
New Insurance Act 2079 (2022).....	38
New Microinsurance Directive.....	40
Other relevant regulations.....	41
RBC, RBS, and the “Proportionality Principle”	41
Capacity building for the insurance industry.....	43
National Financial Inclusion Roadmap and Action Plan and insurance.....	44
Supply and distribution of inclusive insurance.....	44
Life microinsurance.....	45
Non-life microinsurance.....	46
Inclusive insurance distribution.....	51
Social protection programs important for the low-income market in Nepal	53
Demand for inclusive insurance.....	53
Recommendations – inclusive insurance.....	56

Infrastructure investment and the insurance industry 62**Conclusion 64****Appendices 65**

Appendix 1: Bibliography of secondary and primary sources	65
Appendix 2: Diagnostic study research questions – detailed version	70
Appendix 3: Overview of Nepal’s Key NDC Commitments.....	74
Appendix 4: Institutional Arrangements for Climate Change in Nepal.....	76
Appendix 5: Summary of Nepal’s progress on Sendai Framework Actions (May 2022).....	77
Appendix 6: Fifteen strategic activities (section 8) from DRF Strategy 2020	78
Appendix 7: Implementation Plan from Section 1.4 of the Disaster Risk Financing National Strategy 2078 Implementation Plan.....	80
Appendix 8: Roadmap interventions for the UNDP-Milliman Global Actuarial Initiative in Nepal	87
Appendix 9: Inclusive insurance data.....	1

Table of Figures

Figure 1: Nepal’s source of foreign exchange as percent of GDP (excluding debt flows).....	12
Figure 2: Contributions to GDP by sector (2021, World Bank Development Indicators).....	12
Figure 3: Gender gaps in digital literacy skills	15
Figure 4: Natural hazard occurrence in Nepal for 1980 – 2020 (Source: World Bank Climate Change Knowledge Portal).....	19
Figure 5: Key natural hazard statistics in Nepal for 1980 - 2020 (Source: World Bank Climate Change Knowledge Portal).....	20
Figure 6: Estimated aggregate exceedance probability curve for earthquake (Source: NDRRMA)	28
Figure 7: Sovereign risk finance instruments in Nepal (current and in progress).....	30
Figure 8: GoN Disaster Management Funds.....	31
Figure 9: Non-life microinsurance number of policies and premiums (in NPR), offered by non-life companies.....	46
Figure 10: Non-life microinsurance number of policies issued through NIA Non-Life MI Pool	47
Figure 11: Investment portfolio make-up for life and non-life insurers in Nepal.....	62

Table of Tables

Table 1:	Research topics addressed by the diagnostic study in Nepal (see Appendix 2 for specific research questions explored).....	9
Table 2:	Recent disaster damages, 2011 - 2020 (US\$ thousands).....	26
Table 3:	Damage and losses of disaster incidents 2017 – 2018 (Source: NEOC, MoHA).....	27
Table 4:	Inclusive insurance (microinsurance plus MoA Crop and Cattle Program) market number of policies issued in 2021-22 fiscal year (not finalized).....	45
Table 5:	Outstanding Crop & Cattle Insurance Program subsidy owed to insurers.....	48
Table 6:	Summary of insurer investment sectors and limits from new Investment Guideline issued by Nepal Insurance Authority.....	63
Table 7:	Research questions addressed by diagnostic study in Nepal (to the greatest extent possible).....	70
Table 8:	Methods of data collection.....	72

Table of Boxes

Box 1:	The gender gap in Nepal.....	16
Box 2:	Institutions and councils involved in DRM and DRF in Nepal.....	21
Box 3:	Goal and objectives of Nepal's DRF Strategy (excerpts from DRF Strategy 2020).....	22
Box 4:	Data and risk assessments relevant to DRF.....	24
Box 5:	Global resource: Lagos state flood model.....	32
Box 6:	Microinsurance related highlights from the new Insurance Act 2079.....	38
Box 7:	Global resource: Proportionality in practice case studies (description excerpts from A2ii website).....	42
Box 8:	Summary of Priority 3 on risk mitigation from the Nepal Financial Inclusion Action Plan.....	44
Box 9:	Global resource: Enhancing scalability and sustainability of Uganda's Uganda Agricultural Insurance Scheme.....	49
Box 10:	Challenges for insurance companies in providing formal agriculture insurance in Nepal (source: IFAD).....	50
Box 11:	Global resource: Lumkani and fire risk.....	51
Box 12:	Current example of digital distribution of insurance in Nepal from eSewa.....	52
Box 13:	Challenges for farmers with formal agriculture insurance in Nepal (source: IFAD).....	55

A conversion rate of US\$ 1 – NPR 130.694 is applied throughout this report, unless otherwise noted. The source is the 'average bid rate' from Oanda currency converter.

ABBREVIATIONS

Abbreviation	Term
A2ii	Access to Insurance Initiative
ADB	Asian Development Bank
AML	Anti-Money Laundering
ASN	Actuarial Society of Nepal
BFIs	Banking and financial institutions
CAT DDO	Catastrophe Deferred Drawdown Option
DM	Disaster management
DRF	Disaster risk financing
DRM	Disaster risk management
DRR	Disaster risk reduction
DRRM	Disaster risk reduction and management
FY	Fiscal year
GAIN	Global Actuarial Initiative (of UNDP-Milliman)
GBV	Gender-based violence
GDP	Gross domestic product
GESI	Gender equality and social inclusion
GFDRR	Global Facility for Disaster Reduction and Recovery
GLOFS	Glacial Lake Outburst Floods
GoN	Government of Nepal
GRID	Green, resilient, and inclusive development
GRMA	Global Risk Modelling Alliance
GWP	Gross written premium
ICP	Insurance Core Principle
IFAD	International Fund for Agricultural Development
II	Inclusive insurance
IIN	Insurance Institute of Nepal
IRFF	Insurance and Risk Finance Facility (of UNDP)
JICA	Japan International Cooperation Agency
KI	Key informant [interviews]
LDC	Least developed country
MAP	Making Access Possible [program]

MFI	Microfinance institution
MI	Microinsurance
MOALD	Ministry of Agriculture and Livestock Development
MoF	Ministry of Finance
MOFAGA	Ministry of Federal Affairs and General Administration
MoHA	Ministry of Home Affairs
NDC	Nationally Determined Contributions
NDRRMA	National Disaster Risk Reduction and Management Authority
NEOC	National Emergency Operation Center
NIA	Nepal Insurance Authority
NMBA	Nepal Microfinance Bank Association
NRB	Nepal Rastra Bank
NTA	Nepal Telecommunications Authority
PAMS	Public Asset Management System
PSP	Payment service provider
RBC	Risk based capital
SSF	Social Security Fund
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
WB	The World Bank

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EXECUTIVE SUMMARY

Objective of this study and methodology. The United Nations Development Programme's (UNDP) Insurance and Risk-Finance Facility (IRFF) aims to reduce vulnerability, enhance resilience of countries and communities, and strengthen prospects for sustainable development in select countries it engages in. For this purpose, the IRFF has developed the present diagnostic study in Nepal to provide an assessment of the market for inclusive insurance (II) and disaster risk finance (DRF) in 2023 and develop recommendations for UNDP and other stakeholders to address the gaps and challenges identified in the report.

Development profile. Nepal has a total population of 29 million people,¹ of which 79% live in rural areas.² Nepal's economy has been steadily growing, averaging 4.9% gross domestic product (GDP) growth (2009 – 2019) and graduating to “lower-middle-income” status in 2020. Both the services (including tourism) and agriculture sectors are crucial to Nepal's economy, making up 52.6% and 21.3% of GDP in 2021. Labor and livelihoods in agriculture account for 64% of total employment.³

Nepal has significantly reduced poverty rates (population living below the national poverty line) from 42% in 1996⁴ to 15.1% in fiscal year (FY) 2022/23.⁵

To date, there have been many gender equality and social inclusion (GESI)-related policies and practices adopted by public and development sector in the country. Despite these efforts, Nepal ranks 105 out of 149 countries (149 being lowest) in the Global Gender Gap Index.⁶

Geographic location, key risks, and hazards: Nepal is one of the most affected countries in the world to climate change and is highly vulnerable to the effects of natural and non-natural hazards. Key natural hazards the country faces include floods, landslides, earthquakes, extreme temperature, epidemics, storms, droughts, wildfires,⁷ debris flows, thunderbolts, heatwaves, cold waves, avalanches, hail, snowstorms, and windstorms.⁸ Non-natural hazards such as fires and road accidents also have a significant impact in terms of losses and damages. Among all of its natural hazards, those that cause the greatest devastation in terms of human and economic impact in Nepal are earthquakes, floods, and landslides. Between 1980 – 2020, earthquakes were responsible for affecting the

1 World Bank, Nepal Databank, 2021. Available at: Population, total - Nepal | Data (worldbank.org)

2 World Bank, Nepal Databank, 2021. Available at: Urban population (% of total population) - Nepal | Data (worldbank.org)

3 World Bank, Nepal Databank, 2021. Available at: Employment in agriculture (% of total employment) (modeled ILO estimate) - Nepal | Data (worldbank.org)

4 Nepal Central Bureau of Statistics, 2011.

5 Government of Nepal, Ministry of Finance. Economic Survey 2022/23. Available at: <https://www.mof.gov.np/site/publication-detail/3248>

6 Global Gender Gap Index Report, 2018. World Economic Forum. <https://www.weforum.org/reports/the-global-gender-gap-report-2018>

7 WB Climate Change Knowledge Portal. Available at: <https://climateknowledgeportal.worldbank.org/country/nepal/vulnerability>

8 Government of Nepal, Ministry of Home Affairs. Nepal Disaster Report 2019. Available at: <http://drrportal.gov.np/uploads/document/1594.pdf>

highest number of people (over 6 million in total), Followed closely by floods (5.7 million people affected).

Sovereign risk finance: The Government of Nepal (GoN) is committed to disaster risk reduction and management; its Constitution includes this responsibility for all levels of government: federal, provincial, and local. Key institutions include the Ministry of Finance, the Ministry of Home Affairs (MoHA), and the National Disaster Risk Reduction and Management Authority (NDRRMA). NDRRMA (housed at the MoHA) was established in 2019 per Section 10 of the Disaster Risk Reduction and Management (DRRM) Act 2076. It is the central institution for coordinating and implementing DRRM activities in Nepal, including the Disaster Risk Finance (DRF) strategy and DRF implementation plans.

DRF in Nepal has made significant strides in policy and legal frameworks, including a national DRF Strategy (2020) and a forthcoming, accompanying DRF National Strategy Implementation Plan (2021). The DRF Strategy includes “strategic activities,” such as: hazard mapping; collecting risk data and entering into the National Disaster Risk Information System (or Bipad Portal); implementing risk transfer instruments; expanding the capacity of the Hazard Monitoring and Disaster Early Warning Information Systems; provision of a Catastrophe Fund; life and non-life insurance for private, public, and sovereign assets; financial stability protections for financial services sector; ensuring proper management of Disaster Management Funds (federal, provincial, local); insurance for poor and marginalized populations; and early warning based pre-financing, among others.

The DRF National Strategy Implementation Plan is a follow on to the DRF Strategy and “sets out short-, medium-, and long-term activities to attain the main objectives in the disaster risk assessment, disaster risk reduction, financial management, and social security sectors specified in the strategy.” The Plan includes a section with detailed information and analyses relevant to developing and deploying market-based financial instruments. Included in this section are results of a cost-benefit analysis for earthquake risk, producing two alternative financing strategies (one with risk transfer and one without). A timeline for implementation of market-based financial instruments is also presented. NDRRMA will coordinate and facilitate the implementation of this plan.

Historical losses due to earthquakes, floods, and landslides in Nepal are significant; it is for this reason that the GoN has prioritized these three hazards in its DRF strategy and implementation. According to data from the EM-DAT database on major disaster events, between 2012 – 2020, earthquakes alone accounted for over 85% (about US\$ 5.17 billion) of total disaster damages (driven by the 2015 Ghoroka earthquake), followed by floods, which caused US\$ 915 million worth of damages. Damages resulting from major landslides amounted to US\$ 15 million. The Nepal Disaster Report 2019 accounts for over 6,000 natural and non-natural disaster incidents, 900+ deaths, and NPR 6.84 billion (US\$ 51.1 million) in estimated property loss for 2017-2018; the latter mainly attributable to fire incidents.⁹ Limited information is available on the GoN’s contingent liabilities for disasters, but a recent earthquake model estimates average annual losses of NPR 11 billion (US\$92 million) and up to NPR 144 billion (US\$1.2 billion) for a 1-in-100 year event. A funding gap analysis is currently being performed to compare these and other contingent liabilities with the available resources.¹⁰

9 Government of Nepal, Ministry of Home Affairs. Nepal Disaster Report 2019. Available at: <http://drrportal.gov.np/uploads/document/1594.pdf>

10 Government of Nepal, Ministry of Home Affairs, NDRRMA. Disaster Risk Financing National Strategy 2078 Implementation Plan: With Implementation Plan for Market-Based Financial Instruments. 2021. Not publicly available.

The main DRF instruments currently used by the GoN include ex-ante budget allocations and contingent credit, as well as ex-post / post-disaster budget adjustments and humanitarian appeals. The GoN has one contingent credit line, a catastrophe deferred drawdown option (CAT DDO) of US\$ 50 million, via the World Bank. There are additional ex-ante instruments under development, for example, sovereign risk transfer solutions for earthquake and flood.¹¹

The success of many of the DRF strategic activities and corresponding implementation plans is heavily dependent on the effectiveness of the institutional structures and systems put in place, such as public financial management systems. The shift in thinking about DRF and using ex-ante financing instruments (as opposed to only post-disaster response) has not happened throughout all levels of government, and NDRRMA believes that capacity building on DRF needs to happen for policymakers and decision makers, especially at provincial and local governments.

Inclusive insurance: The Government of Nepal (GoN) has demonstrated continued commitment to inclusive insurance (II) with recent legal developments, notably the new Insurance Act 2079 (2022) – which contains several microinsurance-related provisions, including the allowance of standalone microinsurance companies – and the new Microinsurance Directive in April 2023. A present challenge will be for the NIA to regulate microinsurance offered by the newly introduced microinsurance companies alongside commercial insurance companies, so that there is a fair approach in the market.

Microinsurance supply has largely been driven by life policies. The total number of II (microinsurance plus the Ministry of Agriculture and Livestock Development (MOALD) Crop and Cattle Program) policies issued for fiscal year 2021-22 was just over four million, totaling 4,174,105.¹² Credit-life microinsurance products offered via microfinance institutions (MFIs) drive the relative success of life microinsurance in Nepal, and life microinsurance is generally viewed as a profitable business. Cooperatives are also a channel used to sell life microinsurance. Life insurers did not use the prescribed life microinsurance product prototypes from NIA (per the previous Directive) but designed their own.

Non-life microinsurance products have struggled to take off and have met several challenges, the latest being the COVID-19 pandemic which caused a dramatic decrease in number of policies issued. Non-life insurance companies have been primarily using the prescribed non-life microinsurance product prototypes from NIA (though this could be subject to change with new microinsurance regulations) and they also offer the Ministry of Agriculture and Livestock Development (MOALD) Crop and Cattle Program products, which are subsidized by the government. Premium subsidy amounts have been volatile and delays in the subsidy reaching insurers have been reported. Outside of agriculture insurance, there are a few examples of non-life companies offering health, household / property microinsurance, and personal accident products, though they do not seem to have significant reach (based on the data for number of policies).¹³ Amongst the many challenges, non-life companies see a lack of business case for non-life microinsurance.

11 Information based on key informant interview with the World Bank in January 2023.

12 Data source: Nepal Insurance Authority, April, 2023.

13 Information based on key informant interview with the Nepal Insurers' Association (non-life association).

MFIs, agents, branch offices, and cooperatives are used as prominent distribution channels in Nepal. MFIs are particularly prominent, namely for mandatory credit-life insurance (considered microinsurance) to loan clients, while branch offices of insurers are used mostly for agriculture insurance. Payment service providers, local and provincial governments, and digital financial services have the potential to serve as inclusive insurance distribution channels and scale products.

A notable gap exists in the availability of (micro)insurance demand data, with insurers facing challenges due to low awareness of insurance among the target market and limited understanding of this market’s characteristics.

Infrastructure investment and the insurance industry: Both life and non-life insurance companies in Nepal primarily invest in fixed deposits at banks and government debenture bonds, accounting for 67% of life insurance company investments and 70% for non-life companies.¹⁴ In the category of investments that includes infrastructure, companies invested very little, with 1.5% for life and 0.6% for non-life companies. Life and non-life companies can invest a maximum of 10% in this category, which includes “Agriculture, renewable energy, tourism, Infrastructure, Education, Health”); however, the newly established microinsurance companies are prohibited from investing in this category.

Key recommendations include: To improve disaster risk financing, key interventions are recommended on capacity building and enhanced coordination in DRF efforts, standardizing funds management, and addressing gaps in risk assessment. To support inclusive insurance development, interventions are proposed on updating regulations, expanding distribution channels, enhancing capacity, and conducting demand side research. High level recommendations are as follows:

Disaster risk financing – high-level recommendations	Inclusive insurance – high-level recommendations
<ul style="list-style-type: none"> • Provide capacity building on DRF at all levels of government • Standardize disaster management fund operating guidelines • Develop municipal-level DRF solutions (after capacity building and public financial management challenges are addressed, or in tandem) • Coordinate DRF activities, especially for market-based solutions • Identify and address priority gaps in risk assessments 	<ul style="list-style-type: none"> • Continue to Develop a Comprehensive Microinsurance Directive • Assess and improve prescribed microinsurance products • Provide tailored support for applying the “proportionality principle” • Support the development of inclusive insurance specific training • Expand microinsurance distribution channels • Address microinsurance demand challenges • Increase actuarial capacity • Review and provide recommendations on the Crop and Cattle Insurance subsidy program • Share knowledge and create a platform for discussion on index insurance • Develop an effective and efficient way to promote insurance awareness

¹⁴ Nepal Insurance Authority. Investment Statement. Data available at: <https://nia.gov.np/business-statement/>

BACKGROUND

Purpose of diagnostic study

Risks of all types, climate change, and disasters threaten development gains and investments made globally. Inclusive insurance and risk finance are critical to building resilience and to protecting people's lives and livelihoods from the increasingly interconnected crises that arise from negative shocks and are exacerbated by climate and socio-economic conditions.

To address this, the UNDP's Insurance and Risk-Finance Facility (IRFF) aims to reduce vulnerability, enhance resilience of countries and communities, and strengthen prospects for sustainable development. For this purpose, the IRFF embarked on developing a series of country diagnostics in each country it engages in to better understand the current situation and areas of need and potential interventions.

The purpose of the diagnostic study in Nepal is to provide an assessment of the market for inclusive insurance (II) and disaster risk finance (DRF) in 2023 and develop recommendations for UNDP and other stakeholders to address the gaps and challenges identified in the report. The study in Nepal has the following objectives:

- Provide the basis for recommendations for technical assistance interventions or future UNDP engagements
- Inform IRFF work planning
- Garner support from stakeholders for II and DRF (e.g., government, donors, and the private sector)
- Provide an entry point / positioning for UNDP in country in II and DRF
- Stimulate conversation in the sector beyond UNDP

This report contains the findings, analysis, and recommendations for the diagnostic in Nepal and is intended for IRFF, UNDP Nepal, interested and relevant UNDP offices and programs, and other key II and DRF stakeholders.

Methodology

Based on the diagnostic study methodology developed by the IRFF, the team aimed to collect data and produce information on the topics found in Table 1, to the greatest extent possible, underlining risk and development, market conditions for II, market conditions for

DRF, insurance / risk finance and development integration, market conditions for insurance investment, and the implications for gender in Nepal. The research team employed a combination of secondary and primary research methods, including secondary data review, key informant interviews, and workshops. See more on the research team and methodology in Appendix 2.

Table 1: Research topics addressed by the diagnostic study in Nepal (see Appendix 2 for specific research questions explored)

Topical area	Research sub-topics
Underlying risk and development information	<ul style="list-style-type: none"> • Hazard Profile • Crisis and Disaster History • Political Economy • Development Dynamics • Technology • Data Mapping • Recommendations
Market conditions for inclusive insurance	<ul style="list-style-type: none"> • Overview of Current Market: • Legislation, regulation, policies, institutional capacity (the enabling environment) • Market Demand • Supply, Providers • Recommendations
Market conditions for risk finance	<ul style="list-style-type: none"> • Existing Assessments of Disaster Risk • Fiscal Impact from previous catastrophic events • Existing Legal and Institutional Framework • Existing Disaster Risk Finance Mechanisms and Instruments • Funding gap analysis • Recommendations
Insurance / risk finance and development integration	<ul style="list-style-type: none"> • In Development Frameworks • In Development Financing
Market conditions for insurance investment	<ul style="list-style-type: none"> • In regulation • In government policy • In private insurer activity
Gender	<ul style="list-style-type: none"> • Across all topics, gender information was integrated where relevant and available

NEPAL'S DEVELOPMENT AND RISK PROFILE

Nepal has a growing but financially vulnerable economy and population, with significant emigration from Nepal and increasing urbanization. Development progress has been impressive in recent decades but not equally spread. Socially excluded and economically deprived group of the people such as women, and the geographically remote, have not benefited from this growth.

Climate risks, including natural hazards, exacerbate the vulnerability of Nepal's population, which the public, private, and development sectors acknowledge and are acting on by promoting a green, resilient, and inclusive development (GRID) model for Nepal's continued economic growth.

Nepal is a country with high exposure and vulnerability to natural hazards, most notably earthquakes, floods, and landslides. With climate change, climatological risks will continue to increase in frequency and severity of these risks.

Development profile

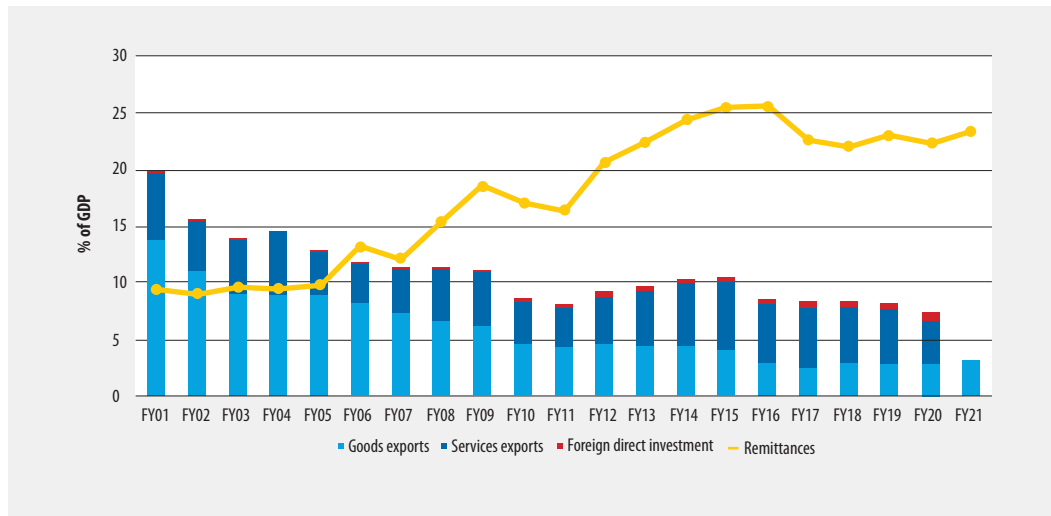
Socio-economic development

Nepal has been steadily growing its economy in recent decades, averaging 4.9% gross domestic product (GDP) growth (2009 – 2019) and graduating to “lower-middle-income” status in 2020. Simultaneously, in 2020 Nepal experienced its first economic contraction since 1983, due to the COVID-19 pandemic.

Nepali citizens emigrating for work have been increasing this trend is directly linked to Nepal's pattern of economic growth. Since 2005, international remittances have contributed significantly more to GDP than any other type of foreign exchange (including goods exports, services exports, and foreign direct investments); in 2021 remittances accounted for 22% of the country's GDP (refer Figure 1).¹⁵ Remittances are also a key tool for Nepali households to bounce back from, or increase their resilience, to shocks. According to panel data from the Nepal Household Risk and Vulnerability Survey (HRVS) 2016-18, in the aftermath of the 2015 earthquakes there was “a positive relationship between remittances and household spending on non-food items and health,” and similarly, there is suggestive evidence that households with a migrant member experienced less economic distress during the COVID-19 pandemic.¹⁶ Migration, remittances, and resilience to shocks (includ-

¹⁵ WB Country Climate and Development Report 2022: Nepal: <https://www.worldbank.org/en/country/nepal/brief/key-highlights-country-climate-and-development-report-for-nepal#:~:text=Nepal%20has%20begun%20to%20put,prioritization%20of%20investments%20is%20incipient>.

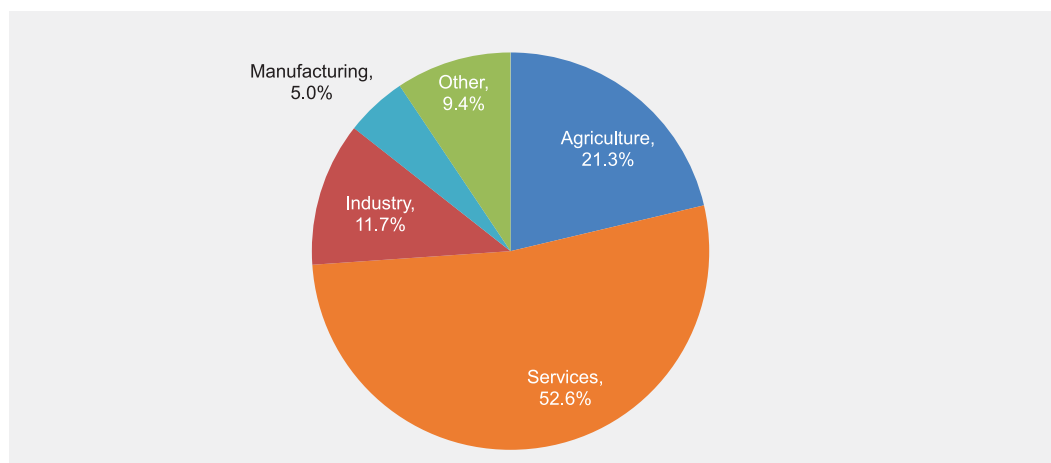
¹⁶ World Bank. Nepal Development Update October 2022: <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099509510142293911/du0cc1fc540d49604f840bed8028507a611b30>

Figure 1: Nepal's source of foreign exchange as percent of GDP (excluding debt flows)

Source: Nepal Rastra Bank and World Bank staff calculations.

ing from climate risks) are interconnected in the Nepali context and must be considered when thinking about how inclusive insurance and risk finance can enhance the resilience of vulnerable populations.

Both the services and agricultural sectors are crucial to Nepal's economy, making up 52.6% and 21.3% of GDP, respectively, in 2021 (Figure 2). Labour and livelihoods in agriculture account for 64% of total employment in the country.¹⁷ Nepal's reliance on the agriculture and services sectors, including tourism, make it highly vulnerable financially to natural hazards and resulting disasters, particularly earthquakes and weather-related events (discussed later on in this report). For example, after the 2015 Gorkha earthquake, tourism declined by 33% and did not recover until 2017, shortly before the COVID-19 pandemic again negatively impacted those numbers.¹⁸

Figure 2: Contributions to GDP by sector (2021, World Bank Development Indicators)

¹⁷ World Bank Development Indicators, 2019. Employment in agriculture (% of total employment) (modeled ILO estimate) - Nepal | Data (worldbank.org)

¹⁸ World Bank. Assessment of Contingent Liabilities from Natural Disasters in Nepal. World Bank: 2022. Not publicly available yet - forthcoming.

Poverty reduction and vulnerable populations

Nepal has significantly reduced poverty rates (population living below the national poverty line) from 42% in 1996¹⁹ to 15.1% in FY 2022/23.²⁰ However, this means that many of Nepalis still live close to the poverty line, especially in rural areas, and therefore are disproportionately vulnerable and affected by climate and seismic risks, including natural hazards and corresponding disasters. This also means a large potential target market for inclusive insurance, as well as a potentially high contingent liability of disasters to the Government of Nepal (GoN) if not managed effectively.

Beyond monetary poverty, the incidence of multidimensional poverty dropped from 30.1% in 2014 to 17.4% in 2019, according to Nepal's Multi-dimensional Poverty Index (MPI).²¹ Nepal's MPI takes into account health, education, and living standard dimensions and serves as a complement to economic and monetary measures of poverty. Indeed, there is recorded progress in access to electricity and potable water, literacy rates, and school enrollment, among several other indicators. Similar to Nepal's economic growth, one of the important contributing factors to its development progress were remittances, which "accounted for 27% of all poverty reduction from 1996 to 2011."²²

Despite impressive development results, not all Nepalis have benefited equally. In Nepal, social and physical aspects of the population such as gender, caste, ethnicity, indigenous identity, geographic remoteness, and / or other marginalized categories and, furthermore, their connection with low incomes, exacerbate vulnerability to risks, including climate risks. For example, the Nepal Living Standards Survey for 2010-2011 demonstrated caste-based disparities with a 42% poverty rate for Dalits compared to 23% for non-Dalits.²³ The Nepal Demographic Health Survey in 2011 found gender disparities in education levels, with 40% of women having no education compared to just 14% for men.²⁴ Nepalis that belong to marginalized social or geographic groups have generally been excluded from mainstream development, including social and institutional structures making decisions and implementing development activities.²⁵ This should be considered when developing any inclusive insurance and risk finance solutions.

In addition to challenges related to inequalities, Nepal is still classified as a "Least Developed Country (LDC)." Nepal is scheduled to "graduate" from this list in 2026 and is currently either close or has surpassed the graduation thresholds in each assessment category: gross national income per capita, human assets index, and economic and environmental vulnerability index.²⁶ One of the indicators tracked under the economic and environmental vulnerability index is "victims of disasters," which is calculated by dividing the annual number of victims by the total population of the country over a period of 15 years and then taking the simple average.²⁷ Nepal's recent and continued efforts on DRR, DRM, and DRF support improving this indicator.

18 Nepal Central Bureau of Statistics, 2011.

19 Government of Nepal, Ministry of Finance. Economic Survey 2022/23. Available at: <https://www.mof.gov.np/site/publication-detail/3248>

20 Nepal: Multidimensional Poverty Index: Analysis towards action – 2021. Available at: https://www.unicef.org/nepal/media/14346/file/MPI_Report_2021.pdf

21 World Bank. 2021. Risks to Poverty, Vulnerability, and Inequality from COVID-19: Nepal Light Poverty Assessment. Washington, DC: World Bank.

22 CBS, 2011. Kathmandu: Central Bureau of Statistics, National Planning Commission, Government of Nepal.

23 Background Document for of 6th April 2016, "DFID Nepal Support for the Economic Empowerment of Women and Girls – the Sabalaa Programme."

24 WB Country Climate and Development Report 2022: Nepal: <https://www.worldbank.org/en/country/nepal/brief/key-highlights-country-climate-and-development-report-for-nepal#:~:text=Nepal%20has%20begun%20to%20put,prioritization%20of%20investments%20is%20incipient.>

25 United Nations Department of Economic and Social Affairs. Least Developed Country Category: Nepal Profile. Available at: <https://www.un.org/development/desa/dpad/least-developed-country-category-nepal.html>

26 <https://www.un.org/development/desa/dpad/least-developed-country-category/evi-indicators-ldc.html>

Rural population and increasing urbanization

Nepal has a total population of 29 million,²⁸ and nearly 79% live in rural areas.²⁹ However, there is a trend of increasing urbanization; for example, in 2000 the urban population was 13%, which climbed to 21% by 2021.³⁰ This transition from rural to urban has not been met with the necessary planning and regulation; almost half of the urban population live in informal settlements, especially in Kathmandu Valley.³¹ Already highly vulnerable to climate risks, urbanization is further exacerbating the impacts of climate change in Nepal.

Political economy and governance

In 2008, Nepal became a federal democratic republic with a President as Head of State and a Prime Minister heading the Government. This took place after several years of political transition, putting an end to a 240-year-old monarchy. After several years of drafting and two different Constituent Assemblies, the new constitution was adopted in 2015.³²

The newly introduced federal system created seven provincial governments and 753 local governments. This decentralized system has empowered local level governance, citizen participation, and social inclusion in community and economic development challenges, including disaster risk reduction and management. Local governments now have new and significant fiscal responsibilities and the ability to mobilize resources. At the same time, given the newness of these governance structures, especially at the local level, there are capacity and coordination issues that have implications for and must be considered in the context of disaster risk finance and inclusive insurance activities (discussed further later on in this report).³³

Digital ecosystem³⁴

The GoN envisions becoming a knowledge and information-based society and developed policies to support this, namely the 2015 Information and Communications Technology (ICT) Plan and the corresponding implementation document, the 2019 Digital Nepal Framework.³⁵ Over the past decade, Nepal has indeed made strides to develop its digital ecosystem, but has fallen short on several aspects, some of which are particularly relevant to disaster risk management and financial inclusion.

The GoN aimed to reach 90% broadband penetration rate by 2020. According to data from Nepal Telecommunications Authority (NTA), 37.23% of people used fixed broadband internet as of January 2023.³⁶ However, some sources estimate that fixed broadband penetration is as low as 2.8% and mobile broadband penetration 35.4%.^{37, 38} Regardless of data

28 World Bank Development Indicators, 2021. Population, total - Nepal | Data (worldbank.org)

29 World Bank Development Indicators, 2021. Urban population (% of total population) - Nepal | Data (worldbank.org)

30 World Bank Development Indicators 2021. <https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS?locations=NP>

31 WB Country Climate and Development Report 2022: Nepal. <https://www.worldbank.org/en/country/nepal/brief/key-highlights-country-climate-and-development-report-for-nepal#:~:text=Nepal%20has%20begun%20to%20put,prioritization%20of%20investments%20is%20incipient.>

32 Ministry of Foreign Affairs. History of Nepal. Available at: <https://mofa.gov.np/about-nepal/history-of-nepal/>

33 WB Country Climate and Development Report 2022: Nepal. <https://www.worldbank.org/en/country/nepal/brief/key-highlights-country-climate-and-development-report-for-nepal#:~:text=Nepal%20has%20begun%20to%20put,prioritization%20of%20investments%20is%20incipient.>

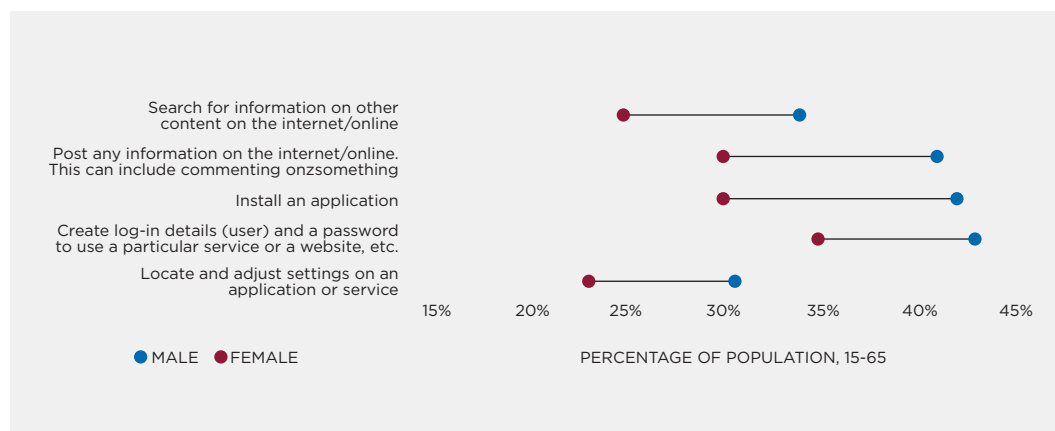
34 Shachee Doshi, Susannah Horton, Ariel Magid, and Craig Jolley. Digital Ecosystem Country Assessment (DECA): Nepal. USAID: February 2022. Available at: https://www.usaid.gov/sites/default/files/2022-05/USAID_Nepal_Digital_Ecosystem_Country_Assessment_FINAL.pdf

35 https://nepalindata.com/media/resources/items/15/bEN_Digital_Nepal_Framework_V72March2019.pdf

36 Nepal Telecommunications Authority. Available at: <https://nta.gov.np/wp-content/uploads/2023/03/MIS-poush-2079.pdf>

37 Mobile broadband penetration data from GSMA Intelligence (behind a paywall). This data agrees well with ITU's estimate (based on household surveys) of 34 percent of Nepalis using the internet in 2019.

38 Original footnote from USAID DECA publication on mobile and fixed broadband penetration figures: "Some sources (based on data from Nepal Telecommunications Authority) claim much higher broadband penetration rates of around 72 percent. The Nepal Rastra Bank (NRB) document never uses the word "penetration," and this is a misinterpretation of their data. NRB simply counts the number of subscriptions. This approach fails to distinguish personal from business use and double-counts in cases where people have multiple subscriptions (e.g., multiple SIM cards or both a fixed and a mobile subscription). The ITU and GSMA numbers cited above are probably more trustworthy as a measure of population-level digital adoption."

Figure 3: Contributions to GDP by sector (2021, World Bank Development Indicators)

Source: LIRNE After Access Survey.

source, there is significant work to be done to reach the broadband goal. About 55% of Nepalis (unique subscribers) use internet-enabled mobile phones.³⁹ This has implications for early warning systems and outreach to populations during disasters.

There is a digital divide in Nepal, including along the categories of ethnicity, religion, geography, income, caste, and gender. When it comes to gender, women lag behind men in mobile phone ownership, internet use, and digital literacy (see Figure 3⁴⁰). According to GSMA, “closing the gender gap in mobile internet use across low-and middle-income countries could add US \$700 billion in GDP growth globally.”⁴¹ In addition, as described earlier, Nepal has a high percentage of its workforce living abroad as migrant workers. Due to the fact that many of these workers are rural men, now a significant proportion of Nepali farmers are women.⁴² Therefore, addressing this gap is not only critical to social development in Nepal but also economic.

Commitment to gender equality

The gaps in development and equality for women and other marginalized social groups in Nepal must be addressed to achieve development and economic goals (see Box 1 for fast facts on the gender gap in Nepal). Gender equality and social inclusion (GESI) are ideals set forth by the Constitution of Nepal. Given this and its numerous international commitments, the GoN is committed to GESI. To date, there have been many GESI-related policies and practices adopted by public and development sector in the country. Exemplifying this is the fact that as of 2017, there were seven major sectorial ministries with GESI policies and guidelines. Though all guidelines call for disaggregated data, there is a problem when it comes to consistency of reporting on social groups.⁴³ According to the Gender Equality and Social Inclusion Working Group (a multistakeholder group of

39 GSMA Intelligence. USAID DECA publication.

40 Figure from the following report: Shachee Doshi, Susannah Horton, Ariel Magid, and Craig Jolley. Digital Ecosystem Country Assessment (DECA): Nepal. USAID: February 2022. Available at: https://www.usaid.gov/sites/default/files/2022-05/USAID_Nepal_Digital_Ecosystem_Country_Assessment_FINAL.pdf

41 <https://www.gsma.com/mobileforddevelopment/wp-content/uploads/2019/03/GSMA-Connected-Women-The-Mobile-Gender-Gap-Report-2019.pdf>

42 https://www.jica.go.jp/english/our_work/thematic_issues/gender/background/pdf/e07nep.pdf

43 GESI Working Group, 2017: Gender Equality and Social Inclusion Working Group, International Development Partners Group, Nepal. Available at: <https://asiapacific.unwomen.org/en/digital-library/publications/2017/04/gesi-framework>

development partners)⁴⁴ “the lack of a universal, consistent and officially endorsed GoN categorization of social groups has resulted in different systems and levels of disaggregation being followed in different sectors.”⁴⁵ This matters for disaster risk finance and inclusive insurance efforts that often work closely with local organizations and strive to target vulnerable and marginalized social groups. UNDP Nepal is already well connected with GESI Working Group members and the GESI Common Framework, including on projects such as Strengthening Urban Preparedness, Earthquake Preparedness and Response in Western Regions of Nepal (SUPER).⁴⁶ It is recommended that IRFF leverage UNDP Nepal’s current GESI knowledge and networks for any implementation on risk finance and inclusive insurance activities.



BOX 1: THE GENDER GAP IN NEPAL⁴⁷

Global Gender Gap Index: Nepal ranks 105 out of 149 countries,⁴⁸ meaning much improvement can be made.

Poverty: Female-headed households more likely to suffer from poverty than male-headed.

Health: Progress in the reduction of maternal mortality ratio, but inequalities in access to services persist.

Education: Female students drop out earlier than male students, and literacy rates are lower for women (48.8%) than men (71.7%).

Economic participation: 85.4% of women are in the labor force (relatively high for South Asia), but there is a gender wage gap. Women are less likely than men to own land, and Dalit women are even less likely

because of this connection and double marginalization.⁴⁹

Insurance usage: 30% of the total population in Nepal have insurance. When broken down by gender, 34.6% of men have insurance while just 25.6% of women have insurance.⁵⁰

Political participation: There has been an increase in women’s participation in local governments (41% of local government positions went to women in 2017); however, men still have greater representation at all levels of government.

Gender-based violence: “GBV is the leading cause of violence-related deaths” in Nepal. Women who are employed in Nepal are more likely to experience violence, and Nepal still has high rates of early marriage compared to other Asian countries.

44 Group, Nepal. Available at: <https://asiapacific.unwomen.org/en/digital-library/publications/2017/04/gesi-framework>

45 The GESI Working Group is one of the Working Groups under the Social Cluster of the International Development Partner Group (IDPG). The GESI Working Group aims to provide strategic advice and support to the IDPG and other development stakeholders on gender equality and social inclusion.

46 GESI Working Group. 2017. Gender Equality and Social Inclusion Working Group, International Development Partners Group, Nepal. Available at: <https://asiapacific.unwomen.org/en/digital-library/publications/2017/04/gesi-framework>
<https://www.undp.org/nepal/projects/super>

47 WB Gender Brief Nepal (2019): <https://documents.worldbank.org/curated/en/484811556130253064/pdf/Nepal-Gender-Brief.pdf>

48 Global Gender Gap Index Report, 2018. World Economic Forum. <https://www.weforum.org/reports/the-global-gender-gap-report-2018>

49 FAO Gender and Land Rights Database

50 Nepal Rastra Bank, 2022. Baseline Survey on Financial Literacy in Nepal (including Financial Inclusion Indicators). Available at: <https://www.nrb.org.np/contents/uploads/2022/12/Baseline-Survey-on-Financial-Literacy-in-Nepal-including-Financial-Inclusion-Indicators.pdf>

In 2017, *A Common Framework for Gender Equality & Social Inclusion* was published, creating a shared conceptual framework on GESI for development partners to leverage in their work, in particular with GoN. The framework clarifies concepts and key terms as well as proposes a theory of change for GESI work in Nepal.⁵¹

Climate resilient development in Nepal

Despite development gains, climate change and global warming are threats to continued economic and human development in Nepal. For this reason, GoN has made a strong commitment to addressing climate change and embracing a green, resilient, and inclusive development (GRID) approach to future economic activities. This commitment to GRID was made official via the Kathmandu Declaration for the GRID Partnership in 2021 with the World Bank Group and 15 development partners.⁵² Refer to Appendices 3 and 4 for details on Nepal's nationally determined contribution (NDC) targets and institutional arrangements for climate change. The GoN has integrated climate action into its public policy and institutional frameworks, including related to disaster risk management and financing at federal, provincial, and local levels, discussed in more detail in the Risk Finance section (starting on page 26). Despite this, several challenges exist, especially related to having the capacity and resources to implement such policies and activities. In addition, the private sector has limited data and a low understanding of climate risks which is one of the main barriers to the development of the financial sector through investing in climate-related projects.⁵³

In line with Nepal's commitment to climate action and harnessing one of its most precious natural resources - water - hydropower projects have been pivotal in the country's transition to sustainable energy and access to electricity, in general. Prior to 2010, only a little over half of the population had access to electricity, while as of 2021, 93% had access.⁵⁴ Hydropower is responsible for about 90% of electricity generation in Nepal.⁵⁵ The generation capacity of hydropower in Nepal has surpassed 2,000 MW and is expected to reach 7,300 MW by 2025.⁵⁶

Against this socioeconomic and development backdrop, the country of Nepal has a unique hazard profile given its geographic location. It experiences frequent natural disasters, described in the following section.

Risk and hazard profile

Geographic location, topography, and climate

Nepal is a South Asian landlocked country between India and China. Though generally mountainous terrain, Nepal does have a diverse topography and climatic conditions and can be divided into climatic zones. The high altitude, High Himalayan region is located in the

51 GESI Working Group, 2017. Gender Equality and Social Inclusion Working Group, International Development Partners Group, Nepal. Available at: <https://asiapacific.unwomen.org/en/digital-library/publications/2017/04/gesi-framework>

52 WB Country Climate and Development Report 2022: Nepal: <https://www.worldbank.org/en/country/nepal/brief/key-highlights-country-climate-and-development-report-for-nepal#:~:text=Nepal%20has%20begun%20to%20put,prioritization%20of%20investments%20is%20incipient>.

53 WB Country Climate and Development Report 2022: Nepal: <https://www.worldbank.org/en/country/nepal/brief/key-highlights-country-climate-and-development-report-for-nepal#:~:text=Nepal%20has%20begun%20to%20put,prioritization%20of%20investments%20is%20incipient>.

54 MoF, GoN. 2021. Economic Survey 2020/2021. Kathmandu: MoF.

55 WB Country Climate and Development Report 2022: Nepal: <https://www.worldbank.org/en/country/nepal/brief/key-highlights-country-climate-and-development-report-for-nepal#:~:text=Nepal%20has%20begun%20to%20put,prioritization%20of%20investments%20is%20incipient>.

56 <https://www.nbr.org/publication/balanced-hydropower-development-in-nepal/>

north, and low-lying plain lands of the Terai region are in the south; Nepal's altitude varies substantially from 59 meters to 8,848 meters within its relatively small geographical size (147,180 km²).⁵⁷ In addition to and corresponding with altitude variations, average temperatures also vary from 0 °C and below in the highest mountains to over 24 °C in the south.⁵⁸

Nepal is also located at the subduction⁵⁹ of the Indian and Eurasian (Tibetan) tectonic plates, responsible for the many and severe earthquakes in Nepal and changes in height to the Himalayas.

Vulnerability to natural disasters and climate change

Against this backdrop of geographic location, climate, and socioeconomic situation (discussed previously), Nepal is considered highly vulnerable to both climate and seismic risks. According to the Global Climate Risk Index for 2000 – 2019, Nepal ranks as the 10th most affected country in the world, considering impacts of extreme weather events in terms of fatalities and economic losses.⁶⁰ When looking at the World Risk Index – which incorporates scoring for exposure, vulnerability, susceptibility, lack of coping capacities, and lack of adaptive capacities – Nepal ranks better at 131 out of 192 countries (1 being the highest risk). However, when analyzing the components of this index, Nepal scores “high” risk in all categories apart from “exposure” where it scores “very low” and brings down the overall score.⁶¹ Nepal ranks 126th out of 181 countries (rank 1 for the highest scoring country, and higher scores are better) in the 2020 Notre Dame Global Adaptation Initiative (ND-GAIN) Index, which assesses vulnerability to climate change and readiness to improve resilience, scoring low on this index.⁶²

Given its vulnerability, it is important to understand climate change projections in Nepal. It is expected that warming will be higher than the global average and that drought, heat-wave, river flooding, and glacial lake outburst flooding will intensify over the 21st century.⁶³ In addition, given Nepal's significant migrant population predominantly in India, Saudi Arabia, Qatar, and United Arab Emirates (UAE), the risk of extreme temperatures in those host countries is also relevant. For example, “research published in the *Cardiology Journal* in 2019 found a strong correlation between heat stress in the deaths of more than 1,300 young Nepali workers over Qatar's summer months between 2009 and 2017.”⁶⁴

57 Government of Nepal, Ministry of Home Affairs. Nepal Disaster Report 2019. Available at: <http://drrportal.gov.np/uploads/document/1594.pdf>

58 World Bank and Asian Development Bank. Climate Risk Country Profile: Nepal. WBG and ADB: 2021. Available at: <https://www.adb.org/publications/climate-risk-country-profile-nepal>

59 A subduction occurs when an oceanic plate runs into a continental plate and slides beneath it. Source here: <https://www.usgs.gov/news/science-snippet/earth-word-subduction#:~:text=Subduction%20occurs%20when%20an%20oceanic,plate%20and%20slides%20beneath%20it>

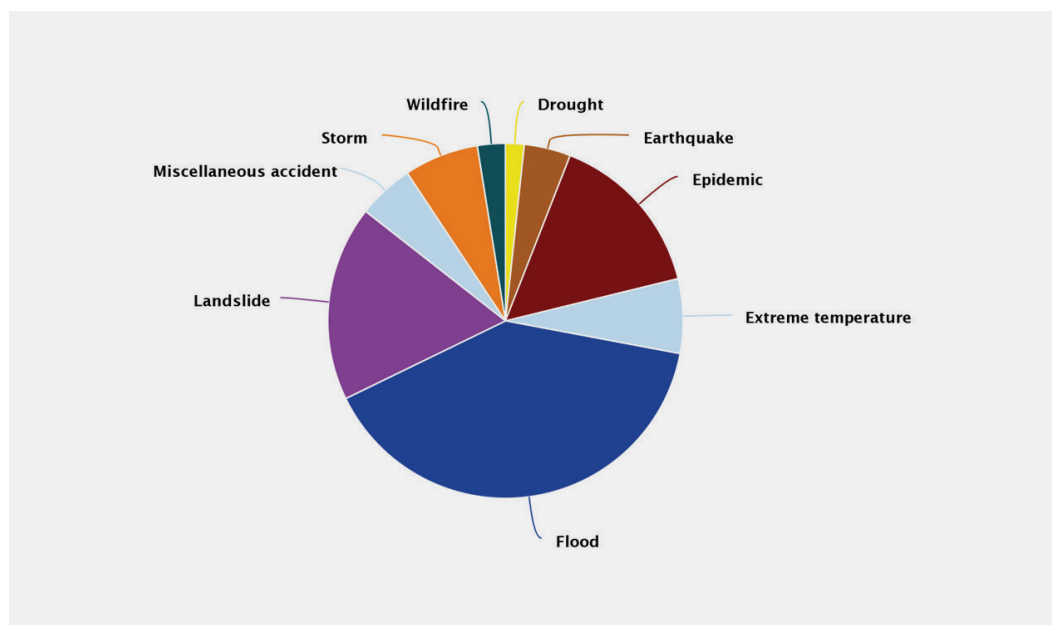
60 Eckstein, David, Vera Künzel, and Laura Schäfer. https://www.germanwatch.org/sites/default/files/Global%20Climate%20Risk%20Index%202021_2.pdf

61 World Risk Report 2022: Focus: Digitalization. Available at: <https://weltrisikobericht.de/weltrisikobericht-2022-e/>

62 University of Notre Dame (2020). Notre Dame Global Adaptation Initiative. URL: <https://gain.nd.edu/our-work/country-index/>

63 World Bank and Asian Development Bank. Climate Risk Country Profile: Nepal. WBG and ADB: 2021. Available at: <https://www.adb.org/publications/climate-risk-country-profile-nepal>

64 Campbell, Charlie. 'It's Rare To See Change Happen at This Pace.' A Global Backlash Is Forcing Qatar to Treat Migrant Workers Better. *TIME*: December 16, 2022. Available at: <https://time.com/6240955/qatar-world-cup-migrants-labor-reforms/>

Figure 4: Natural hazard occurrence in Nepal for 1980 – 2020

Source: World Bank Climate Change Knowledge Portal

Earthquakes, floods, landslides (and other hazards)

Nepal experiences many natural hazards including floods, landslides, earthquakes, extreme temperature, epidemics, storms, droughts, wildfires,⁶⁵ debris flows, thunderbolts, heatwaves, cold waves, avalanches, hail, snowstorms, and windstorms.⁶⁶ The Ministry of Home Affairs also notes significant non-natural hazards that occur frequently, including fires and road accidents.⁶⁷

Among all of its natural hazards, those that cause the greatest devastation in terms of human and economic impact in Nepal are earthquakes, floods, and landslides. Over the last 40 years, floods and landslides have been the most frequently occurring natural hazards in Nepal (see Figure 4). According to data from the World Bank Climate Change Knowledge Portal,⁶⁸ 47 major floods and 21 major landslides occurred, these two natural hazards accounting for 60% of disastrous events during this time period.

Floods in Nepal are triggered by several different causes, including rapid snow and ice melt in the mountains, extreme torrential rainfall in the foothills during monsoon season (June – September), and Glacial Lake Outburst Floods (GLOFS). Landslides are also triggered by rapid snow melt in the mountains and torrential rainfalls.⁶⁹

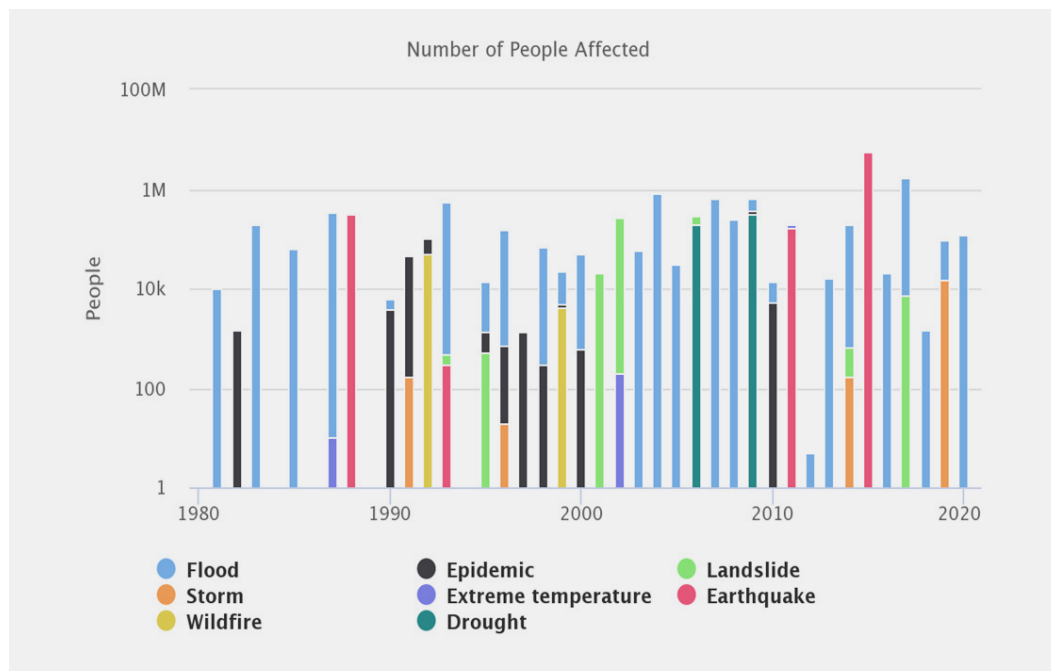
⁶⁵ WB Climate Change Knowledge Portal. Available at: <https://climateknowledgeportal.worldbank.org/country/nepal/vulnerability>

⁶⁶ Government of Nepal, Ministry of Home Affairs. Nepal Disaster Report 2019. Available at: <http://drrportal.gov.np/uploads/document/1594.pdf>

⁶⁷ Government of Nepal, Ministry of Home Affairs. Nepal Disaster Report 2019. Available at: <http://drrportal.gov.np/uploads/document/1594.pdf>

⁶⁸ WB Climate Change Knowledge Portal. Available at: <https://climateknowledgeportal.worldbank.org/country/nepal/vulnerability>

⁶⁹ WB Climate Change Knowledge Portal. Available at: <https://climateknowledgeportal.worldbank.org/country/nepal/vulnerability>

Figure 5: Key natural hazard statistics in Nepal for 1980 - 2020

Source: World Bank Climate Change Knowledge Portal.

Droughts are also an increasing threat due to climate change, particularly in the western Terai plains.

Between 1980 - 2020, earthquakes are responsible for affecting the highest number of people (over 6 million in total), see Figure 5. Following closely in terms of total number of people affected are floods (5.7 million), drought (500,000), and landslides (376,000).

SOVEREIGN RISK FINANCE IN NEPAL

Since adopting its new Constitution in 2015 and in the same year experiencing the devastating Ghorke earthquake, Nepal has made significant progress to establish disaster risk management (DRM) systems, including DRF, especially with regards to issuing institutional, policy, and legal frameworks for DRF. The key challenge going forward will be to implement these relatively new systems that have been put in place and support them with sound disaster and hazard data and capacity building on DRF for the people in charge of managing them.

Policy, legal, and institutional frameworks

DRR and DRM foundations

The GoN is committed to disaster risk reduction and management, its Constitution includes the responsibility for all levels of government; federal, provincial, and local. Furthermore, the GoN is implementing the Sendai Framework for Disaster Risk Reduction for 2015 – 2030 and has made progress on priority action areas related to understanding disaster risk, strengthening governance, investing in DRR for resilience, and enhancing disaster preparedness for effective response.⁷⁰ Key achievements on the Sendai Framework specifically related to DRF are discussed in this section, but for details on non-DRF progress updates, refer to Appendix 5.

“Every US\$1 invested in risk reduction and prevention activities can save up to US\$15 in post-disaster recovery”⁷¹

Aligned with the Sendai Framework and foundational to the GoN’s approach to DRF are the following laws and policies that all support and provide underlying policy for DRF at multiple levels of government and society:⁷²

Disaster Risk Reduction and Management (DRRM) Act 2017: Includes provisions on instruments and procedures for risk transfer, such as insurance and social security, as well as for “Disaster Management Funds.”

National Policy for Disaster Risk Reduction 2018: Calls for promotion of and access to agriculture and livestock insurance for vulnerable communities, soft loans for disaster affected communities, and insurance for public infrastructure, such as hospitals, schools, and water supply.

70 Ministry of Home Affairs. Risk to Resilience: Disaster Risk Reduction and Management in Nepal. 2022. Accessed at: https://dpnet.org.np/uploads/files/Nepal_Position%20Paper_GPDRR2022_Final%202022-05-26%2016-58-49.pdf

71 UNDRR: <https://www.undrr.org/about-undrr/funding>

72 GoN, The World Bank. Nepal: National Disaster Risk Financing Strategy – 2020. Accessed at: <https://www.preventionweb.net/publication/nepal-national-disaster-risk-financing-strategy>

National Strategic Action Plan for Disaster Risk Reduction 2018-2030: Includes in its priorities promoting disaster resilience through risk sharing, insurance, and other instruments.

The Fifteenth Plan: Sets forth national goals and targets for economic growth and social development, including a call for increasing public, private, and community financing for disasters.

Local Government Operation Act 2017: Local governments must implement the National Building Code and Standards as well as the Safe Settlement Development Program activities.

Agriculture Development Strategy (2015-2035): Priorities include the establishment of Farmers' Welfare Fund and the Disaster Response Fund, and promotion of agriculture insurance.

Industrial Policy 2011: Includes a provision on “deducting the amount of expenses made for safety of physical property of the industry, natural disaster and insurance cover from the taxable income.”

National Urban Development Strategy 2017: Resilience to disasters is a key principle in this plan.



BOX 2: INSTITUTIONS AND COUNCILS INVOLVED IN DRM AND DRF IN NEPAL

National Disaster Risk Reduction and Management Authority (NDRRMA):

Housed at the Ministry of Home Affairs, NDRRMA was established in 2019 per Section 10 of the DRRM Act 2017. It is the central institution for coordinating and implementing DRRM activities in Nepal, including the DRF strategy and DRF implementation plans. The chief executive of NDRRMA is the member-secretary of the DRRM National Council and DRRM Executive Committee.⁷³

DRRM National Council is the apex DRRM body and is chaired by the Rt. Hon'ble Prime Minister. This council is involved in formulating strategies and approving disaster related policies.⁷⁴

The **DRRM Executive Committee** is chaired by the Hon'ble Home Minister

and manages operational affairs and guidelines.

Provincial, district, and local DRRM Committees operate at these subnational levels of government on disaster preparedness and response.⁷⁵

The **National Platform for DRR** aims to coordinate DRRM efforts of the various stakeholders involved (from public, private, development sectors, communities, and more). The Platform is headed by the chief executive of NDRRMA.⁷⁶

There is a network of **Emergency Operation Centers (EOCs)** throughout the country that coordinate disaster preparedness and response.⁷⁷

73 NDRRMA homepage: <https://bipad.gov.np/en/about-us>

74 Ministry of Home Affairs. Risk to Resilience: Disaster Risk Reduction and Management in Nepal. 2022. Accessed at: https://dpnet.org.np/uploads/files/Nepal_Position%20Paper_GPDRR2022_Final%202022-05-26%2016-58-49.pdf

75 Ministry of Home Affairs. Risk to Resilience: Disaster Risk Reduction and Management in Nepal. 2022. Accessed at: https://dpnet.org.np/uploads/files/Nepal_Position%20Paper_GPDRR2022_Final%202022-05-26%2016-58-49.pdf

76 Ministry of Home Affairs. Risk to Resilience: Disaster Risk Reduction and Management in Nepal. 2022. Accessed at: https://dpnet.org.np/uploads/files/Nepal_Position%20Paper_GPDRR2022_Final%202022-05-26%2016-58-49.pdf

77 Ministry of Home Affairs. Risk to Resilience: Disaster Risk Reduction and Management in Nepal. 2022. Accessed at: https://dpnet.org.np/uploads/files/Nepal_Position%20Paper_GPDRR2022_Final%202022-05-26%2016-58-49.pdf

Disaster Management Fund Operating Procedure - 2079: provides guidance on usage of funds for risk reduction and response and direction on how to receive funds.

Key institutions and councils tasked with leading and supporting DRM and DRF policies are presented in Box 2.

Disaster Risk Financing Strategy 2020⁷⁸

Against this DRR and DRM policy and institutional backdrop, NDRRMA (in collaboration with the World Bank and other stakeholders) published Nepal's Disaster Risk Financing Strategy 2020. This and the corresponding implementation plan (described in the following section), are the cornerstone policies guiding DRF activities in Nepal.

The DRF Strategy was developed "in order to manage financial resources necessary for minimization of disaster damage, enhancement of post-disaster resilience of persons, society and nation and realization of the concept of 'Build Back Better and Stronger.'" The Strategy includes an overview of policies and laws relevant to DRF or DRR and DRM (mentioned above); current DRF-related activities (including the crop and livestock insurance program); its vision, goal, and objectives (see Box 3); and fifteen strategic DRF-related activities.

The "strategic activities" provided in Section 8 of the DRF Strategy include but are not limited to: hazard mapping; collecting risk data and entering into the National Disaster Risk Information System (or Bipad Portal); implementing risk transfer instruments; expanding the capacity of the Hazard Monitoring and Disaster Early Warning Information Systems; provision of a Catastrophe Fund; life and non-life insurance for private, public, and sovereign assets; financial stability protections for financial services sector; ensure proper management of Disaster Management Funds (federal, provincial, local); insurance for poor and marginalized populations; early warning based pre-financing; among others. Refer to Appendix 6 containing Section 8 with the full detailed list of Strategic Activities.



BOX 3: GOAL AND OBJECTIVES OF NEPAL'S DRF STRATEGY (EXCERPTS FROM DRF STRATEGY 2020)

Goal: To ensure Pre-arranged Financial Mechanisms for providing adequate financial resources immediately at the onset of a disaster by maintaining financial risk sharing of stakeholders, while reducing financial, physical, social and human losses from disasters.

Objectives: To develop appropriate instruments and technologies to

forecast the nature and magnitude of hazards and disaster impacts and estimate the damages to be caused by them.

To minimize the damage of individual, private and public assets from disaster, and identify and implement appropriate mechanisms and instruments for risk transfer.

⁷⁸ The World Bank. Nepal: National Disaster Risk Financing Strategy - 2020. Accessed at: <https://www.preventionweb.net/publication/nepal-national-disaster-risk-financing-strategy>

DRF National Strategy Implementation Plan 2078 (2021)⁷⁹

A risk layering approach and plan for DRF. The DRF National Strategy 2078 Implementation Plan was recently drafted (though not yet publicly available) as a direct follow on to the DRF Strategy and “sets out short-, medium-, and long-term activities to attain the main objectives in the disaster risk assessment, disaster risk reduction, financial management, and social security sectors specified in the strategy.” NDRRMA will coordinate and facilitate the implementation of this plan.

The Implementation Plan presents GoN’s risk layering approach to DRF, considering frequency, severity, and financial impact of disasters and matching such events with appropriate DRF instruments. For any risk transfer instruments to be developed – such as catastrophe bonds, risk pools, and insurance – the Implementation Plan emphasizes the need for justification based on cost-benefit analyses and available resources. Along with cost-benefit analyses, six additional criteria must be met when developing DRF instruments, including: adhering to legal requirements; coordinating responsibilities with all levels of government; conducting feasibility studies with cost estimates; following government procurement processes for service providers; employing a phased approach to implementing market-based financial instruments; and coordination with relevant government agencies on annual budgets and resource mobilization.

Section 1.4 of the Implementation Plan presents six short-term (within two years), six medium-term (between two to five years), and 27 long-term (within ten years) goals and indicators. Short- and medium-term DRF goals include the development of market-based financial instruments, the collection and analysis of disaster data, the calculation of the GoN’s contingent liabilities of disasters and the funding gap, and the formulation of guidelines to improve speed of financial relief from disaster funds, among others. The long-term goals include a wide variety of activities, including several related to insurance and II, specifically. The advancement of agriculture and microinsurance, the expansion of access to insurance for rural communities via index insurance, and the development of a market-based microinsurance strategy to support social insurance, are some examples. See Appendix 7 for the detailed table excerpt of all action plan goals from the Implementation Plan, including information on outcome measurement, responsible entity, and supportive entities.

The Implementation Plan action items are many and require a variety of different stakeholders from public, private, and development sectors to take responsibility. As the leaders and managers of this plan, NDRRMA has encouraged stakeholders, especially development partners, to coordinate and complement their activities.⁸⁰

Guidance for market-based financial instruments. Section 2 of the Implementation Plan provides detailed information and analyses relevant to developing and deploying market-based financial instruments. Included in this section are results of a cost-benefit analysis for earthquake risk, producing two alternative financing strategies (one with risk transfer and one without). A timeline for implementation of market-based financial instruments is also presented.

Data and risk assessments

Sources of risk data relevant to DRF

There are different data sources relevant to DRF in Nepal, including data on hazards and losses, which are captured in Box 4. As presented in the strategic activities of the DRF Strategy and short-term goals of the Implementation Plan and expressed by NDRRMA,⁸¹ there is a clear need to im-

79 The information in this section is based on the following resource, which is not yet publicly available: NDRRMA. Disaster Risk Financing National Strategy 2078 Implementation Plan With Implementation Plan for Market-Based Financial Instruments.

80 Information based on keynote speech from Anil Pokhrel, CEO NDRRMA, at the Validation Workshop held 11 April 2023.

81 Information based on interview held with NDRRMA on 6 Feb, 2023.



BOX 4: DATA AND RISK ASSESSMENTS RELEVANT TO DRF

Building Information Platform Against Disaster (BIPAD) portal:⁸² BIPAD's goal is to pool credible digital and spatial data on natural and non-natural hazards from a variety of sources in a single platform. This strives to address the issue that disaster data in Nepal is still scattered and not coordinated. BIPAD employs a bottom-up approach in which provincial and local governments are tasked with data collection. The targeted users of BIPAD are Emergency Operation Centers at all tiers of government and the Nepal Police, as well as other public stakeholders (e.g., line ministries working in DRRM, non-governmental organizations, etc.). This portal is managed by NDRRMA.

Nepal Disaster Report (published periodically by Ministry of Home Affairs) – under the National Policy on Disaster Risk Reduction, this report gives comprehensive information on disaster losses and damages.

Data from National Emergency Operation Center (NEOC) – data on people affected, killed, and properties damaged and costs.⁸³ This houses Nepal's **Disaster Risk Reduction (DRR) Portal**, which is managed by MoHA.⁸⁴

Emergency Events Database (EM-DAT): The Centre for Research on the Epidemiology of Disasters (CRED) manages EM-DAT, which contains “essential core data on the occurrence and effects of over 22,000 mass disasters in the world from 1900 to the present day,” including in Nepal.⁸⁵

National Disaster Risk Assessment and Management Information System (NDRA-MIS): Part of the strategic direction is for NDRA-MIS to be able to “perform data collection and processing and manage information about adverse impacts

of climate change as well as all communities which are at risk of disasters.”⁸⁶ The DRF Implementation Plan includes several action items around enhancing and expanding NDRA-MIS to provincial and local levels of government.⁸⁷

Department of Hydrology and Meteorology generates and disseminates hydrological and meteorological information and forecasts for the public and for disaster risk management (DRM) purposes as well as flood forecasting and early warning systems for flooding.⁸⁸ Goals focused on developing and improving hazard monitoring and disaster early warning information systems are well represented in the action items in the DRF Implementation Plan.⁸⁹

Seismological shocks are monitored by the National Seismological Centre, part of the Department of Mines and Geology.

Public Asset Management System (PAMS) is a new database of buildings, natural resources, and infrastructure values being developed and managed by the Financial Comptroller General Office (FCGO).⁹⁰

Risk assessments:

- WB and Global Facility for Disaster Reduction and Recovery (GFDRR) supported GoN in 2010 in commissioning the Asia Disaster Preparedness Center (ADPC), Norwegian Geotechnical Institute (NGI), and the Center for International Studies and Cooperation (CECI) to perform a multi-hazard risk assessment for Nepal.⁹¹
- Hazard-specific risk assessments: There have been hazard-specific risk assessments carried out, for various objectives. One example is the assessment of earthquake disaster risk in Kathmandu Valley commissioned by the Japan International Cooperation Agency.⁹²

82 <https://bipadportal.gov.np/>

83 The World Bank. Nepal: National Disaster Risk Financing Strategy – 2020. Accessed at: <https://www.preventionweb.net/publication/nepal-national-disaster-risk-financing-strategy>

84 Ministry of Home Affairs. Disaster Risk Reduction Portal. Accessed at: <http://drportal.gov.np/>

85 Centre for Research on the Epidemiology of Disasters (CRED). Emergency Events Database (EM-DAT). Available at: <https://www.emdat.be/>

86 GoN, The World Bank. Nepal: National Disaster Risk Financing Strategy – 2020. Accessed at: <https://www.preventionweb.net/publication/nepal-national-disaster-risk-financing-strategy>

87 The information in this section is based on the following resource, which is not yet publicly available: NDRRMA. Disaster Risk Financing National Strategy 2078 Implementation Plan With Implementation Plan for Market-Based Financial Instruments.

88 Asian Development Bank. The Enabling Environment for Disaster Risk Financing in Nepal: Country diagnostics assessment – August 2019. Accessed at: <https://www.adb.org/sites/default/files/publication/521681/environment-disaster-risk-financing-nepal.pdf>

89 The information in this section is based on the following resource, which is not yet publicly available: NDRRMA. Disaster Risk Financing National Strategy 2078 Implementation Plan With Implementation Plan for Market-Based Financial Instruments.

90 Information based on interviews held with NDRRMA and MOFAGA on 6 and 10 February 2023, respectively.

91 Asia Disaster Preparedness Center, Norwegian Geotechnical Institute, Center for International Studies and Cooperation. Nepal Hazard Risk Assessment. 2010. Available at: https://www.adpc.net/igo/category/ID276/doc/2013-b271ym-ADPC-NHRA_Report.pdf

92 JAPAN INTERNATIONAL COOPERATION AGENCY ORIENTAL CONSULTANTS GLOBAL CO., LTD. OYO INTERNATIONAL CORPORATION. The Project for Assessment of Earthquake Disaster Risk for the Kathmandu Valley in Nepal: Final Report. April 2018. Available at: https://openjicareport.jica.go.jp/pdf/1000039154_01.pdf

prove and standardize data collection and mapping of natural and non-natural hazards in Nepal.

NDRRMA is working to improve the relatively new BIPAD portal (see Box 5 for more details), which contains data on people affected, damages, and other natural and non-natural hazard data. There are challenges with this database in that local governments must collect and report the data.⁹³

Another important database that is currently being rolled out is the Public Asset Management System (PAMS). PAMS is managed by FCGO (with support from MoFAGA) and includes buildings, natural resources, and infrastructure and their valuations at the time they were built. According to officials at MoFAGA, currently about 559 out of the 753 local governments are using PAMS. PAMS and its underlying asset valuation activities need updating and support. However, the current PAMS system only includes data on government-owned property. For example, the land and buildings that are owned by the relevant local governments and have ownership rights are included in the system, but those assets which do not belong to local governments in terms of ownership / rights (e.g., certain school buildings, hospitals, road bridges, culverts, etc.) are not yet included in PAMS. The scope of the system itself needs to be broadened, and the full concept of the PAMS is yet to be implemented.⁹⁴

Many of the disaster data systems and processes are relatively new in Nepal, especially given the transition to federalism less than a decade ago. Institutions tasked with developing and managing them are learning. Despite the challenges that come with this, there has been impressive progress and investment in these systems that can be leveraged in other areas of development. For example, a representative from NDRRMA made the point that sectors, like the insurance sector, should leverage investments made in DRRM (e.g., hydrometeorological systems for early warning) for index insurance purposes, and vice versa.⁹⁵

Historical losses

In addition to frequency of natural hazards and the volume of people affected (presented earlier in this report), the cost of these hazard events is crucial to understand for DRF purposes. The most damaging hazards in Nepal in terms of costs are earthquakes, floods, and landslides (see Table 2). According to data from the EM-DAT database on major disaster events, between 2012 - 2020, earthquakes alone accounted for over 85% (about US\$ 5.17 billion) of total disaster damages (driven by the 2015 Ghorka earthquake), followed by floods, which caused US\$ 915 million worth of damages. Damages resulting from major landslides amounted to US\$ 15 million. Between 1980 and 2011, earthquakes caused US\$ 305 million in damages and floods US\$ 404.4 million; the latter with a much higher frequency of occurring (landslide damages are not captured in EM-DAT for this time period). For DRF strategy and action in Nepal, the GoN has prioritized these three disaster risks.

93 Information based on interviews held with NDRRMA on 6 February 2023

94 Information based on interviews held with NDRRMA and MOFAGA on 6 and 10 February 2023, respectively.

95 Information based on Validation Workshop held in Kathmandu on 11 April 2023.

Table 2: Recent disaster damages, 2011 - 2020 (US\$ thousands)⁹⁶

Year	Earthquake	Flood	Landslides	Total
2012		1,000		1,000
2013				-
2014			15,000	15,000
2015	5,174,000			5,174,000
2016		15,000		15,000
2017		595,000		595,000
2018				-
2019		204,000		204,000
2020		100,000		100,000
Total	5,174,000	915,000	15,000	6,104,123

As described in the previous section on disaster data, there are other local sources of data on disaster events in Nepal, such as the DRR Portal and BIPAD. The Nepal Disaster Report 2019, for example, reports over 6,000 natural and non-natural disaster incidents, 900+ deaths, and NPR 6.84 billion (US\$ 51.1 million) in estimated property loss for 2017-2018; the latter mainly attributable to fire incidents.⁹⁷ See Table 3 for more details on damage and loss data from natural and non-natural hazards. A key bottleneck expressed by reinsurers and insurers is the lack of sufficiently granular data, such as disaggregated by location, as risks vary across Nepal.

Table 3: Damage and losses of disaster incidents 2017 - 2018 (Source: NEOC, MoHA)⁹⁸

Damage and losses of disaster incidents										
S.No	Incident	No. of Incidents	Dead			Injured	Affected Family	Houses Destroyed		Estimated Losses (NPR)
			Male	Female	Total			Partial	Complete	
1	Flood	418	128	55	183	61	16196	14424	286	60,944,400
2	Landslide	483	96	65	161	182	1083	149	328	191,662,000
3	Lightning	432	87	72	160	551	618	23	14	14,687,000
4	Fire	3973	74	76	150	557	6027	549	3234	6,422,638,013
5	Cold Wave	48	26	22	48	0	48	0	0	-
6	High Altitude	45	37	4	41	6	46	0	0	-
7	Heavy Rainfall	342	8	22	30	84	538	193	252	89,415,160
8	Animal Terror	141	14	8	22	69	280	136	8	4,390,150
9	Wind storm	254	7	12	19	84	1527	763	301	51,447,998
10	Boat Capsize	10	9	7	16	9	27	0	0	-
11	Epidemic	22	11	4	15	1881	420	0	0	-
12	Snake Bite	18	7	7	14	5	18	0	0	-
13	Snow Storm	2	10	0	10	0	10	0	0	-
14	Avalanche	1	1	0	1	0	1	0	0	-
15	Hailstone	3	0	0	0	0	127	2	0	457,000
16	Other	189	54	45	99	150	289	69	10	3,181,599
		6381	569	399	968	3639	27255	16308	4433	6,838,823,320

Source: NEOC, HoHA 2017 and 2018.

⁹⁶ Information based on Validation Workshop held in Kathmandu on 11 April 2023.

⁹⁷ Data source: EM-DAT database

⁹⁸ Government of Nepal, Ministry of Home Affairs. Nepal Disaster Report 2019. Available at: <http://drportal.gov.np/uploads/document/1594.pdf>

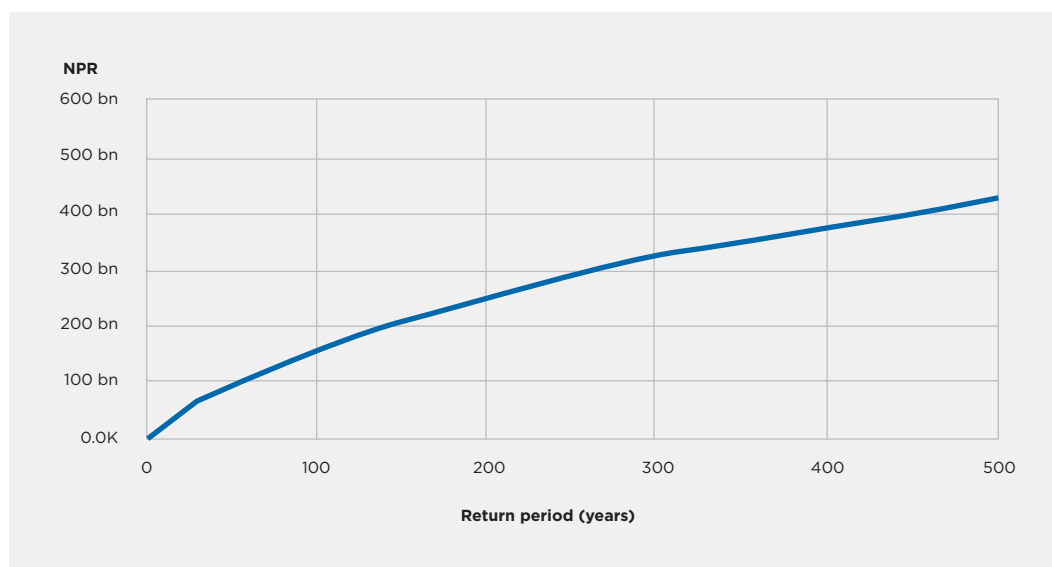
Modelling and GoN's contingent liability of disasters⁹⁹

Expenditure data show that between 2012 – 2020, the GoN spent “NPR 451.45 billion in total (or on average NPR 50 billion per year) for post-disaster response” (approximately US\$ 3.45 billion total and US\$ 0.4 billion annually). In addition to explicit liabilities (those with a clear legal or policy commitments made pre-disaster), GoN must also account for implicit liabilities (those costs covered out of obligation not based on any prior commitment). Expense data from the 2015 Ghorka earthquake demonstrate this well; GoN spent NPR 166 billion (US\$ 1.3 billion) on explicit liabilities and spent more than double that, NPR 370 billion (US\$ 2.8 billion) on implicit liabilities.

Of the total losses caused by significant natural hazards in Nepal, such as earthquakes, floods, and landslides, the GoN covers a certain proportion of the cost for recovery. According to a 2020 Impact Forecasting and an in-house, fully probabilistic earthquake model developed by AON, it is estimated that the GoN's contingent liability for earthquake events is 30% of all losses. “This analysis calculated that the GoN's average annual loss (AAL), the amount the government would expect to fund on average each year, would be approximately NPR 11 billion (US\$92 million). However, for a 1-in-50 year event, the losses would reach approximately NPR 87.5 billion (US\$730 million) and a 1-in-100 year event NPR 143.7 billion (US\$1.2 billion).” See Figure 6 for the estimated aggregated loss exceedance curve¹⁰⁰ for earthquake risk.

In addition to the earthquake model, there are currently other models under development, most notably for flood risk. NDRRMA and the MoF have engaged in modelling and development of DRF solutions at multiple tiers of government. The World Bank, and other

Figure 6: Estimated aggregate exceedance probability curve for earthquake



Source: NDRRMA.

⁹⁹ The information in this section is from the following resource, which is not yet publicly available: Government of Nepal, Ministry of Home Affairs, NDRRMA. Disaster Risk Financing National Strategy 2078 Implementation Plan: With Implementation Plan for Market-Based Financial Instruments. 2021.

¹⁰⁰ The loss exceedance curve (LEC) represents the annual frequency whereupon a determined economic loss will be exceeded. Source: <https://riskmonitor.iadb.org/en/node/65>

development partners such as the Asian Development Bank (ADB) and the United States Agency for International Development (USAID) are assisting GoN to implement its initiative. The World Bank and GoN are aware of the Global Risk Modelling Alliance (GRMA) and its potential complementarity to current DRF activities. Engagement with the GRMA could be an option for future support on catastrophe modelling or other relevant areas.¹⁰¹

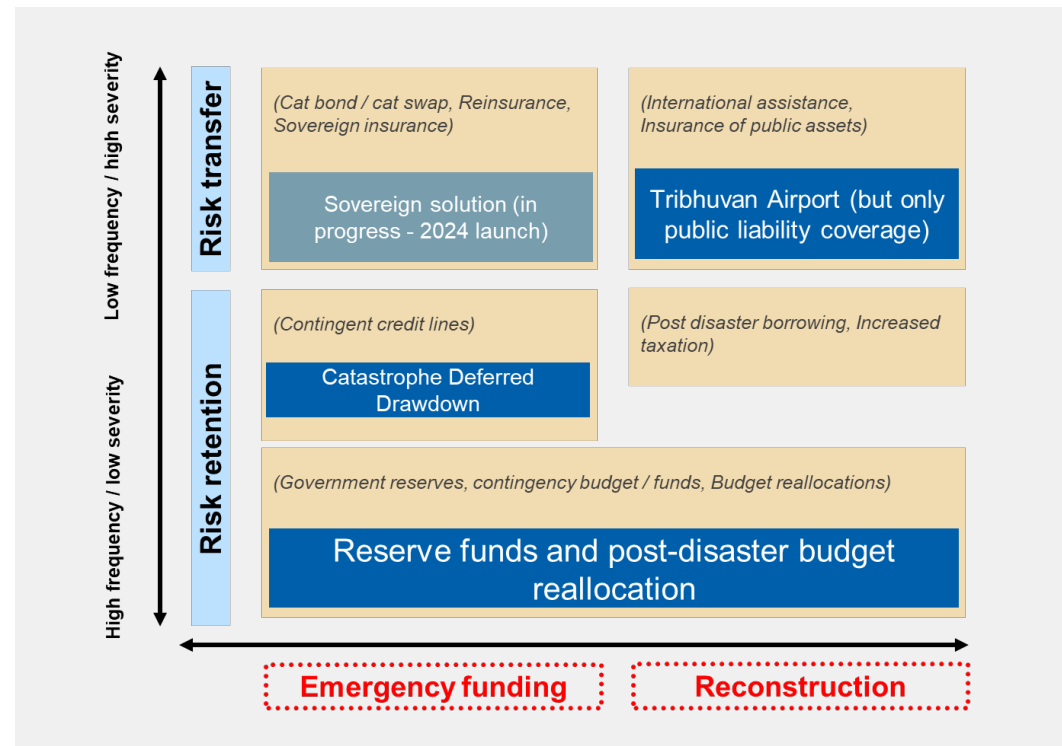
Comparing the GoN's contingent liability of disasters to available resources to cover those liabilities is essential to DRF planning and developing the appropriate mix of instruments. A funding gap analysis is currently being performed to understand this better.¹⁰²

DRF instruments

Existing DRF instruments

Currently, the main DRF instruments used by the GoN are ex-ante budget allocations and ex-post / post-disaster budget reallocations and humanitarian appeals. The GoN has one contingent credit line via the World Bank. Because of the strong and proactive approach to plan for and manage the financial risks of disasters as outlined in the DRF Strategy 2020, there are additional ex-ante instruments under development. See Figure 7 below for a snapshot of the current sovereign risk finance instruments that GoN has access to.

Figure 7: Sovereign risk finance instruments in Nepal (current and in progress)



Source: World Bank and GFDRR, 2014.

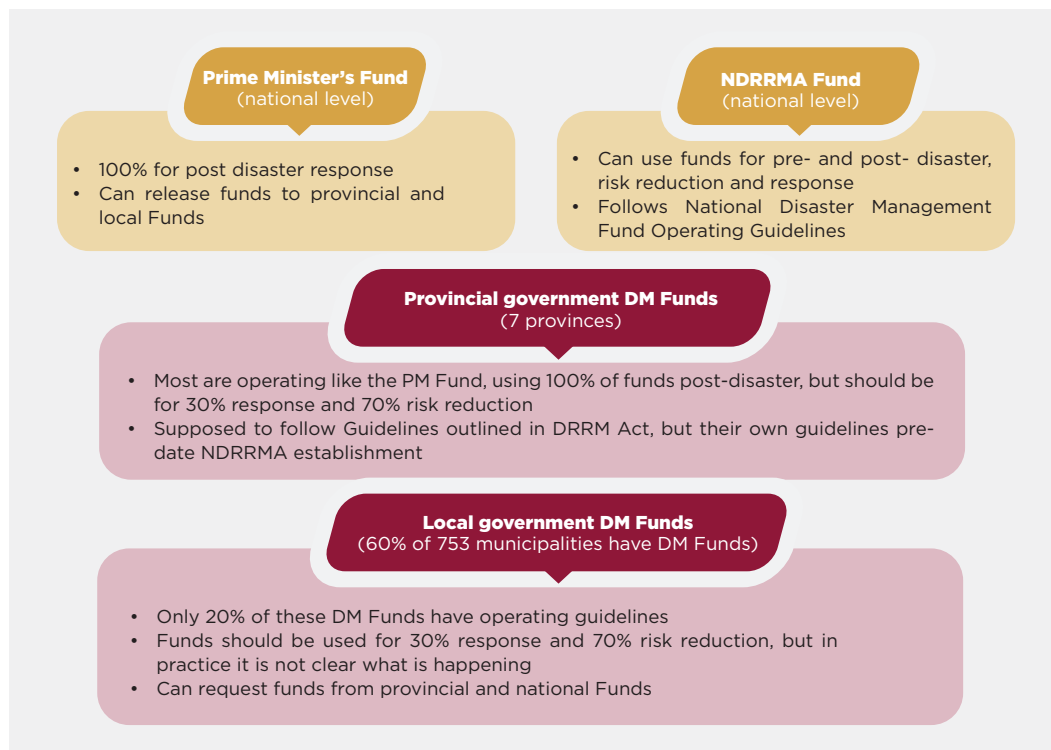
¹⁰¹ Information based on interview with GRMA in May 2023.

¹⁰² Information based on interviews with NDRRMA in April 2023.

Government budget lines and reallocations. Budget allocations pre-disaster (ex-ante) and budget reallocations post-disaster (ex-post) are the primary DRF instruments that the GoN uses currently, and this involves all levels of government. Reserve funds include the Prime Minister’s Disaster Relief Fund, a Contingencies Fund, a Natural Calamity Relief Fund, and provincial and local funds. **Disaster Management Funds (DM Funds)**¹⁰³ are an important ex-ante and ex-post mechanism, especially in terms of DRF at the local and provincial levels. See Figure 8¹⁰⁴ for a diagram of the different types of DM Funds the GoN has.

The GoN struggles to effectively and efficiently spend its allocated capital for post-disaster recovery.¹⁰⁵ These DM Funds at the national, provincial, and local levels are a key mechanism for how this funding flows and gets disbursed. There are challenges related to management of these DM Funds, especially within the context of pushing for risk reduction and pre-disaster instruments. The DRRM Act and Disaster Management Fund Operating Procedure 2079¹⁰⁶ provide guidance on usage of funds for risk reduction (30%) and response (70%) and direction on how to receive funds. Local and provincial governments are supposed to be following these Operating Guidelines; however, this is not happening in practice, especially since many of the DM Funds and guidelines predate NDRRMA and the DRRM Act. Also, there are post-disaster expenditure guidelines missing altogether at all levels of government. Reasons for this include a lack of human resources at local and provincial governments, and, at all levels of government, there is a lack of capacity and

Figure 8: GoN Disaster Management Funds



103 The information in this section is based on the following resource, which is not yet publicly available: NDRRMA. Disaster Risk Financing National Strategy 2078 Implementation Plan With Implementation Plan for Market-Based Financial Instruments.

104 Diagram created by research team based on information from key informant interviews with NDRRMA on 6 and 9 February.

105 Asian Development Bank. The Enabling Environment for Disaster Risk Financing in Nepal: Country diagnostics assessment – August 2019. Available at: <https://www.adb.org/sites/default/files/publication/521681/environment-disaster-risk-financing-nepal.pdf>

106 Document shared by NDRRMA with research team

understanding of the different types of DRF instruments and thinking beyond post-disaster response. **The DRF Implementation Plan will help with this, but support is needed to create consistency in DRF understanding throughout all tiers of government.** Increased capacity and strengthening of public financial management systems will help to make DRF instruments more effective and efficient.¹⁰⁷

Catastrophe Deferred Drawdown Option (CAT DDO). The GoN has access to a CAT DDO of US\$50 million (NPR 5.9 billion) via a World Bank Development Policy. This is a contingent line of credit that the GoN can access (partially or fully) in the event of a natural disaster or health emergency.¹⁰⁸ The GoN drew down US\$25 million during the COVID-19 pandemic.¹⁰⁹

Insurance of public assets. Virtually all of the public buildings and infrastructure in Nepal are uninsured, with the exception of the Tribhuvan International Airport (but only for public liability coverage)¹¹⁰ and infrastructure projects, like hydropower projects, during the construction phase (a recent example being a parametric insurance product developed for the continued development of the Upper Trishuli-1 Hydropower Project).¹¹¹



BOX 5: GLOBAL RESOURCE: LAGOS STATE FLOOD MODEL

A partnership to develop a sub-sovereign risk transfer scheme for flood risk was launched in Lagos State, Nigeria in 2022.

- **Problem:** Lagos State has a high proportion of poor and vulnerable people and experiences frequent, widespread flooding, which is exacerbated by climate change.
- **Solution:** The solution is a parametric insurance that pays out based on a predetermined magnitude of flooding. The insurance product will be integrated within the existing flood risk management framework of Lagos State and in the event of a payout is triggered,

funds will be released to the Lagos State Government and then disbursed to affected households or other relief and reconstruction efforts.

- **Partners involved:** This is a joint initiative of the Insurance Development Forum, the UNDP, the German Government, and the Lagos State Government. Several technical and implementing partners are also involved, including AXA Mansard (insurer), African Risk Capacity, among others.

Read the press release here: [Public-Private Partnership Launched to Develop Urban Flood Risk Cover for Lagos State in Nigeria.](#)

Source: adapted from source.

¹⁰⁷ Asian Development Bank. TA-9007 REG: Strengthening the Enabling Environment for Disaster Risk Financing (Phase 1) Disaster Risk Financing in Nepal: Municipal Government Assessment

¹⁰⁸ MoF and the World Bank. World Bank and Nepal Partner to Strengthen Climate and Disaster Risk Response (press release). Available at: [https://www.mof.gov.np/uploads/news/file/Press%20Release%20-%20Nepal%20Pandemic%20Emergency%20Financing%20Facility%20\(1\)_20200330063323.pdf](https://www.mof.gov.np/uploads/news/file/Press%20Release%20-%20Nepal%20Pandemic%20Emergency%20Financing%20Facility%20(1)_20200330063323.pdf)

¹⁰⁹ Information based on key informant interview with the World Bank in January 2023

¹¹⁰ ADB diagnostic report

¹¹¹ Swiss Re. Parametric enables Nepal's renewable energy project financing. 2 March 2023. Available at: <https://corporatesolutions.swissre.com/insights/knowledge/parametric-renewable-energy-nepal.html>

Sovereign risk transfer. In accordance with its DRF Strategy, the GoN and NDRRMA plan to develop sovereign risk transfer solutions, such as sovereign insurance or catastrophe bonds. Currently, the WB Crisis and Disaster Risk Finance team is working with the MoF on an earthquake sovereign risk transfer tool, and potentially DRF solutions for floods and landslides. Despite these efforts, there is more support needed at the local and provincial levels to create DRF solutions for flood and landslide risks. This could be an area for support and intervention, after or along with capacity building and public financial management process issues area addressed.^{112, 113}

Public financial management

As demonstrated in previous sections, the GoN has made impressive progress on developing DRF policy, legal frameworks, and even instruments in a very short amount of time with a brand-new system of government. However, given that the 753 local governments and 7 provincial governments are new to DRF (and DRM in general), there is a lot to be done and a lot of support needed on the implementation side, especially at provincial and local levels of government.¹¹⁴ The DRF Implementation Plan includes several goals around increasing the capacity of local and provincial governments on DRF.

The success of many of the DRF strategic activities and corresponding implementation plans is heavily dependent on the effectiveness of the institutional structures and systems put in place. The shift in thinking about DRF and using ex-ante financing instruments (as opposed to only post-disaster response) has not happened throughout all levels of government, and NDRRMA believes that capacity building on DRF needs to happen for policymakers and decision makers, especially at provincial and local governments.

The GoN and relevant agencies have developed several policies and guidelines (many mentioned earlier in this section) that guide post-disaster expenditures; these include (but are not limited to) the DRRM Act (2017), The DRR National Policy (2018), the DRRM Strategic Plan of Action (2018 – 2030), Local Government Operation Act (2017), the National Disaster Response Framework (2013), and the DM Funds Operating Guidelines. According to a DRF municipal government assessment conducted by the ADB,¹¹⁵ recommendations around public financial management included mapping of financial and institutional arrangements among stakeholders, conducting medium-term budgeting, and registering assets at the municipal level.¹¹⁶ Several of these recommendations are already being addressed.

GESI in DRF

UN Women advise that a key challenge to effectively integrate women and vulnerable groups in DRF is the gap in knowledge of who “vulnerable” people are, especially at the local government level.¹¹⁷ Women, people without homes, socially excluded and economically deprived groups etc.

112 World Bank. Assessment of Contingent Liabilities from Natural Disasters in Nepal. World Bank: 2022. Not publicly available yet – forthcoming.

113 Information based on key informant interview with the World Bank in January 2023.

114 Information based on key informant interviews with NDRRMA on 6 and 9 February 2023.

115 Asian Development Bank. TA-9007 REG: Strengthening the Enabling Environment for Disaster Risk Financing (Phase 1) Disaster Risk Financing in Nepal: Municipal Government Assessment

116 Asian Development Bank. TA-9007 REG: Strengthening the Enabling Environment for Disaster Risk Financing (Phase 1) Disaster Risk Financing in Nepal: Municipal Government Assessment

117 Information based on key informant interview with UN Women Nepal on 16 March 2023.

Gender equality and social inclusion (GESI) have been strongly integrated into policies at the federal level, but implementation is weak. At the ward and local levels, lists of “vulnerable groups” are highly politicized. There needs to be standardization around these lists and defining vulnerable groups, as well as including excluded groups into the government databases.

In addition, DRR and DRM should include civil society organizations in their planning and programming, such as organizations focused on gender-based violence (GBV) and human rights.¹¹⁸

¹¹⁸ Information based on key informant interview with UN Women Nepal on 16 March 2023.

INCLUSIVE INSURANCE IN NEPAL

Inclusive insurance in Nepal is at a critical point. Take-up is not as high as expected since formalizing microinsurance in 2014, and the current outreach is driven largely by credit-life microinsurance products. There are key challenges with non-life microinsurance and inclusive insurance related to business case and sustainability of the Crop and Livestock Insurance program subsidy. The new Insurance Act 2079 became effective in 2022 and contains several provisions related to microinsurance, including allowing standalone microinsurance companies. The Nepal Insurance Authority (NIA) has issued a new Microinsurance Directive and additional regulations will follow. The present challenge will include how to regulate microinsurance offered by the newly introduced standalone microinsurance companies as well as commercial insurance companies, so that there is a fair approach in the market.

Insurance market context

History

Formal insurance in Nepal dates back to seven decades ago when the first insurance company was established in 1947. Gradually, both government-owned and private insurance companies were established. In recent years, insurance penetration has expanded to beyond mandatory insurance and core cities to serve a wider population. Yet, the sector has a long way to go to meet insurance needs of the population, especially low-income Nepalis.

Insurance penetration¹¹⁹ in FY 2021/22 was 3.67%, comparable to 3.7% for Emerging Asia. Non-life insurance penetration was relatively low at 0.81%, particularly when compared to 1.6% for Emerging Asia, 3% for Advanced Asia-Pacific, and 3.9% globally.^{120,121} The Nepal Insurance Authority (NIA), formerly Beema Samiti, reported that a total of 30.56% of people are covered by life insurance, which includes endowment, term, micro term insurance, as of mid-January 2023.¹²² As per NIA, the coverage ratio was 22.49% a year earlier. This is an important indicator to consider within the context of public and private sector financial resilience to disaster risks, especially related to protection of properties and agricultural assets. When looking closer at the non-life portfolio, in 2019 motor insurance accounted for the largest share of written premiums at 43%.¹²³

Industry players

In early 2023, the insurance industry in Nepal comprises 15 life insurers, 15 non-life insurers, two reinsurers, and seven standalone microinsurance companies.¹²⁴ There has been

119 Insurance penetration is measured by calculating total gross written premiums as a percentage of GDP

120 NIA. Insurance Industry At A Glance. Available at: <https://nib.gov.np/insurance-industry-at-a-glance/>

121 Swiss Re. Sigma 4/2022: World Insurance: inflation risks front and centre. Available at: <https://www.swissre.com/dam/jcr:4500fe30-7d7b-4bc7-b217-085d7d87a35b/swiss-re-institute-sigma-4-2022.pdf>

122 https://nib.gov.np/wp-content/uploads/2023/02/Total-insurance-business_English_Pouch-2079.pdf

123 Ghimire, Rabindra, Business Portfolio, Market Share and Trend of Nepalese Non-Life Insurance Market (August 22, 2020). Journal of Banking, Finance and Insurance, August 2020. Available at SSRN: <https://ssrn.com/abstract-3680054>

124 <https://www.capitalnepal.com/news/2711614743>

consolidation of insurance companies in the market recently, this is likely to the requirement to increase the paid-up capital requirement for insurers.¹²⁵ A few companies have completed mergers, and many others are in the process of doing so. In life insurance, Surya Life Insurance and Jyoti Life Insurance have completed their merger and started their integrated business from June 2022. In non-life, Himalayan General Insurance and Everest Insurance have merged and started joint operations. Similarly, Siddhartha Insurance and Premier Insurance have also merged to become Siddhartha Insurance Limited while Sagarmatha and Lumbini Insurance completed their merger to become Sagarmatha Lumbini Insurance co. Ltd. There are other companies in both the life and non-life sectors who are in the process of merger.

Reinsurance

There are two local reinsurance companies operating in Nepal. NIA requires mandatory cession by insurers to Nepali reinsurers. For business that is not accepted by Nepali reinsurers, insurers can cede to foreign reinsurance companies. Usually, 50-60% of the total premium collected by insurance companies is ceded to reinsurers. The ratio varies between the portfolio of insurers and also the appetite of insurance companies to take risks. In the fiscal year 2021/22, for instance, 56% of the gross earned premium of Sagarmatha Insurance (one of the top companies) was ceded to reinsurers, while Ajod Insurance (one of the newly established companies) ceded 73.74% of the gross premium to reinsurers. In highly risky and bigger portfolios insurers retain a lower amount and for other portfolios, insurers take higher risks. In the case of aviation insurance, Sagarmatha ceded 99.78% of the premium to reinsurers. In motor insurance policies, Sagarmatha ceded 37.69% of the gross insurance premium.¹²⁶

According to diagnostic study interviews with Nepali reinsurers, one of the key challenges in engaging with insurers revolves around data accuracy and data best practice issues.¹²⁷ This is a capacity building need in the industry.

Actuarial capacity¹²⁸

The Actuarial Society of Nepal (ASN), is an active organization. In 2016 an actuarial program was established in 2016 at Tribhuvan University. Despite this, there is a lack of qualified actuaries in the market, with one UK-qualified¹²⁹ actuary (working as a consultant to the regulator) and approximately 50 actuarial graduates, the majority working in life insurance due to limited opportunities in non-life. Insurers outsource the “appointed actuarial” function, mainly to Indian actuaries. This outsourcing comes at a cost, both monetary and in terms of internal insights lost, especially in the context of expanding regulatory requirements. NIA has committed to implementing risk-based capital requirements (discussed in more detail later on) and climate risk disclosures; the latter requiring insurers to

¹²⁵ <https://nepalnews.com/s/business/increased-paid-up-capital-of-insurance-companies>

¹²⁶ Annual Report of Sagarmatha Insurance and Ajod Insurance

¹²⁷ Information based on interview with a Nepali reinsurance company on 9 February 2023.

¹²⁸ Queenie Chow and Steve White. UNDP's IRFF and Milliman: Strengthening the actuarial market in developing & emerging countries – Roadmap Report Nepal. Milliman: December 2022.

¹²⁹ Explain UK-qualified actuary. IFOA certification

¹³⁰ NIA. Directive on Climate Risk Disclosures. January 2022.

¹³¹ Refer to this article from Actuaries Digital on “Sex, gender and life insurance” for an overview and one perspective on the global discourse surrounding gender, sex, and pricing of insurance contracts: <https://www.actuaries.digital/2022/03/03/sex-gender-and-life-insurance/>

disclose certain information related to their exposure to climate-related risks.¹³⁰ The market currently uses Nepali life mortality table, which has age-based rates from 2001 census and insurance data; these age-based rates are gender neutral. The incorporation of gender and sex in insurance pricing is a prominent topic globally. The discourse around this focuses on fair premium rating that promotes anti-discrimination and gender equality.¹³¹

To address some of the key challenges related to the actuarial capacity and profession in Nepal, starting in December 2022, the UNDP-Milliman Global Actuarial Initiative (GAIN) assessed the market and developed an intervention roadmap. The Roadmap includes nine key interventions spanning supply, demand, and regulatory environment for actuarial skills and is currently being coordinated and implemented with a multistakeholder group called the “GAIN Working Committee”, chaired by NIAI. Refer to Appendix 8 for details on these planned interventions.

Inclusive insurance

Before 2014, insurance designed specifically for low-income people and households, or microinsurance,¹³² was offered informally and not labelled as such in Nepal. Over the last decade, the NIA has partnered with public, private, and the development sector to create an enabling environment to supervise and develop the microinsurance market in Nepal.

Despite many efforts, microinsurance take-up has not been as high as expected, which brings us to the current point in time. Beginning in 2022, there has been a flurry of legal and regulatory activity, some of which targets or will target the current challenges within the microinsurance market and likely come with great implications.

Enabling environment for inclusive insurance

New Insurance Act 2079 (2022)

A new Insurance Bill was passed by Parliament last calendar year, making the new Insurance Act 2079 effective as of November 2022. This new Act replaced the previous, 30-year-old Insurance Act 2049, implemented in 1992.¹³³ Beyond including mention of microinsurance (which was not the case in the previous Act), Act 2079 contains several provisions related to microinsurance and relevant topics, including insurance aggregators (refer to Box 6 for a summary of key points). A key change with potentially significant implications for the microinsurance market is the establishment of standalone microinsurance companies.

¹³⁰ NIA. Directive on Climate Risk Disclosures. January 2022.

¹³¹ Refer to this article from Actuaries Digital on “Sex, gender and life insurance” for an overview and one perspective on the global discourse surrounding gender, sex, and pricing of insurance contracts: <https://www.actuaries.digital/2022/03/03/sex-gender-and-life-insurance/>

¹³² In this report, we use the term “microinsurance” when referring to products registered with NIA under this category and the market for such products, which is low-income populations. For insurance products that reach underserved markets (such as the Crop and Cattle Insurance Program) but are not registered as “microinsurance” with NIA, we refer to them as “inclusive insurance.” Thus, microinsurance products are a sub-category of inclusive insurance. This is based on definitions of microinsurance and inclusive insurance from the International Association of Insurance Supervisors. See more here: <https://a2ii.org/en/about-a2ii/all>

¹³³ NIA. Insurance Acts. Available at: <https://nib.gov.np/insurance-acts/>



BOX 6: MICROINSURANCE RELATED HIGHLIGHTS FROM THE NEW INSURANCE ACT 2079¹³⁴

- Microinsurance and reinsurance related provisions are now included in the Act (and were not in the previous Act)

Section 8: Microinsurance

- Every insurer shall undertake microinsurance business targeting low-income households and marginalized groups. (It is not clear at this time how / if this will be included in forthcoming regulations. Previously, there was a quota system with a 10% microinsurance and 5% agriculture insurance portfolio requirement).
- A separate insurance company can be established to undertake a dedicated microinsurance business. (This was not previously allowed).
- Insurers should have a separate written agreement before assigning insurance agents. If the agent is a registered entity, insurers may delegate certain rights to the agent. (This could potentially create opportunities for corporate agents to be involved in more than just selling insurance and carry out other

activities such as product promotion and facilitation of claim payments).

- Insurers should settle the microinsurance claim within 21 days of receiving the necessary documents for the claim.
- Microinsurers should deposit 0.5% of the insurance premium every year as an insurance regulatory fee (the rate is 0.75% in case of other insurers). Fifty percent of the regulatory fee collected from microinsurance goes to the Insurance Development Fund. Per Section 151 of the Act, the Insurance Development Fund is established to expand the access of insurance to low income and marginalized communities and expand insurance for the good of the community.

Section 11: Insurance aggregator and other insurance service providers

- NIA shall provide the license of insurance aggregators.
- The duration of the licensing of the aggregators will be 3 years.

In December 2022, NIA granted licenses to seven microinsurance companies, out of 31 total applications.¹³⁵ Three of the companies are life microinsurers and four non-life, each with a head office in one of the seven provinces. Regardless of head office location, microinsurance companies will be allowed to sell products nationwide.

Based on key informant (KI) interviews with NIA, both the life and non-life insurance associations, and select insurance companies, as well as discussions held at the February 2023 multi-stakeholder inception workshop there appears to be confusion as to what the microinsurance provisions under the new Insurance Act 2079 will mean to the sector, and

¹³⁴ NIA. Insurance Act 2079 (Nepali). Available at: https://nib.gov.np/wp-content/uploads/2022/11/%E0%A4%AC%E0%A5%80%E0%A4%AE%E0%A4%BE%20%E0%A4%90%E0%A4%A8,%20%E0%A5%A8%E0%A5%A6%E0%A5%AD%E0%A5%AF_compressed.pdf

¹³⁵ <https://www.capitalnepal.com/news/2711614743>

insurers are waiting for guidance from NIA.¹³⁶ The following are summarized perspectives and comments on this topic collected during KI interviews:

Insurer perspectives on new standalone microinsurance companies: There were mixed opinions on this new provision, both positive and negative. Several of the insurers did acknowledge and appreciate the effort and renewed focus on microinsurance. At the same time, the six insurers the research team met with (including representatives of both associations) generally expressed the following concerns:¹³⁷

- Lack of understanding on the need for standalone microinsurance companies and how they will be different
- Concern regarding how they will be sustainable, cover overhead costs, and meet capital requirements
- There will be challenges for MI companies and existing insurers. Insurers already have the presence in most of the geographic locations and want to maintain them.
- In the longer term, they will become competition

NIA's perspective: The new provisions in the Insurance Act 2079, including the allowance to establish dedicated microinsurance companies, was made with the focus on poverty alleviation and access to insurance for target vulnerable segments. Also, in embracing the "Proportionality Principle,"¹³⁸ the new MI companies will be required to have quicker claims settlement, simpler policies, faster cycles, among other changes.¹³⁹

Despite the varying perspectives on standalone microinsurance companies, the implementation of this provision is already in motion. Therefore, NIA and the industry can learn from the successes and failures of other jurisdictions where microinsurance companies have been allowed, such as in Nigeria, Mozambique, and the Philippines and focus efforts on issuing new regulation that effectively supports the development of the market and these new companies joining it. The challenge will be in regulating the market in a proportionate approach.

New Microinsurance Directive

Following the issuance of the new Insurance Act and granting of licenses to new microinsurance companies, NIA issued a new Microinsurance Directive in April 2023.¹⁴⁰ A more comprehensive Directive is expected to be issued following the current engagement between NIA and UNDP.¹⁴¹ Some of the major provisions of the Directive are:

- Microinsurance products should be targeted to poor, low-income households, people from marginalized places and communities.
- The Directive has categorized life (whole life, endowment, term and other life insurance) and non-life products (home, property, business, motor, engineering, liability and monetary loss, other non-life insurance).

¹³⁶ Information based on key informant interviews held with: NIA, Nepal Insurance Association (non-life) / Sagarmatha Insurance Company, Life Insurers' Association / Nepal Life, Ajod Insurance Company, Prudential, Rastriya Beema Company, and National Insurance Company.

¹³⁷ Information based on key informant interviews held with: Nepal Insurance Association (non-life) / Sagarmatha Insurance Company, Life Insurers' Association / Nepal Life, Ajod Insurance Company, Prudential, Rastriya Beema Company, and National Insurance Company.

¹³⁸ Give definition of the Proportionality Principle and link to IPC document

¹³⁹ Information based on interview with NIA on 6 February 2023

¹⁴⁰ NIA, Microinsurance Directive, April 2023. Available at: <https://nia.gov.np/wp-content/uploads/2023/04/%E0%A4%B2%E0%A4%98%E0%A5%81%E0%A4%AC%E0%A5%80%E0%A4%AE%E0%A4%BE-%E0%A4%A8%E0%A4%BF%E0%A4%B0%E0%A5%8D%E0%A4%A6%E0%A5%87%E0%A4%B6%E0%A4%A8-2079.pdf>

¹⁴¹ A recommendation to obtain outside expertise and advisory in drafting the new Microinsurance Directive was made by the Diagnostic Study research team. Due to the time sensitivity of this activity, the intervention is in progress.

- The Directive is silent on agriculture microinsurance.
- Insurers can seek approval from NIA for products they develop themselves, while NIA can also prescribe standard insurance policies. In the previous Directive (2020), there were seven prescribed products for household, health, personal accident, cattle and bird, crop, term life, and endowment life microinsurance.¹⁴² The new Microinsurance Directive (2023) states that insurers can develop products themselves and NIA can also recommend products. For products developed by NIA, a committee will be formed (including representatives from NIA, Nepal Rastra Bank, insurers & microfinance institutions) which will prepare insurance policies and recommend them to NIA.
- Maximum sums assured of microinsurance products differ from products to product. For non-life microinsurance (property, house, business and engineering) the maximum sum assured is specified as NPR 5 million (US\$ 37,350) while for life microinsurance products the maximum sum assured is specified as NPR 500,000 (US\$ 3,735).
- Both individuals and institutions can work as an agent. NIA has also expanded the role of agents to support insurers, such as for enrollment, reviewing/verifying self-declaration, premium collection and handover to insurers, handover of policy and help in renewal, and claim settlement.
- Insurers are required to settle claims within 21 days of receiving all the documents.
- This Directive is issued targeting the microinsurance companies. But the Directive also states that commercial insurers can also issue microinsurance products.

The new Microinsurance Directive gives some guidance to the sector and allows the new microinsurance companies to start operating. However, there are several other considerations that NIA, in collaboration with the industry, must consider in order to proportionately regulate both microinsurance and commercial insurance companies operating in the market together. For example, further clarity around the following points is needed: 1) the role of commercial insurance companies when it comes to microinsurance products; 2) the role of new microinsurance companies in offering agriculture insurance; and 3) details of products that can be offered along with premium rates (as there are tariff products in commercial insurance, whether the insurers need to follow the same rate or not).

Other relevant regulations

In addition to the Microinsurance Directive, there are other relevant regulations that affect inclusive insurance directly or indirectly. Some of the major regulations are as follows:

- **Branchless Mobile Insurance Guideline 2076:** NIA issued a directive on branchless mobile insurance to encourage insurance companies to reach customers and to increase awareness and uptake of insurance.¹⁴³ Insurance companies were also asked to conduct mandatory activities through branchless insurance in mandated districts (assigned for agriculture insurance). Though the insurers had started some activities after the issuance of the di-

¹⁴² Sakchyam Access to Finance, UKAid, and Louis Berger. Study on the Microinsurance Industry in Nepal. Sakchyam Access to Finance, UKAid: 2018. Accessed at: https://www.a2ii.org/sites/default/files/2020-09/study-on-the-microinsurance-industry-in-nepal_final.pdf

¹⁴³ <https://nia.gov.np/wp-content/uploads/2023/03/%E0%A4%98%E0%A5%81%E0%A4%AE%E0%A5%8D%E0%A4%A4%E0%A4%BF-%E0%A4%AC%E0%A5%80%E0%A4%AE%E0%A4%BE-%E0%A5%A8%E0%A5%A6%E0%A5%AD%E0%A5%AC%E0%A5%A4%E0%A5%A6%E0%A5%A4%E0%A5%A6%E0%A5%AF.pdf>

rective, they have not delved much into this post COVID-19 pandemic. Coordination with Nepal Telecommunications Authority is needed as there is confusion in the market around mobile microinsurance (premium paid by airtime vs mobile wallet, etc.).

- **Bancassurance:** Nepal Rastra Bank (NRB), the central bank of the Nepal, disallowed banks to sell insurance in 2017, citing this a forced selling of insurance products through banking and financial institutions (BFIs). As per the provision of NRB, BFIs can only sell insurance products directly associated with credit.¹⁴⁴
- **Agriculture, Livestock, and Herbs Insurance Directive 2079 (the “Crop & Cattle Insurance Directive”):** NIA issued a directive on Crop and Livestock Insurance in 2013 to allow insurance companies to issue agriculture insurance policies. The directive covers a wide range of crops and livestock, including rice, wheat, maize, vegetables, fruits, and livestock such as cattle, buffalo, goats, and sheep. Farmers can insure their crops and livestock against a variety of risks, including pests, diseases, floods, droughts, and hailstorms.¹⁴⁵
- **National Financial Inclusion Road-map and Action Plan and insurance:** Insurance is well integrated and prioritized into GoN's financial inclusion policies. NRB engaged in a Making Access Possible (MAP) program with UNCDF to identify key barriers and recommendations to improve financial inclusion in the country. The resulting Nepal Financial Inclusion Road-map 2017 - 2030 was produced, followed by the corresponding Nepal Financial Inclusion Action Plan (approved in 2017).¹⁴⁶ The Action Plan outlines six priority areas for implementation of the Roadmap, including “Priority 3: Bolster risk mitigation capabilities.”



BOX 7: SUMMARY OF PRIORITY 3 ON RISK MITIGATION FROM THE NEPAL FINANCIAL INCLUSION ACTION PLAN¹⁴⁷

Objective: Improve people's capabilities to weather risk events that potentially have a significant impact on their financial situation, both current and future

- **Intervention 1:** Facilitate awareness generation on insurance as risk-mitigation tool; Actions include assessing effectiveness of past campaigns and moving towards an institutional agent model.

- **Intervention 2:** Improve insurer business models; Actions include expansion of microinsurance, support to insurance research and development, and financing options for insurance.

- **Intervention 3:** Institutional capacity building of the Insurance Board (or NIA)

¹⁴⁴ https://www.nrb.org.np/contents/uploads/2019/12/Monetary_Policy_in_Nepali-2076-77_Full_Text-new.pdf

¹⁴⁵ <https://nia.gov.np/wp-content/uploads/2022/11/%E0%A4%95%E0%A5%83%E0%A4%B7%E0%A4%BF-%E0%A4%AC%E0%A5%80%E0%A4%AE%E0%A4%BE-%E0%A4%A8%E0%A4%BF%E0%A4%B0%E0%A5%8D%E0%A4%A6%E0%A5%87%E0%A4%B6%E0%A4%BF%E0%A4%95%E0%A4%BE-%E0%A5%A8%E0%A5%A6%E0%A5%AD%E0%A5%AF-%E0%A4%85%E0%A4%B8%E0%A4%BE%E0%A4%B0-%E0%A5%A9%E0%A5%A7.pdf>

¹⁴⁶ NRB. Nepal Financial Inclusion Action Plan. 2018. Available at: https://un.org.np/sites/default/files/doc_publication/2018-08/MAP%20Nepal%20Financial%20Inclusion%20Action%20Plan.pdf

¹⁴⁷ Adapted from NRB's Nepal Financial Inclusion Action Plan. 2018. Available at: https://un.org.np/sites/default/files/doc_publication/2018-08/MAP%20Nepal%20Financial%20Inclusion%20Action%20Plan.pdf

NIA's involvement on the Action Plan has been in an advisory role, as this is driven by NRB.¹⁴⁸ Though there was no engagement with NRB from the diagnostic research team, it could be synergetic and efficient for UNDP and relevant stakeholders to strategize with NRB on inclusive insurance activities as several of the recommendations in this report (see upcoming section on inclusive insurance recommendations) align with the financial inclusion interventions presented in Box 8. In addition, a new report was published in May 2023¹⁴⁹ and builds on the results of the Nepal Household Survey on Access to Finance (IFC A2F 2021/22) and presents an update to the 2021 Nepal Financial Inclusion Making Access Possible Refresh study. The IFC A2F 2021/22 survey “provides comparable updated indicators for the Nepal Financial Inclusion Roadmap and Action Plan (2017 - 2022).” The report also proposes measures that can help expand financial inclusion, including developing “demand-driven, innovative insurance products” for various market segments as well as carrying out insurance awareness programs for the general public.¹⁵⁰

RBC, RBS, and the “Proportionality Principle”

To support the insurance industry on the topic of risk-based capital (RBC) and risk-based supervision (RBS), NIA has engaged in a multi-year training initiative with the World Bank and the Toronto Centre, respectively.¹⁵¹ Nepali insurers are currently being trained on 35+ topics including (but not limited to) RBC-related courses such as life insurance contracts and asset liability management, calculation for future discretionary benefit reserves, non-life calculation of technical provisions (including calculation of earthquake reserves), stochastic modelling versus deterministic modelling, and RBC for non-life catastrophes including climate-change risk impact, among other topics.¹⁵²

Along with RBC and the movement to a risk-based supervisory framework, NIA is working on implementing the “Proportionality Principle,” which forms an integral part of the Insurance Core Principles (ICP) and calls on insurance regulators to “adjust certain supervisory requirements and actions in accordance with the nature, scale, and complexity of risks posed.”¹⁵³

Implementing the Proportionality Principle and taking a risk-based supervisory approach can be instrumental in creating an enabling environment for II, including microinsurance. Indeed, the Access to Insurance Initiative (A2ii) had engaged with NIA and the United Nations Capital Development Fund (UNCDF) on an inclusive and digital insurance capacity building project in 2020. The work resulted in an action plan owned by NIA with goals related to its activities and engagement with insurance sector and inclusive insurance consumers. This project did not include a focus on proportionality.¹⁵⁶

148 Based on information provided via key informant interview with NIA on 6 February 2023.

149 UNCDF, IFC, 2023. Nepal Financial Inclusion Report 2023. Available at: <https://www.uncdf.org/article/8240/nepal-financial-inclusion-report-2023#:~:text=In%20order%20to%20meet%20the,MAP%20have%20collaborated%20to%20inform>

150 UNCDF, IFC, 2023. Nepal Financial Inclusion Report 2023. Available at: <https://www.uncdf.org/article/8240/nepal-financial-inclusion-report-2023#:~:text=In%20order%20to%20meet%20the,MAP%20have%20collaborated%20to%20inform>

151 Based on information from the UNDP-Milliman Global Actuarial Initiative, the Toronto Centre, and Nepal Insurance Authority.

152 World Bank, NIA. RBC curriculum agenda draft.

153 <https://microinsurancecentre.milliman.com/-/media/milliman/pdfs/microinsurance/case-study-pip-distribution-eng-web.aspx>

154 The Access to Insurance Initiative (A2ii) is the are the ‘implementation arm’ of the International Association of Insurance Supervisors (IAIS) on Inclusive Insurance. A2ii is a unique global partnership working to ensure that the world’s excluded and underserved have access to insurance. Read more here: <https://a2ii.org/en/about-a2ii/all>

155 Chiew, Hui Lin. Lessons so far: Beema Samiti-A2ii-UNCDF insurance supervisory capacity building support on inclusive and digital insurance. A2ii: 5 July 2021. Available at: <https://a2ii.org/en/blog/lessons-so-far-beema-samitia2iiuncdf-insurance-supervisory-capacity-building-support-on-inclusive-and-digital-insurance>

156 Based on information from interviews with NIA in February and April 2023.



BOX 8: GLOBAL RESOURCE: PROPORTIONALITY IN PRACTICE CASE STUDIES

(DESCRIPTION EXCERPTS FROM A2II WEBSITE)

- **Proportionality in practice: Disclosure of information**¹⁵⁷ - The report “Proportionality in practice: disclosure of information” draws on the experiences of Brazil, Pakistan, Peru and El Salvador and examines the practical aspects of the disclosure in which supervisors adopt proportionate regulation in order to encourage the industry to offer inclusive insurance while ensuring consumer protection. Access the report [here](#).
- **Proportionality in practice: Distribution**¹⁵⁸ - Drawing on the experiences of Ghana, Mexico and the Philippines, the report “Proportionality in practice: Distribution” examines the practical aspects of distribution where insurance supervisors are flexible and adjust certain supervisory requirements in order to encourage the insurance industry to offer insurance to the underserved or those excluded from insurance services while protecting consumers. Access the report [here](#).

There is no “one size fits all” approach to applying the Proportionality Principle, but it can be helpful for supervisors to learn from the experiences of other jurisdictions. See Box 8 for published resources on the Proportionality Principle in practice from seven different jurisdictions.

NIA faces many challenges to apply the Proportionality Principle. Based on key informant interviews,¹⁵⁹ specific challenges include (but are not limited to) the valuation of the new microinsurance companies and their minimum capital requirements, how to apply the Proportionality Principle to both microinsurance and commercial insurance companies, and proper monitoring of microinsurance activities. The current support and capacity building on RBC and RBS does not focus on proportionality in the context of inclusive insurance. Longer-term support to the supervisor and the industry on applying the Proportionality Principle would be beneficial to the microinsurance market in Nepal.

Capacity building for the insurance industry

Capacity building of insurance providers can be a key factor to create a better enabling environment for microinsurance. The Insurance Institute of Nepal (IIN) is the premier insurance training institution, tasked with training employees working in the insurance industry as well as those working in banking and financial institutions. IIN is a relatively new organization, established as a Public Limited Company in 2019,¹⁶⁰ and although it is not the only player in the insurance training space, it is the most specialized.

¹⁵⁷ Access to Insurance Initiative. Proportionality in practice: Disclosure of information. Available at: <https://a2ii.org/en/knowledge-center/proportionality-in-practice-disclosure-of-information>

¹⁵⁸ Access to Insurance Initiative. Proportionality in practice: Distribution. Available at: <https://a2ii.org/en/knowledge-center/proportionality-in-practice-distribution>

¹⁵⁹ Based on information provided via key informant interview with NIA on 6 and 9 February, 2023 and consulting actuary to NIA on 9 February, 2023.

¹⁶⁰ https://iin.org.np/?page_id=9

IIN provides courses on life and non-life underwriting, Anti-Money Laundering (AML), agent training, marketing, on-site inspections for regulatory requirements, among other topics.¹⁶¹ It has plans to launch a new course on digital marketing. The organization has trained over 4,500 individuals, but still struggles with insurance companies that lack investment in training their employees, especially those in branch offices outside of Kathmandu, and there is no formal process related to onboarding and training with insurance companies.¹⁶² As an attempt to ensure the industry receives the proper training it needs, NIA is requiring insurers to spend 2% of their expenditure on training. IIN has an active MoU with the Insurance Institute of India.

IIN recently presented its new objectives to its leadership during the annual general meeting, which included plans to collaborate on a Master's in Business Administration (MBA) with a concentration in insurance at Pokhara University, development of a training of trainers (ToT) program to better reach provinces outside of Kathmandu valley, and financial education activities for communities.

The IIN's offering on inclusive insurance is limited to training participants on the content of the regulations and current Microinsurance Directive 2076 (2020). Because of this approach, IIN will update its training based on the new Microinsurance Directive 2023.

The IIN has a small team with limited resources. The key challenge it faces to offer valuable microinsurance training is limited due to their limited technical capacity on curriculum design for microinsurance courses, including much needed content on microinsurance distribution models.¹⁶³

Supply and distribution of inclusive insurance

Microinsurance in Nepal has been quite regulatory driven thus far. Presently, the market is waiting on the forthcoming MI regulations to be issued under the new Insurance Act (discussed in the previous section). Microinsurance supply has largely been driven by life policies, while the non-life products have struggled to take off, especially with subsidized competition from the MOALD Crop and Cattle Program. Though the MOALD-subsidized crop and livestock products are not categorized as microinsurance and were not designed specifically for low-income populations, they do reach rural and low-income communities. For this reason and because of the subsidy they have access to, these MOALD products are an important part of the II supply in Nepal at this time.

The total number of II (microinsurance plus MOALD Crop and Cattle Program) policies issued for fiscal year 2021-22 was just over four million, totaling 4,174,105. In the first eight months of fiscal year 2022-23,¹⁶⁴ insurance companies have issued 4,152,242 policies (see Table 4). The number of microinsurance policies is largely driven by the micro-life insurance, with 98% of the policies issued contributed by life insurers. It is also important to note that the figures for life policies include group policies, meaning that the total number of insureds exceeds this figure for total number of policies. (See Appendix 9 for a table of all microinsurance and MOALD Crop & Cattle Program data for the past six fiscal years).

¹⁶¹ https://iin.org.np/?page_id=165

¹⁶² Based on information provided via key informant interview with the Insurance Institute of Nepal on 8 February 2023.

¹⁶³ Based on information provided via key informant interview with the Insurance Institute of Nepal on 8 February 2023.

¹⁶⁴ Data obtained via data request to NIA. FY 2021/22 figures are not finalized.

Table 4: Inclusive insurance (microinsurance plus MOALD Crop and Cattle Program) market number of policies issued in 2021-22 fiscal year (not finalized)

Types of Micro-insurance policy	FY 2021/22	FY 2022/23*
Life	4,114,191	4,105,755.0
Non-life	24,503	25,226.0
Non-life (MoA Crop & Livestock)	35,411	21,261
Total	4,174,105	4,152,242

*First 8 months of the fiscal year

Life microinsurance¹⁶⁵

Credit-life microinsurance products offered via microfinance institutions (MFIs) drive the relative success of life microinsurance in Nepal. The uptake of savings-linked or endowment type life microinsurance has been negligible thus far. As of 2019-20, NRB issued a provision that banks and financial institutions (BFIs) in Nepal can insure the collateral pledged for loans from the insurance company chosen by the borrower. Apart from that, BFIs will not be allowed to sell any other type of insurance policies except the policies directly related to the credit. NRB cited forced selling of insurance by BFIs as the rationale behind taking this action.¹⁶⁶ Though this did not necessarily have a major impact on the life microinsurance market in its current state given the prominence of credit life, the Life Insurers' Association of Nepal stressed this as a key barrier for their members (likely in relation to commercial life products) and request support in opening this channel back up, with the proper checks and balances in place.¹⁶⁷ If re-opened, this could be an opportunity in the future for endowment, savings-linked, and other types of life microinsurance products not associated with credit.

Life insurers did not use the prescribed life microinsurance product prototypes from NIA (per the previous Directive) but designed their own. The option to use prototype products from NIA could be subject to change with new microinsurance regulations, but it is not likely. Life microinsurance is generally viewed as a profitable business. The distribution channels currently being used are MFIs and cooperatives. Overall, there has not been any innovation for life microinsurance product design nor distribution partnerships nor around creating gender-inclusive solutions. In the commercial life market, MetLife does have a women-specific critical illness product called "LifeCare – Beautiful" that provides coverage for nine female-specific diseases and life coverage, however, this is not for the micro market.¹⁶⁸

In terms of strategic direction of the life microinsurance industry, the Life Insurers' Association does not have a microinsurance specific strategy, nor do the two insurance companies that lead the association.¹⁶⁹

¹⁶⁵ Note: Life microinsurance data for the past six fiscal years was provided by NIA and can be found in Appendix 9. However, due to changes in reporting standards of group and individual life microinsurance policies, we do not present the data in this section as it does not present an accurate picture of the trends in number of policies over time.

¹⁶⁶ Nepal Rastra Bank. Monetary Policy 2019/2020. Available at: https://www.nrb.org.np/contents/uploads/2019/12/Monetary_Policy_in_Nepali-2076-77_Full_Text-new.pdf

¹⁶⁷ Information based on key informant interview with the Life Insurers' Association on 6 February 2023.

¹⁶⁸ <https://www.metlife.com.np/en/health/health-insurance/lifecare/>

¹⁶⁹ Information based on key informant interview with the Life Insurers' Association on 6 February 2023.

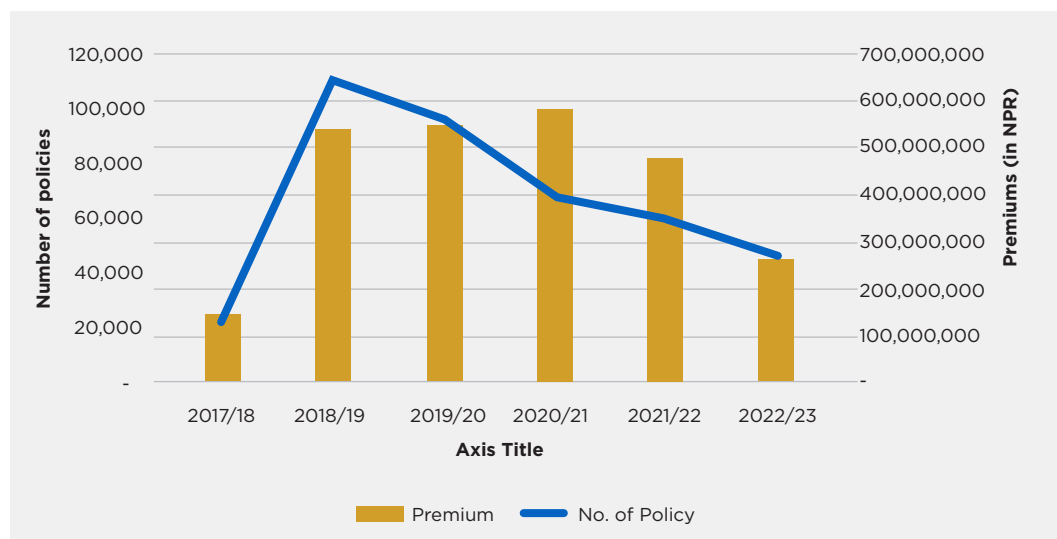
Non-life microinsurance

Non-life microinsurance products in the Nepali market have met several challenges, the latest being the COVID-19 pandemic, which can be clearly seen in Figure 9 below showing a dramatic decrease in number of policies issued. Unlike life insurance companies, non-life insurance companies have been primarily using the prescribed non-life microinsurance product prototypes from NIA (though this could be subject to change with new microinsurance regulations) and they also offer the MOALD Crop and Cattle Program products. Reason being, insurers have not been able to access the MOALD Crop & Cattle Program's subsidy for the prescribed crop and livestock / cattle microinsurance product prototypes, therefore there is no incentive for virtually any non-life companies to offer the prescribed product prototypes.

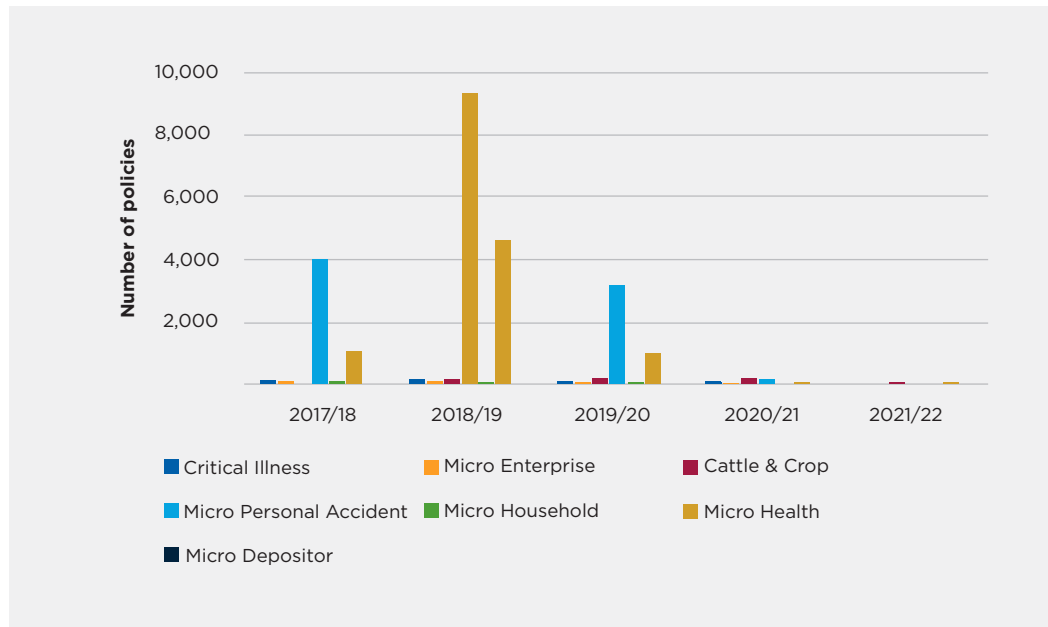
Outside of agriculture insurance, there are a few examples of non-life companies offering health, household / property microinsurance, and personal accident products, though they do not seem to have significant reach (based on the data for number of policies).¹⁷⁰

NIA Non-Life Microinsurance Pool. In an attempt to increase efficiencies by reducing distribution costs and increase insurance awareness, the Nepal Insurers' Association started a microinsurance pool in 2017 to distribute non-life microinsurance products by utilizing cooperatives and Microfinance Institutions (MFIs) as a distribution channel. Nepal Insurers' Association collaborated with the Nepal Microfinance Bankers Association (NMBA) for this initiative, which was supported by UKAID (now FCDO) Sakchyam Access to Finance Programme. In this mechanism, one insurance company was assigned as a pool manager to be responsible for policy issuance and other coordination work. Nepal Insurers' Association sold 24,000+ total insurance policies between fiscal year 2017/18 and fiscal year

Figure 9: Non-life microinsurance number of policies and premiums (in NPR), offered by non-life companies



170 Information based on key informant interview with the Nepal Insurers' Association (non-life association).

Figure 10: Non-life microinsurance number of policies issued through NIA Non-Life MI Pool

2021/22, with the greatest number of policies sold in micro health and personal accident (see Figure 10).¹⁷¹ The scheme was loss making for insurers and insurance distribution was affected by the Covid-19 pandemic. Some of the reasons why the Pool was loss making include: 1) there were issues with adverse selection for health products and instances of fraudulent claims; 2) Some MFI staff also mis-sold the product, resulting in higher claims ratios; 3) In addition, Pool members were not able to reach the scale which is required to make microinsurance profitable. As a result, Nepal Insurers' Association discontinued the scheme.¹⁷²

Agriculture insurance in Nepal. Government-supported agriculture insurance is part of the II story in Nepal. Agriculture insurance in Nepal was formalized from 2013 after the introduction of the Crop and Livestock Directive 2013 from the Ministry of Agriculture (MoA), though insurance companies and other entities were selling agriculture insurance products. The GoN introduced a subsidy for insurance products registered via this program, which helped to increase insurance uptake; insurance companies collected NPR 22.6 million (US\$ 232,000 equivalent)¹⁷³ as a premium in 2013/14 and NPR 1.902 billion (US\$ 15.8 million equivalent)¹⁷⁴ in 2020/21. NIA also allocated districts for each of the non-life insurance companies to ensure presence in all 77 districts of Nepal.

Insurance companies have reported that crop insurance is difficult to administer because of the subsistence nature of farming, and the complicated claim settlement process. In 2020/21, premiums collected in livestock insurance compared to overall agriculture insurance was 92% while other insurance including crop insurance was only 8%. The prescribed crop and livestock microinsurance products (under the previous Directive) had less onerous processes; however, these products have not been eligible for the subsidy from the

171 Data source: Nepal Insurance Authority, April, 2023.

172 Information sourced from interviews with Nepal Insurers' Association leaders and member companies.

173 Average bid rate from 30 June 2014 used for this conversion. 1 US\$ = NPR 94.9

174 Average bid rate from 30 June 2021 used for this conversion. 1 US\$ = NPR 117.4

MoA's Crop and Livestock Insurance Program, and therefore insurers have not been registering products in this category. The new Microinsurance Directive issued in April 2023 is silent on agriculture microinsurance.

Though the government has announced the subsidy of agriculture insurance (80% in 2021/2022 fiscal year), insurance companies have complained that it has taken as many as four years, in some cases, to claim subsidy from the government.^{175, 176} There are also problems with coordination between the relevant government agencies (Nepal Insurers' Association, Ministry of Finance and Ministry of Agriculture), which has caused the delay in subsidy payment. Nepal Insurers' Association has claimed that the government has outstanding payments of NPR 2.9458 billion (US\$ 22.57 million) of agriculture insurance subsidy to insurers. Data showing the outstanding subsidy amounts by company is shown in Table 5, displaying ranges from NPR 25 million to NPR 593.8 million (US\$ 191,000 to US\$ 4.55 million). Insurance companies have claimed that the government has added unnecessary reporting requirements, while the government has claimed that insurers have not completed said requirements. As a result, non-life insurance companies announced in May 2023 that they will stop selling agriculture insurance until they receive outstanding subsidy funds.¹⁷⁷

Table 5: Outstanding Crop & Cattle Insurance Program subsidy owed to insurers

Name of Company	Cumulative outstanding Subsidy (in millions of NPR)	Total Insurance Premium (9 months of this FY), in millions of NPR) ¹⁷⁸	% of outstanding subsidy compared to total premium
Shikhar Insurance	593.8	4,154.9	14%
IME Prudential	498.7	2,467.3	20%
NLG Insurance	337.7	1,811.3	19%
Neco Insurance	301.9	2,263.1	13%
Sagamatha Lumbini Insurance	233.4	3,481.3	7%
Himalayan Everest Insurance	165.6	2,294.9	7%
Siddhartha Premier	169.6	3,352.5	5%
Ajod Insurance	159.2	1,443.3	11%
Nepal Insurance	111.6	1,151.0	10%
Oriental Insurance	106.8	1,073.9	10%
Sanima GIC	97.7	1,654.7	6%
United Insurance	90.2	953.2	9%
Prabhu Insurance	64.2	1,154.9	6%
Rastriya Beema	25	1,995.2	1%

In addition to delays in providing the subsidy to insurers, the subsidy amounts have been volatile. For instance, the subsidy in the last fiscal year reduced to 50% from the 75%. After about 2 - 3 months, it was increased to 80%. Beyond the scope of microinsurance, the subsidy and design of the MoA's Crop and Cattle Insurance Program needs a review,

¹⁷⁵ <https://bizmandu.com/content/20230313122238.html>

¹⁷⁶ Based on information provided via key informant interviews with Sagamatha Insurance, Prudential Insurance, Rastriya Beema Company, Ajod Insurance, Ministry of Agriculture, and NIA

¹⁷⁷ <https://www.merolagani.com/NewsDetail.aspx?newsID-91592>

¹⁷⁸ <https://www.sharesansar.com/newsdetail/how-much-premium-have-the-16-non-life-insurance-companies-amassed-through-chaitra-of-fy-207980-2023-04-27>



BOX 9: GLOBAL RESOURCE: ENHANCING SCALABILITY AND SUSTAINABILITY OF UGANDA'S UGANDA AGRICULTURAL INSURANCE SCHEME¹⁷⁹ (EXCERPT ADAPTED FROM SOURCE REPORT)

A technical and diagnostic review of the Uganda Agricultural Insurance Scheme (UAIS) was performed by the World Bank Group, requested by Uganda's Ministry of Finance, Planning and Economic Development (MoFPED). Findings and recommendations on enhancing scalability and sustainability of the Scheme are provided.

The situation and gap analysis performed of the UAIS yielded findings and recommendations in the following areas:

- Beneficiaries of UAIS by farm size
- Product design and rating

- Need for meso-level portfolio cover for financial institutions lending to farmers
- Organization, staffing, and operating systems and procedures
- Strengthening data and statistics for agricultural insurance in Uganda
- Monitoring and evaluation
- Capacity building for UAIS stakeholders and role of a technical support unit

The report also includes a rapid assessment of agriculture finance and its recommendations, and a proposal for two additional insurance programs.

Read the report here.

redesign, and strategy for sustainability. The review process should include an in-depth problem analysis to identify the root causes of the challenges currently playing out in the market. There could also be lessons learned from international examples on how agriculture insurance is structured, for example, with respect to insurance pools, subsidies, design, etc. See Box 9 for a high-level overview of a technical review carried out on agriculture finance and the Uganda Agricultural Insurance Scheme. A similar exercise could be carried out in Nepal to enhance sustainability of the Crop and Cattle Insurance Program and a way forward.

In recent years, a few companies have piloted index insurance, including Shikhar Insurance, Sagarmatha Insurance, and the USAID-funded project Tayar Nepal.¹⁸⁰ These pilots are targeted to both small holder farmers and commercial farmers but not exclusively defined as microinsurance. Shikhar Insurance piloted weather-based index insurance for apple farmers in Karnali province in 2016 and is still offering the product. There are a few other pilot programs to cover flood risk for paddy farmers that are ongoing. There are concerns about the scalability of index insurance programs because of fragmented farming, different topography in different parts of the country, etc. In addition, there are challenges with accuracy of precipitation data and lack of weather stations. At this point, satellite-based weather index insurance (WII) has not been explored, and it is not clear if satellite-based

179 World Bank. Toward Scaled-Up and Sustainable Agriculture Finance and Insurance in Uganda. 18 September 2019. Available at: <https://elibrary.worldbank.org/doi/abs/10.1596/32331>

180 Information on the Tayar Nepal project obtained via key informant interview on 9 February 2023.

datasets would be a good option – this could be evaluated.¹⁸¹ There is robust experience and interest in index insurance that can be shared across stakeholders. It is clear they have many learnings related to index insurance in Nepal, and the diagnostic research team heard from other non-life insurers, the MoA, and development sector partners¹⁸² about their interest in index insurance. **Therefore, it would be beneficial for Tayar Nepal and implementation partners and any other stakeholders engaged in index insurance pilots to initiate and formalize knowledge-sharing and create a platform for discussion on this topic among the insurance industry, regulator, MoA, data partners (such as the Department of Hydrology and Meteorology), and any other relevant agricultural value chain or other partners.** This could even take the form of an index insurance working group with a strategy and framework for advancing index insurance in Nepal.¹⁸³

In 2022, the International Fund for Agricultural Development (IFAD) carried out a comprehensive, internal study on agricultural insurance in Nepal called “Feasibility Study: Agricultural Insurance in Nepal – Lessons and recommendations for agricultural insurance in the context of the IFAD-financed portfolio.”¹⁸⁴ In the (internal) report, the authors provide key challenges that insurance companies face in offering formal agriculture insurance in Nepal, which we have given a high-level overview of in Box 10.

In addition to presenting the challenges, in its report, IFAD provides several recommendations related to agriculture insurance including: increased capacity building; product development and process improvements; better distribution and bundling of financial ser-



BOX 10: CHALLENGES FOR INSURANCE COMPANIES IN PROVIDING FORMAL AGRICULTURE INSURANCE IN NEPAL (SOURCE: IFAD)

- Lack of actuarial analysis
- Lack of record keeping by farmers
- Limitations of datasets needed for product design, actuarial pricing, and claims settlement
- Accurate and efficient claims settlement
- Coverage durations are currently difficult for short duration seasons
- Moral hazard
- Delay in receipt of premium subsidies by insurers
- Distribution challenges
- Remote areas are difficult and expensive to reach
- Crop insurance is not well developed and is loss making
- Satellite data for weather index insurance – it is not known how accurate existing satellite data is
- Digitalization of insurance processes
- Insurers need partnership and coordination support for agri insurance

¹⁸¹ Martina Wiedmaier-Pfister and Agrotosh Mookerjee. “Feasibility Study: Agricultural Insurance in Nepal – Lessons and recommendations for agricultural insurance in the context of the IFAD-financed portfolio.” IFAD: December 2022. Internal document – not published.

¹⁸² Interest and discussion on index insurance during the Diagnostic Study Validation Workshop held 11 April 2023.

¹⁸³ Information based on discussion during the Diagnostic Study Validation Workshop held 11 April 2023.

¹⁸⁴ Martina Wiedmaier-Pfister and Agrotosh Mookerjee. “Feasibility Study: Agricultural Insurance in Nepal – Lessons and recommendations for agricultural insurance in the context of the IFAD-financed portfolio.” IFAD: December 2022. Internal document – not published.

vices; maximizing cooperatives as a distribution channel; increasing accessibility, modernizing, and evaluating data sets; revisiting the existing segmentation of farmers from the Agricultural Development Strategy; and learning from international examples.¹⁸⁵

Key challenges. The COVID-19 pandemic and MoA subsidy are factors that have affected the lack of success in non-life microinsurance supply; however, these are not the only factors. In addition to the challenges in agriculture insurance summarized in the box above, the following perspectives were expressed:¹⁸⁶

- Lack of clear business case for offering non-life microinsurance
- Lack of information technology capacity in-house at insurance companies
- (Non-life) microinsurance viewed as a corporate social responsibility activity
- Insurers do not receive the appropriate insurance training support that they need
- The premium is not affordable for the prescribed products
- The microinsurance market is not educated and insurers do not dedicate resources to education and marketing

There appear to be many factors that have contributed to the lack of success for non-life microinsurance in Nepal. Before designing new non-life products, NIA should engage with the industry (both life and non-life) to understand what went wrong, what went well, and how can the prescribed products be updated so that they are simple, understood, acces-



BOX 11: GLOBAL RESOURCE: LUMKANI AND FIRE RISK (ADAPTED FROM LUMKANI WEBSITE)

According to the BIPAD Portal, fire risk is high, with natural and non-natural fire events happening frequently in Nepal. A South African company, Lumkani, provides an interesting and relevant case with its holistic approach to reducing and mitigating fire risk and its effects.

■ **The problem:** Living in informal settlements puts enormous social, economic, and financial burdens on households, and it can lead to intergenerational poverty. Several factors contribute to the perpetuation of poverty, including fire, crime and an inability to access basic financial services and technologies to protect assets. Density is a challenge all urban

informal settlements share and is a major risk factor that enables the rapid spread of fires. (Excerpts from lumkani.com)

■ **The solution:** Lumkani reduces fire risk and its impacts through its Networked Fire Detector product. In the event of a fire, the detector transmits a communal alert to all Lumkani detectors in a 60-metre radius so that they will all ring together, providing a community-wide early warning system and response. The product is bundled with funeral and fire insurance (for home or business) to help deal with the impacts of a fire and / or death in the family (due to any reason).

Learn more about Lumkani here.

185 Martina Wiedmaier-Pfister and Agrotosh Mookerjee. "Feasibility Study: Agricultural Insurance in Nepal – Lessons and recommendations for agricultural insurance in the context of the IFAD-financed portfolio." IFAD: December 2022. Internal document – not published

186 Interview with Nepal Insurers' Association

sible, valuable, and efficient (SUAVE) for the microinsurance market. Part of the review process could also include prototyping of the newly designed prescribed products with target microinsurance customers to see if they actually meet demand and respond to key risks (see Box 11 for a global resource on an innovative example of a holistic risk management product that responds to fire risk in South Africa, a prevalent risk people in Nepal face too), as part of the advisory support being provided on the Microinsurance Directive development.

Inclusive insurance distribution

A number of different distribution channels are used to distribute microinsurance products in Nepal. For life microinsurance products, microfinance institutions (MFIs) are used as a prominent distribution channel. MFIs offer mandatory credit life insurance products to the loan clients, which are considered as microinsurance products. In early 2023, 64 MFIs were operating and serving some 3.26 million loan clients.¹⁸⁷ Besides MFIs, cooperatives, individual insurance agents, and branch officers are used as a distribution channel. In the case of non-life insurance, branches, agents, banks, and MFIs/cooperatives are used as distribution channels. Non-life insurers also formed a pool to distribute microinsurance products via MFIs/Cooperatives (also discussed in earlier section), which has been discontinued, for the time being.

Agriculture insurance is mostly driven by branch offices of insurers. A few insurers have also started collaborating with local and provincial governments to distribute insurance. Rastriya Beema Company, for instance, has offered an insurance product to cover personal accident risk of people of Karnali province, using the provincial government as a channel.

Payment Service Providers (PSPs) are distribution channels that are untapped have the potential to reach scale for II products. These PSPs are used for payment of regular insurance products, they are not extensively used to promote microinsurance products. Some of the PSPs have already started selling insurance through their channel (see Box 12¹⁸⁸ for an example of how a PSP is integrating insurance). In February 2023, NRB has licensed 27 PSPs and cumulatively they are serving some 16 million clients.¹⁸⁹ Increased penetration of mobile and internet connectivity along with the acceleration of digital usage post pandemic has driven usage of digital financial services. According to a report of Nepal Telecommunication Authority, more than 36 million¹⁹⁰ SIM cards are distributed compared to the population of 30 million.

While there is potential of leveraging these multiple distribution channels, insurers have not gone beyond traditional methods. To incentivize the use of new and innovative distribution channels, regulators should be flexible while insurers should also come up with innovative ways to embed insurance products in the customer journey.

187 <https://www.nrb.org.np/departments/mfd/> (Quarterly progress report of MFIs)

188 Information based on interview with eSewa staff in May April 2023.

189 https://www.nrb.org.np/contents/uploads/2023/03/2079_10_P-S-Indicators-of-Magh.pdf

190 <https://nta.gov.np/wp-content/uploads/2023/03/MIS-Mangsir-2079.pdf>



BOX 12: CURRENT EXAMPLE OF DIGITAL DISTRIBUTION OF INSURANCE IN NEPAL FROM ESEWA

eSewa, a leading payment service provider of Nepal, has launched “eSewa Care,” a hospitalization cash insurance product along with other benefits, in partnership with Himalayan Everest Insurance.

eSewa collects NPR 360 (around US\$ 3) as insurance premium and covers up to NPR 230,000 (US\$ 1,760). The product includes hospital cash of NPR 10,000 (US\$ 77), accidental death benefit of NPR 100,000 (US\$ 765), medical expenses due to accident of NPR 100,000 (US\$ 765), funeral and transportation (in case of death) of NPR 20,000 (US\$153). Verified clients (via Know Your Client “KYC” processes) of eSewa can purchase the product in three simple steps without providing many details. Clients can also receive claims by submitting necessary documents online without visiting the insurance company branch office, in most cases.

In the first nine months of this fiscal year, eSewa has sold ~20,000 “eSewa Care” insurance policies. Since the hospital cash benefit (for hospitalization risk) tends to have minimal moral hazard, the claim settlement process is straightforward.

eSewa has also done seamless integration between insurance companies, eSewa, and the Foreign Employment Management Information System for the management of foreign term life insurance subscriptions which is mandatory for all migrant workers. It has made it much easier for migrant workers to subscribe to mandatory term life Insurance through a simple and transparent process. Insurers can enroll clients in the policy within a minute. This service is integrated by other payment service providers in the country.

Social protection programs relevant for inclusive insurance in Nepal

Social protection is a fundamental right recognized in Nepal’s Constitution of 2015. The GoN has implemented a number of social protection programs, but coverage remains limited. There are opportunities for the GoN to better align with the private sector. For example, the government is offering health insurance while the roles of private sector remain unclear. Private sector insurers should also better understand what is being offered by both the health scheme and the Social Security Fund (SSF) so that they design complementary products.

Government health insurance: The government of Nepal started health insurance under the Health Insurance Board (HIB). The enrolment of insurance started from Kailali district of Nepal from 2016 and gradually expanded to other districts. After 6 years of implementation, the government-run health insurance has been expanded into all 77 districts.¹⁹¹ Insureds pay an annual premium of NPR 3,500 (US \$26) to cover medical expenses of NPR 100,000 (\$750) for a family of up to 5 members. Premiums for senior citizens above 70 and handicapped people are borne by the government.¹⁹² Some local units have also subsidized the partial or full premium to purchase health insurance. Subsidizing the pre-

¹⁹¹ <https://health-policy-systems.biomedcentral.com/articles/10.1186/s12961-022-00952-w>

¹⁹² <https://tkpo.st/37wkPjd>

mium varies between local units; in some of the local units, they have provided subsidy to all the residents, while in many local units, only selected groups (such as poor households, people from marginalized community, single women) receive the subsidy. As per the latest data, a total of 6.4 million people are covered by health insurance, which is 21.3% of the total population.¹⁹³ Koshi has the highest coverage (619,488 families) from health insurance while the Karnali province has the lowest coverage (107,016 families). The HIB has received more than 26 million claims to date.¹⁹⁴ There are few concerns raised in the effectiveness of the program. Many hospitals have complained that they have not received claim amount from the government on time. While there is an ongoing discussion of designing a universal health insurance scheme of the government, private insurers can design complementary insurance products.

Social Security Fund.¹⁹⁵ The Social Security Fund (SSF) of Nepal is a government-run organization that provides social security benefits to employees in the formal and informal sectors. In line with the International Labour Organization's Convention Number 102, the SSF offers four different schemes including: maternity, sickness, injury, and old age benefits, among others. More than 17,000 employers are already registered at SSF while 526,000+ people have started participating in the scheme. So far, the SSF has provided claims to contributors worth NPR 4.47 billion (US\$ 34.2 million).¹⁹⁶

The SSF has recently started accepting contributions from informal sector as well as migrant workers. This could help cover some of the protection gaps that the inclusive insurance target market face, but not all. There will be opportunities for the private sector to design solutions that complement and fill gaps in coverage from the SSF benefits. For example, the SSF provides limited health insurance coverage along with personal accident insurance and retirement benefits. The health insurance component is not sufficient for individuals, presenting an opportunity for private sector players to provide complementary products.

Demand for inclusive insurance

There are small-scale studies and components of larger financial inclusion reports that contain relevant information about microinsurance demand (or factors of demand) in Nepal. However, there does not exist a large database of (micro)insurance demand information, and insurers are not collecting this data themselves. Nepali insurers expressed that the target market has low awareness of insurance, in general, and they themselves do not know much about the target market either.¹⁹⁷

A 2018 microinsurance market study¹⁹⁸ carried out in Nepal included a 303-respondent survey, looking at risks faced and coping strategies of low-income households. Respondents reported the following risks faced, in order of severity of the challenge:

193 Extracted from health insurance dashboard on March 8, 2023, <https://dashboard.hib.gov.np/>

194 <https://dashboard.hib.gov.np/>

195 Information based on interview with the Social Security Fund on 6 February 2023.

196 Social Security Fund. Summary Report. Available at: <https://ssf.gov.np/summary-report>

197 Information based on key informant interviews (6 – 10 February 2023) and perspectives expressed during the Inception Workshops on 7 February and 11 April 2023.

198 Sakchyam Access to Finance, UKAid, and Louis Berger. Study on the Microinsurance Industry in Nepal. Sakchyam Access to Finance, UKAid: 2018. Accessed at: https://www.a2ii.org/sites/default/files/2020-09/study-on-the-microinsurance-industry-in-nepal_final.pdf

- i. health related problems,
- ii. death of livestock,
- iii. natural disaster,
- iv. decrease in agriculture production, and
- v. problem in livestock.

61% of respondents were not prepared for the previously-mentioned events. Saving at home and at a financial institution were common ways of preparing for risk events. In terms of covering expenses for risk events, 34% of respondents received help from friends and family. Researchers have used this study to understand microinsurance in Nepal; however, private sector players (i.e., insurers) have generally not used this resource.

Also valuable for understanding potential microinsurance demand is to know what people in the target market worry about. The 2021 Global Findex Database¹⁹⁹ includes several data points around this. For example, in Nepal, 57% of respondents said they were 'very worried' about not being able to pay for medical costs in case of a serious illness or accident, and 29% were also 'very worried' about not being able to pay school fees. When it comes to the 'most worrying financial issue,' the largest proportion of respondents (48%) said it was 'paying for medical costs in case of a serious illness or accident.'²⁰⁰

A recent baseline survey of financial literacy in Nepal was carried out by NRB. The study shows that 30% of the adult population uses insurance products; 26.78% of the population has life insurance products while only 8.46% of the population has non-life products.²⁰¹ The survey also showed the gender gap in the uptake of insurance products. A total of 34.62% of men hold insurance products and only 25.63% of women hold insurance products. **Though not microinsurance specific and perhaps differing from supply side data available, the study findings highlight the prevalence of life insurance products and the gender gap when it comes to women policyholders. In the context of protecting low-income and vulnerable populations against disaster risks, it appears there is much to be done.**

Related to agricultural insurance, in the agriculture insurance feasibility study conducted by IFAD²⁰² (mentioned in the previous section), challenges for farmers regarding agriculture insurance were shared. Box 13 highlights the key points from the study. Several of these insights correlate with product design challenges discussed in the context of the supply-side insurance companies in the previous section.

In conclusion, there is data available about low-income and vulnerable populations that illustrate factors of demand for microinsurance. Insurers need to be able to harness that information and develop products that respond to those demands as well as present a business case for their companies. Currently, with the recent activity in the sector, including the Microinsurance Directive, this presents a unique opportunity to spread awareness

199 <https://www.worldbank.org/en/publication/globalfindex>

200 <https://www.worldbank.org/en/publication/globalfindex>

201 <https://www.nrb.org.np/contents/uploads/2022/12/Baseline-Survey-on-Financial-Literacy-in-Nepal-including-Financial-Inclusion-Indicators.pdf>

202 Martina Wiedmaier-Pfister and Agrotosh Mookerjee. "Feasibility Study: Agricultural Insurance in Nepal – Lessons and recommendations for agricultural insurance in the context of the IFAD-financed portfolio." IFAD: December 2022. Internal document – not published

**BOX 13: CHALLENGES FOR FARMERS WITH FORMAL AGRICULTURE INSURANCE IN NEPAL**

(SOURCE: IFAD)

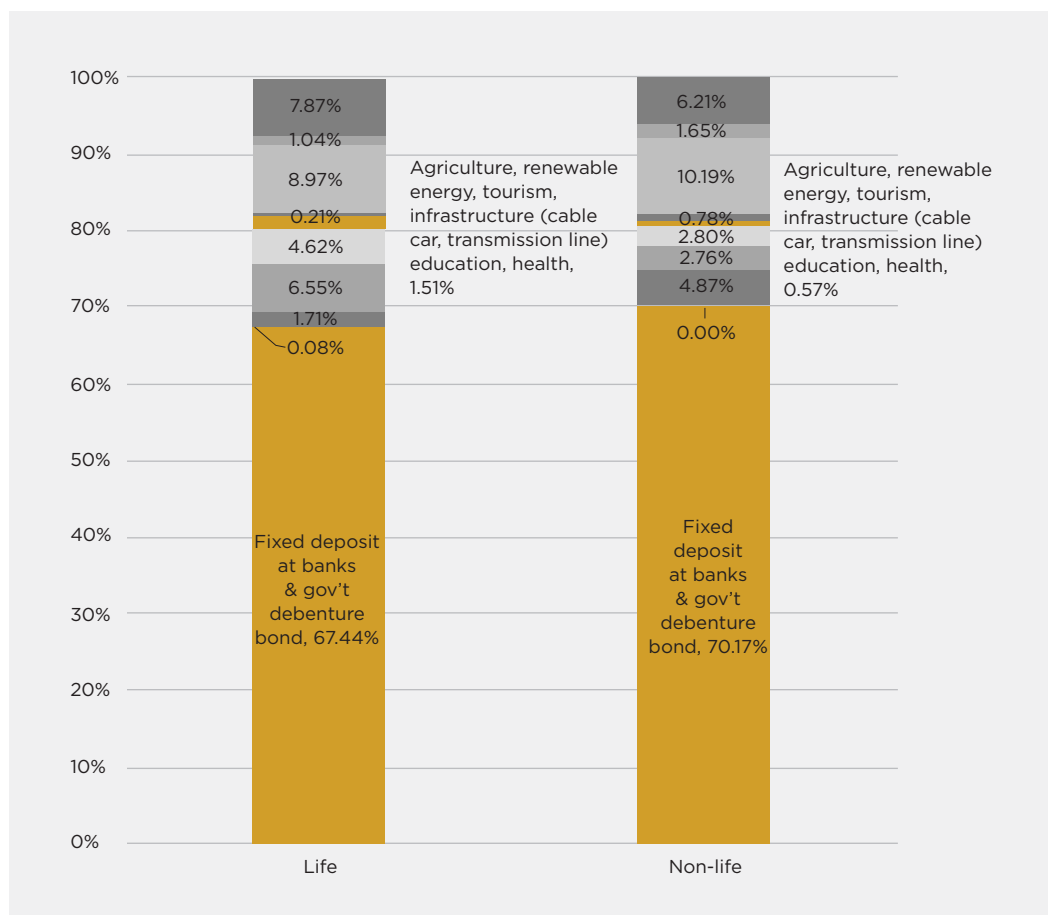
- Low awareness
- Difficulty in paying premiums (lack of affordability)
- Difficulties with claims procedures and delays with claim payments
- Crop insurance is generally not attractive to farmers - generally, only the input cost is paid (very few yield-based insurance available)
- Sum insured is low (because based on input cost) and not a transparent process in setting this
- Extension services - for livestock insurance, veterinary care providers need capacity building on insurance and for crop insurance, there are few services available.
- Insurance covers are not always relevant
- Remoteness creates awareness and access barriers to insurance and extension support
- Smallholders are not easily served (as opposed to the larger commercial farms)

about insurance and at the same time, enhance the value of products. For example, as part of the technical assistance being provided to NIA regarding microinsurance regulations (including the Directive), there could be prototype testing of the prescribed products from NIA and the feedback could be incorporated into the new re-designs that are happening now / soon. There could also be an Innovation Lab to support insurers on conducting their own demand research and how to turn demand information into valuable microinsurance. Awareness campaigns for the target market could be linked with these activities. Additionally, research on the target market that shows a business case, like market sizing of various segments, could be beneficial to engage insurers in better understanding the market and developing products for them.

INFRASTRUCTURE INVESTMENT AND THE INSURANCE INDUSTRY

Insurers' current investments. The insurance sector has large pool of investments which can be leveraged for the development of the country. Investments for insurers, need to be secured, and government needs to provide conducive environment for these investments. From the most recent available data, both life and non-life insurance companies in Nepal primarily invest in fixed deposits at banks and government debenture bonds, accounting for 67% of life insurance company investments and 70% for non-life companies (see Figure 11).²⁰³ In the category of investments that includes infrastructure, companies invested very little, with 1.5% for life and 0.6% for non-life companies, also presented in Figure 11.

Figure 11: Investment portfolio make-up for life and non-life insurers in Nepal



New Guideline on insurance investments. NIA recently issued a new Guideline on insurer investments, which is summarized in Table 6 below. Life and non-life companies can invest a maximum of 10% in the category of investments that includes infrastructure (“Agriculture, renewable energy, tourism, Infrastructure, Education, Health”), while the newly established microinsurance companies are prohibited from investing in this category.

In an interview with the Life Insurance Association, the leadership emphasized the lack of and need for appropriate and differentiated investment instruments for insurance companies, especially life insurers.²⁰⁴

Table 6: Summary of insurer investment sectors and limits from new Investment Guideline issued by Nepal Insurance Authority²⁰⁵

Sector	Maximum limits			
	Micro-life insurance	Micro-non-life insurance	Life insurance	Non-Life insurance
Debenture & bond issued by Nepal Government	25%	25%	25%	20%
Fixed Deposit at Banks (A Class Bank & Infrastructure Bank)	30%	30%	30%	30%
Fixed Deposit at Banks (B Class Bank)	10%	10%	10%	10%
Fixed Deposit at Banks (C Class Bank)	5%	5%	5%	5%
Preference share, bond & debenture of Financial Institutions	30%	30%	30%	20%
Bond, debenture listed in the stock exchange of Nepal	20%	20%	20%	20%
Shares listed in the stock exchange of Nepal	10%	10%	10%	10%
Citizen Investment Trust & Mutual Fund	5%	5%	5%	5%
Real estate			10%	10%
Agriculture, renewable energy, tourism, Infrastructure (cable car, transmission line) Education, Health			10%	10%
Shares of investment company			5%	5%

204 Information from interview with the Life Insurance Association in February and April 2023.

205 NIA. Investment Guideline for Insurance Companies. Available at : <https://nib.gov.np/wp-content/uploads/2022/12/2.-%E0%A4%A8%E0%A4%B-F%E0%A4%B0%E0%A5%8D%E0%A4%9C%E0%A5%80%E0%A4%B5%E0%A4%A8-%E0%A4%AC%E0%A5%80%E0%A4%AE%E0%A4%95%E0%A4%95%E0%A5%8B-%E0%A4%B2%E0%A4%97%E0%A4%BE%E0%A4%A8%E0%A5%80-%E0%A4%A8%E0%A4%BF%E0%A4%B0%E0%A5%8D%E0%A4%A6%E0%A5%87%E0%A4%B6%E0%A4%A8.pdf>

CONCLUSION AND RECOMMENDATIONS

This diagnostic study report has captured the current status of inclusive insurance and risk finance in Nepal and through analyzing secondary data, interviewing key stakeholders in these sectors, and receiving feedback via two workshops, developed recommendations for UNDP and other development partners, government actors, and private sector. This report is merely a starting point for advancing inclusive insurance and DRF in Nepal.

Table 7: Recommendations on disaster risk finance²⁰⁶

Key market status / challenge	Recommendation
<p>1. Capacity building on DRF. GoN has developed strong policies on DRM and DRF; however, the institutions tasked with implementing these efforts are not well informed or trained on DRF, especially ex-ante DRF instruments. In addition, the lists of “vulnerable groups” at the local and ward levels are not standardized and exclude important, at-risk groups. When it comes to DRF solutions and relief, getting the lists right is crucial.</p>	<p>Provide capacity building on DRF, including on basic DRF planning, execution of existing funds, and implementation of existing public financial management rules. After basic training, then risk transfer and other DRF tools could be introduced. This would be for all levels of government with a focus on municipal governments, potentially via a training of trainers model. One example could be a disaster, credit, and insurance unit with trained human resources in all local bodies.</p> <p>Support the municipalities to clarify the definition of “vulnerable groups,” standardize it, and populate the databases with excluded and vulnerable groups. (Reference ‘A Common Framework for Gender Equality & Social Inclusion’: asiapacific.unwomen.org)</p>
<p>2. DM Funds operating guidelines. NDRRMA has developed operating guidelines for the use of disaster management funds at all levels of government. However, not all provincial and local levels have guidelines, and for those that do, not all are following the standardized guidelines.</p>	<p>Assist to standardize DM Fund operating guidelines for provincial and local governments. This, along with capacity building on DRF from Recommendation 1, can strengthen the municipalities to develop DRF solutions beyond post-disaster relief and implement in a more coordinated approach.</p>
<p>3. Municipal level DRF solutions. At the sovereign level, an earthquake model and sovereign risk transfer instrument are under development and will be rolled out in 2024. Flood models are being worked on. However, the municipalities are not strong on their DRF solutions.</p> <p><i>Caveat: This recommendation is predicated on municipal governments first engaging in capacity building on DRF (Recommendation 1) and DM Fund operating guidelines (Recommendation 2)</i></p>	<p>After prior recommendations on DRF capacity building and standardizing the DM Fund Operating Guidelines, strengthen select municipalities, as appropriate, by supporting the development of DRF solutions for floods and landslides, including technical support on risk assessment of public assets.</p>

206 This list of recommendations was discussed with key stakeholders in a Validation Workshop held 11 April 2023 in Kathmandu. Feedback from participants has been incorporated into the recommendations presented here.

Key market status / challenge	Recommendation
<p>4. Coordination on DRF activities. There are multiple public, private, and development sector actors involved in DRF in Nepal. There should be coordination to ensure the best mix of DRF instruments and inputs, and leveraging of the learnings and investments.</p>	<p>Develop / maintain a system for coordination (e.g., the National Platform for DRR or something similar). All stakeholders should consult the DRF National Strategy 2078 Implementation Plan short-, medium-, and long-term goals and suggested responsible entities (developed by NDRRMA). For stakeholders interested in developing market-based financial instruments, they should consult Section 2 of the Implementation Plan, especially the ‘mobilization process’ points.</p>
<p>5. Risk assessments. Risk assessments for specific hazards and multi-hazard have been carried out, but NDRRMA has expressed need for additional support on risk assessments.</p>	<p>Address priority gaps in risk assessments. Based on need and demand from NDRRMA and its partners, potentially connect with other initiatives for support on risk assessments and modelling, e.g., the Global Risk Modelling Alliance (GRMA).</p>

Table 8: Recommendations on inclusive insurance²⁰⁷

Key market status / challenge	Recommendation
<p>6a. Support to Microinsurance Directive and related regulations</p> <p>The new Insurance Act 2022 includes a provision to establish standalone microinsurance companies, but a new Microinsurance Directive and supporting regulations is needed. NIA issued a Directive in April 2023, but it is understood that a more comprehensive Microinsurance Directive is forthcoming. The directive will have a critical and longer term implications for the microinsurance market.</p>	<p>A PRIORITY ACTION: UNDP has begun supporting NIA on Microinsurance Directive development. This includes support on how to regulate microinsurance offered by the newly introduced standalone microinsurance companies as well as commercial insurance companies, so that there is a fair approach in the market.</p> <p>Potentially draw from processes and guidance in Access to Insurance Initiative (A2ii) Toolkits 1, 2, and 4, which aim to support regulatory authorities to create an enabling environment for the development of microinsurance</p>
<p>6b. Prescribed microinsurance products, especially non-life and agriculture. The previous Microinsurance Directive included qualitative and quantitative definitions of Microinsurance. The quantitative definitions included maximum sums insured and premium rates for a variety of life and non-life prescribed products. The take-up has been mainly driven by life policies designed by insurers themselves. Non-life, prescribed microinsurance has not been successful as expected</p> <p>The forthcoming comprehensive Microinsurance Directive will include updated, prescribed products. The market and NIA need to further analyze why the prescribed products, especially the non-life products, did not perform as expected, and see what can be improved.</p> <p>Insurers were not able to access MOALD subsidy for the prescribed crop and livestock microinsurance products, meaning that virtually no insurers offered these products and instead opted to offer the traditional Crop and Cattle products, which were not designed with low-income target groups in mind.</p>	<p>A PRIORITY ACTION: Assess the value of the microinsurance prescribed products (including pricing), particularly non-life, being developed, and involve the industry. This could be done by rapid prototyping of the newly designed prescribed products with target low-income customers to see if they actually meet demand. Ensure gender-sensitive prototypes are designed and tested with both women, men, and vulnerable groups.</p> <p>For agricultural insurance, facilitate NIA and the MOALD to learn from international examples on how agriculture insurance is structured (e.g., with respect to insurance pools, subsidies, design, etc.).</p> <p>Facilitate a discussion and action plan between NIA and MOALD on accessing the subsidy for crop and livestock microinsurance products (if the subsidy is sustainable – see Recommendation 8 below).</p>

²⁰⁷ This list of recommendations was discussed with key stakeholders in a Validation Workshop held 11 April 2023 in Kathmandu. Feedback from participants has been incorporated into the recommendations presented here.

Key market status / challenge	Recommendation
<p>7. Implementing the Proportionality Principle. NIA is applying risk-based capital and risk-based supervision. Along with this comes implementation of the Proportionality Principle, which has significant implications for microinsurance. However, the current activities are not microinsurance specific.</p>	<p>Coordinate / facilitate a program to provide support to NIA as it applies the Proportionality Principle, particularly with respect to microinsurance development, including on distribution and other important areas where the Proportionality Principle should be applied.</p>
<p>8. Microinsurance training. Specific training for microinsurance is currently limited to teaching the content of the regulations. Insurers need more robust training on microinsurance including: business models, development of business cases, research, new product development, distribution & partnership development, digital distribution, data collection, data analytics (relevant to commercial and microinsurance), developing, managing and publication of gender disaggregated data, and understanding demand.</p>	<p>Provide technical assistance to support the key insurance training institute(s) (e.g., Insurance Institute of Nepal) with design of microinsurance curriculum and capacity building of insurers on microinsurance. Draw from international examples and best practices.</p>
<p>9. Bancassurance. Nepal Rastra Bank (NRB) allows banking and financial institutions to insure the collateral pledged for loans, by the insurance company chosen by the borrower. However, BFIs are not allowed to sell any other type of insurance policies except the policies directly related to the credit. This has implications for microinsurance distribution via BFIs, including microfinance institutions.</p>	<p>Facilitate discussions between NIA, NRB, and the industry to develop a way forward to open this channel that includes the necessary checks and balances.</p>
<p>10. Distribution. Microinsurance distribution channels such as digital channels, provincial and local governments (including as part of DRF solutions), and cooperatives are currently under-utilized and could be leveraged more by insurers.</p>	<p>Support insurers to leverage potential distribution partnerships with digital channels, provincial and local governments, and cooperatives to design solutions that cover the losses of low-income households.</p> <p>Analyze what has worked in international context as well as lessons learnt from initiatives using different distribution channels in Nepal to devise strategies on utilizing alternative distribution channels.</p>
<p>11. Understanding microinsurance demand: Insurers have difficulty understanding the target market and demand for microinsurance.</p>	<ol style="list-style-type: none"> 1) Prototype testing of the prescribed products from NIA and use feedback on the new re-designs that are happening now / soon (see Recommendation 1b); 2) Launch Innovation Lab to support insurers on conducting their own demand research (short-term mix of technical assistance, training, and financial support for a group of insurers) 3) Research on the target market that shows a business case (since this is part of the problem for supply side), such as market sizing of various segments (e.g., women, SMEs, smallholders, etc.)

Key market status / challenge	Recommendation
<p>12. Actuarial capacity. Nepal has an active actuarial society, ASN, and an actuarial program at Tribhuvan University, which was established in 2016. Despite this, there is a lack of qualified actuaries in the market. The majority of actuarial graduates work in life insurance due to limited opportunities in non-life. There is significant outsourcing of the “appointed actuary” function.</p>	<p>Support various interventions related to the supply, demand, and enabling environment for actuarial capacity, including: 1) establishing in-house actuarial capacity at NIA, 2) reviewing and adapting the definition of “appointed actuary” function to align with market needs, 3) providing mentorship guidance and technical training support for actuarial graduates and practitioners to increase their confidence and capacity in actuarial work, and 4) collaborate and coordinate with the UNDP-Milliman Global Actuarial Initiative to support and align with capacity-building efforts..</p> <p><i>Note: Several key recommendations are / will be carried out by the Global Actuarial Initiative (part of UNDP IRFF activities). A summary of interventions is provided in Appendix 8.</i></p>
<p>13. Crop and Cattle Insurance Program and sustainable subsidy. The government supported crop and livestock insurance products designed by the MOALD under the Crop and Cattle Program are currently being redesigned / and updated based on market feedback and use of data. Cattle insurance has been successful under this program, but crop insurance has been difficult to design and administer.</p> <p>Non-life insurers are experiencing great difficulty in receiving the subsidy in a timely manner for the MOALD’s Crop and Cattle Insurance Program. Even though the subsidy comes (years) late, they are still expected to pay claims on time, causing financial problems.</p> <p>The overall sustainability of the subsidy is not known and the subsidy amount seems to be dependent on government administration decisions.</p>	<p>Provide technical assistance that includes: A review of the current program and root causes of existing challenges (in particular subsidy distribution delays); recommendations on smart subsidy design and sustainability; and best practice learnings from other markets, including on index insurance. This could be packaged in a policy paper to the MOALD / GoN.</p>
<p>14. Index insurance learning. There is interest and some pilots in progress, but several challenges related to data, lack of weather stations, potential of scalability across geography, and current processes within the context of agriculture insurance in Nepal, need to be reflected on.</p> <p>Index insurance is very nuanced and not a “silver bullet” solution. Reflection on the existing pilots should happen, along with discussion among relevant stakeholders (because there are many when it comes to index insurance).</p>	<p>Facilitate knowledge sharing and create a platform for discussion on index insurance with the insurance industry, regulator, MOALD, data partners (such as the Department of Hydrology and Meteorology), development partners, and any other relevant agricultural value chain actors or other partners to reflect on the pros, cons, and way forward. This could take the form of a multistakeholder working group that develops a strategic framework and / or guidelines for those working on index insurance projects in Nepal.</p>
<p>15. Awareness building of the target market. Awareness of (micro)insurance is low among the low-income and vulnerable populations in Nepal.</p> <p>Large-scale awareness campaigns can be costly and potentially ineffective if there are not good products in the market to support the insurance financial education activities.</p>	<p>NIA and sector stakeholders work together to develop an effective and efficient way to incorporate insurance awareness and financial education into existing or new activities. One example could be developing an editable toolkit of (gender-sensitive) awareness and marketing collateral (endorsed and co-branded with NIA) that insurers and their distribution partners can leverage for their own purposes.</p>

APPENDICES

Appendix 1:

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List of organizations interviewed and consulted

- Nepal Insurance Authority
 - National Disaster Risk Reduction and Management Authority (NDRRMA)
 - Ministry of Federal Affairs and General Administration
 - Ministry of Agriculture and Livestock
 - Social Security Fund
 - Life Insurers' Association
 - Nepal Insurers' Association
 - Insurance Institute of Nepal
 - Prudential Insurance
 - Ratriya Beema Company
 - Chhinek Microfinance
 - Ajod Insurance
 - Himalayan Re
 - Asian Development Bank
 - World Bank (global team)
 - National Insurance Company
 - Japan International Cooperation Agency
 - Taya Nepal project team
 - UN Women
 - Access to Insurance Initiative (consulted)
 - International Fund for Agricultural Development (consulted)
 - Global Risk Modelling Alliance (consulted)
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Appendix 2:

Diagnostic study research questions – detailed version

Table 9: Research questions addressed by diagnostic study in Nepal (to the greatest extent possible)

Topical area	Research questions
Underlying risk and development information	<p>Hazard Profile: What types of risks does Nepal face? How frequently do they occur? What is their intensity? Where in the country do they occur? Is there any projected future impact of such crises (e.g. due to climate change)?</p> <p>Crisis and Disaster History: What past crises have occurred (including COVID-19)? What was the human impact? Economic / cost / fiscal impact? Geographical distribution?</p> <p>Political Economy: What political risks and concerns are prevalent in Nepal (especially those with relevance to insurance and risk finance markets and decisions)?</p> <p>Development Dynamics: In Nepal's population, what are the current levels of poverty, urban vs. rural residence, financial inclusion, literacy, vulnerability and exposure to key risks, informal employment, workforce participation by sector? How do laws, policies, and cultural frameworks affect women? What does Nepal's broad economic growth outlook and which are the key productive sectors for the country?</p> <p>Technology: What is the level of mobile and internet penetration? What other technologies are readily available and highly accessed? What does the current technology ecosystem look like? What are current key initiatives?</p> <p>Data Mapping: What data and which sources are available that are relevant to both inclusive insurance and risk finance?</p> <p>Recommendations: Where are investments needed to understand baseline information and data?</p>
Market conditions for inclusive insurance	<p>Overview of Current Market: What types of providers, products, distribution channels, geographical coverage, and performance make up the current insurance and inclusive insurance market in Nepal?</p> <p>Legislation, regulation, policies, institutional capacity (the enabling environment): What current legislation and regulations govern inclusive insurance in Nepal? What current financial inclusion or industry-related policies exist? What are the roles of Ministry of Finance and Ministry of Agriculture and Livestock Development and how do they support inclusive insurance? What is the role of the newly established Nepal Insurance Authority? Are any international regulations adopted? How are investments by insurance governed and regulated?</p> <p>Market Demand: What is the size of the target market for inclusive insurance in Nepal and what are key segments and geographies? What is the current understanding and perception of insurance? Which risks are priorities and how do people currently cope with them?</p> <p>Supply, Providers: What is the current level of outreach for inclusive insurance? Geographic and economic outreach? What types of products are being offered and who are the providers? What is the performance like? Are these products valuable and meeting the needs of clients? Which distribution channels are used? What marketing channels are used? What are the opportunities and areas for growth?</p> <p>Recommendations: Based on the identified challenges and gaps, what are next steps and options both for work on the enabling environment as well as work to develop and deploy inclusive insurance products, tools and services with partners for both UNDP and other key stakeholders in Nepal?</p>

Topical area	Research questions
Market conditions for risk finance	<p>Existing Assessments of Disaster Risk: What, if any, risk assessments have been undertaken in Nepal? How up to date are they, what is the geographical coverage, what types of hazards are assessed, what is the quality of the underlying data, and the resolution of the output? How are the risk assessments used by government and / or other stakeholders?</p> <p>Fiscal Impact: What was the fiscal impact of major past disasters, especially through unplanned additional expenditures (at the federal and municipal levels)? What were government expenses due to both explicit and implicit contingent liabilities? What, if any, forgone revenue due to disaster was there?</p> <p>Existing Legal and Institutional Framework: What are the relevant laws and institutions that govern resource mobilization and execution, especially related to DRM and DRF? What are the laws governing budget processes and what are the actual, current practices? What is the post-disaster budget execution process? What are the laws on DRM and DRF? What is the institutional structure for DRF in Nepal (which institutions are involved and how)? What is the role and capacity of sub-national actors? Level of effectiveness of all of these aspects?</p> <p>Existing Disaster Risk Finance Mechanisms and Instruments: How does Nepal currently finance disaster-related expenditure, if at all? What mechanisms has the country put in place to mitigate the financial risk of disaster? Is there evidence of explicit risk layering in the way Nepal manages its disaster finance? Which, if any, ex-ante and ex-post DRF instruments are currently in place and how do they work? Effectiveness?</p> <p>Funding gap analysis: What is the potential shortfall of funds a government may face in the wake of disaster (partially based on the estimated contingent liability and the info on available DRF instruments)?</p> <p>Recommendations: What are the gaps in the enabling environment (data and risk assessments, legislative and institutional component) and which areas can UNDP work with government on improving DRF? Are there any substantial gaps in current risk financing mechanisms and processes where UNDP and partners could work with government to address? Are there advocacy activities that could be pursued with UNDP and partners to better articulate the value of DRF?</p>
Insurance / risk finance and development integration	<p>In Development Frameworks: How are insurance and risk financing articulated in various key development frameworks the government may have, including internationally supported processes and national development processes (ie NDCs, NAPs, PDNAs, strategic plans)?</p> <p>In Development Financing: How are insurance and risk financing currently articulated within country financing frameworks, how are they featured, and what are the results?</p>
Market conditions for insurance investment	<p>Regulation: How are investments by insurers governed or regulated? Are infrastructure investments or “infrastructure” defined/ addressed in your insurance laws and regulations. If so, how? Are insurers allowed to invest in infrastructure projects? If so, what are the restrictions and to what extent do insurers participate?</p> <p>Government Policy: Does the government encourage private sector investments in infrastructure projects? Are Public-Private Partnerships (PPPs) permitted? Do investors have access to government plans on infrastructure?</p> <p>Private sector Insurers: Are insurers allowed to invest in infrastructure? What are the barriers in doing so (beyond regulations / policy)? Understand how insurers invest in local infrastructure projects or what their plans are.</p>
Gender	Cross-cutting themes incorporating questions from gender checklist developed by IRFF team, where possible.

Research team and approach. From December 2022 to May 2023, the MicroInsurance Centre at Milliman (MIC@M) conducted the study activities via the following four-phased approach:

- Phase 1: Inception report (included initial research and inception report draft)
- Phase 2: Inception package (included multi-stakeholder inception workshop and package, including revised inception report with notes from workshop; Inception workshop held in Feb 2023)
- Phase 3: Draft report and analysis package (included primary research with key stakeholders, analysis, and report drafting)
- Phase 4: Revised report and validation (included a validation workshop, final data gathering, a revised report, and development of a summary report).

The diagnostic team employed the research and data analysis methods presented in Table 8 below. A combination of secondary and primary research was conducted. In addition to critically processing and interpreting the information and data collected for the study, the research team’s analysis included triangulation with multiple data sources and validation via a multi-stakeholder workshops and bilateral interviews.

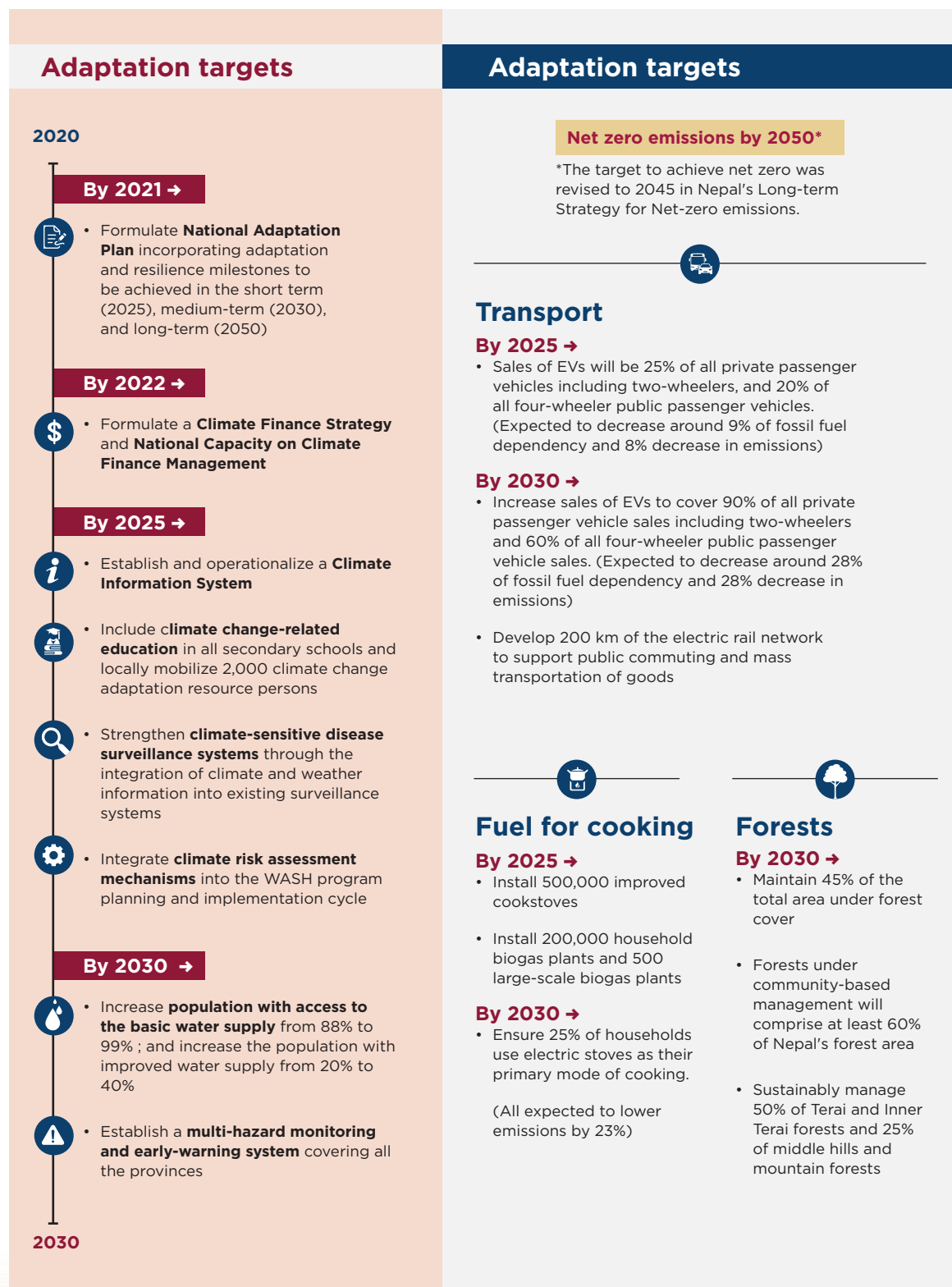
Table 10: Methods of data collection

Data type	Research method	Objectives	Data source
Secondary data	“Desk research” or internet search-based data collection	Answer as many of the research questions (see Table 7) as possible	See Appendix 1 for working bibliography
	Data request to specific organization (ie government ministry, Nepal Insurance Authority, association, insurance company)	Answer research questions with data that exists but is not publicly available	Data requests to specific organizations are included in interview question guides
Primary data	Key informant interviews	<p>Inclusive insurance and risk finance: Validate desk research findings, request secondary data that is not publicly available, understand perceptions of market challenges and opportunities, get recommendations</p> <p>Development integration: Understand how inclusive insurance and risk finance are integrated into current development initiatives and future plans, get perceptions on this coordination and effectiveness</p>	<p>Nepal Insurance Authority, Nepal Insurers’ Association, Life Insurers’ Association, Chhimek Microfinance, Prudential Insurance, MetLife, Nepal Life, Himalayan Re, Sagarmatha Insurance, Ajod Insurance, Rastriya Beema Company, Insurance Institute of Nepal, Ministry of Agriculture & Livestock Development, National Disaster Risk Reduction and Management Authority (NDRRMA), MOFAGA, UN Women, National Insurance Company, others</p> <p>World Bank (global team), ADB, Tayar Nepal (USAID project), JICA,</p>

	Multistakeholder workshops	Validate desk research findings (for all topics) Validate primary data collected (for all topics) Validate recommendations developed (for all topics)	Nepal Insurance Authority, insurers, NIA, Life Insurers' Association, NMBA, Insurance Institute of Nepal, Ministry of Agriculture & Livestock Development, National Disaster Risk Reduction and Management Authority (NDRRMA), Ministry of Finance, Department of Hydrology and Meteorology, others JICA, FCDO
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Appendix 3:

Overview of Nepal's Key NDC Commitments²⁰⁸



208 Graphic source: WB Country Climate and Development Report 2022: Nepal: <https://www.worldbank.org/en/country/nepal/brief/key-highlights-country-climate-and-development-report-for-nepal#:~:text=Nepal%20has%20begun%20to%20put,prioritization%20of%20investments%20is%20incipient>



Agriculture

By 2030 →

- Soil organic matter content of agricultural land will reach 3.95%
- Number of additional improved cattle sheds will reach 500,000
- Number of organic fertilizer production plants will reach 100
- Establish 200 climate-smart villages + 500 climate-smart farms



Energy

By 2030 →

- Expand clean energy generation from 1,400 MW to 15,000 MW
- 15% of the total energy demand supplied from clean energy sources



Waste management

By 2025 →

- Treat 380 million liters per day of wastewater before discharging 60,000 cubic meters/year of fecal sludge. (Expected to reduce 258 Gg CO2 eq. of emissions)



GESI

By 2030 →

- Develop an Action Plan for integrating GESI in achieving NDC targets
- Promote the leadership, participation, and negotiation capacity of women, indigenous peoples, and youth in climate change forums
- Ensure gender-disaggregated data when reporting on progress and achievements



Tourism

By 2025 →

- Formulate and implement nature-based tourism plans in at least five main tourist destinations

By 2030 →

- Ensure at least five tourist destinations are carbon neutral

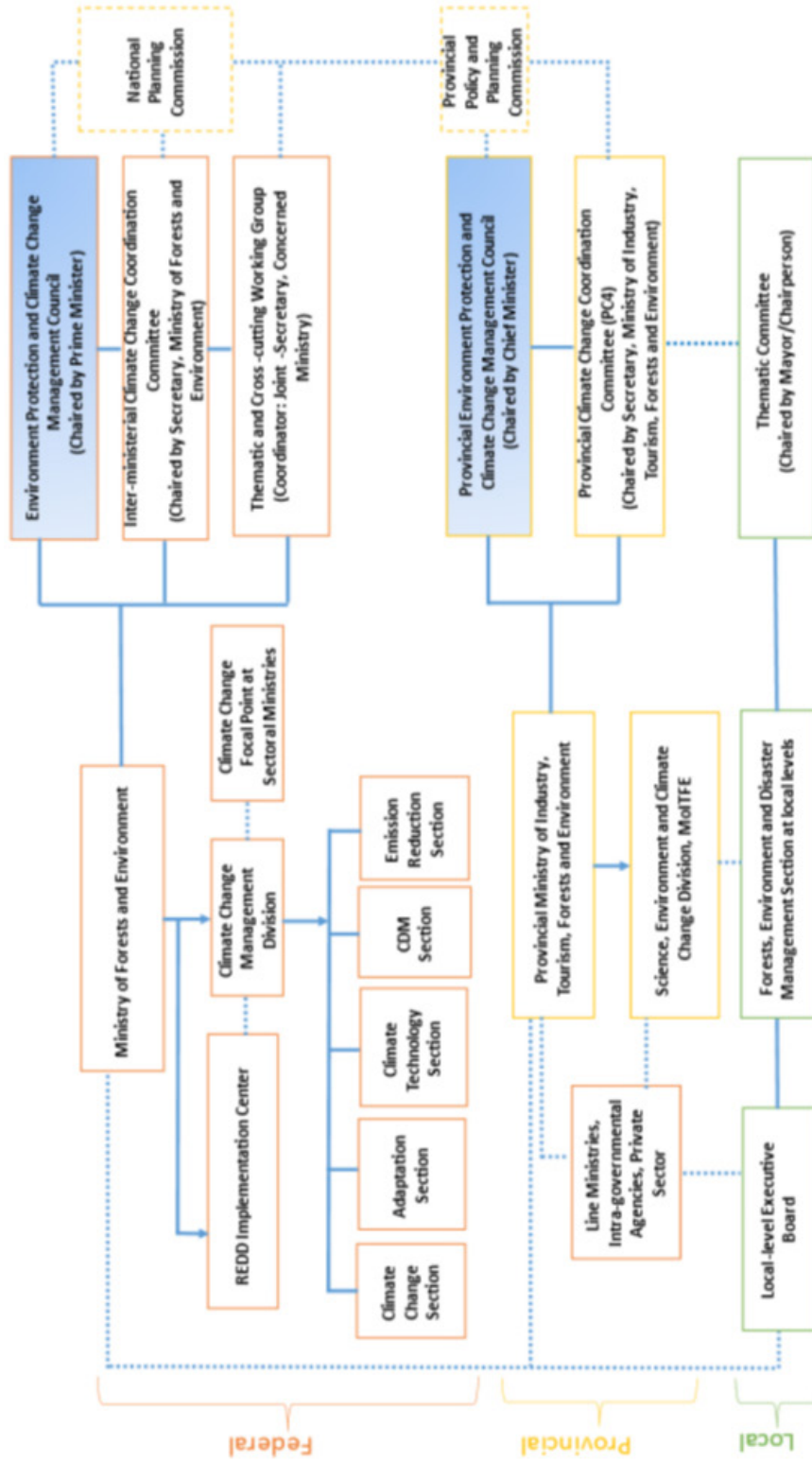


Settlements

By 2025 →

- Revise the urban environment management guidelines to incorporate activities related to promoting low carbon and climate-resilient urban settlements
- Adopt national building codes and prepare Integrated Urban Development Plans

Appendix 4: Institutional Arrangements for Climate Change in Nepal



Source: Based on GoN. 2021b. National Adaptation Plan 2021-50: Summary for Policy Makers, p. 41. <https://www.preventionweb.net/publication/national-adaption-plan-nap-2021-2050-nepal>.

Appendix 5:

Summary of Nepal's progress on Sendai Framework Actions (May 2022)²⁰⁹

SFA Priorities	NSAP Priorities	Current Status (2022)	Remarks
1. Understanding disaster risk	<ul style="list-style-type: none"> Hazard wise assessment of risk Inter-agency coordination of multi-hazard risk assessment Development of effective DIMS Capacity Building for Understanding risk 	<ul style="list-style-type: none"> Landslide Risk Mapping of 14 districts out of 77 DRR Portal and Database Plan and budget for Structural Integrity Assessment of all schools and public facilities Revision of national probabilistic seismic hazard map of Nepal 	
2. Strengthening disaster risk governance to manage disaster risk	<ul style="list-style-type: none"> Establishing and Strengthening Organizational Structures Developing Legal and Regulatory Frameworks Capacity Building, Collaboration and Partnership for Disaster Risk Governance Ensuring Inclusiveness in Disaster Risk Reduction 	<ul style="list-style-type: none"> Establishment of NDRRMA DRM organizational structure at province and local level National Policy for DRR- 2018 Disaster Risk Reduction National Strategic Plan of Action DRM localization manual LDCRP guideline Local Development Planning Guideline 	Several other guidelines and manuals are developed
3. Investing in disaster risk reduction for resilience	<ul style="list-style-type: none"> Promoting Investment for Building Resilience Promoting Public Investment in DRR Promoting private investment in DRR Increasing Disaster Resilience through Risk Transfer, Insurance and social security 	<ul style="list-style-type: none"> DRR Financing Strategy Crop Insurance, Health Insurance COVID-19 Insurance Sectoral budget DM Fund 	
4. Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation and reconstruction	<ul style="list-style-type: none"> Strengthening Disaster Preparedness for Effective Disaster Response Development of Multi-Hazard EWS for Disaster Preparedness Promoting CBDRR Strengthening Communication and Dissemination system for Disaster Preparedness Capacity Building for Search and Rescue Promoting "Build Back Better" approach in Recovery, Rehabilitation and Reconstruction 	<ul style="list-style-type: none"> BBB of 704,341 private owned houses BBB of 6,647 school building BBB of 1,197 Health related infrastructures and services 920 cultural heritage sites, 415 government buildings and 216 buildings of security agencies 598 National level responders are trained (MFR, CSSR, HOPE and CADRE) 	PEER Courses Graduates

209 This table is an excerpt from the following publication: Ministry of Home Affairs, Risk to Resilience: Disaster Risk Reduction and Management in Nepal, 2022. Accessed at: https://dpnet.org.np/uploads/files/Nepal_Position%20Paper_GPDRR2022_Final%202022-05-26%2016-58-49.pdf

Appendix 6:

Fifteen strategic activities (section 8) from DRF Strategy 2020


(excerpt from Strategy document)

Strategic Activities

- 8.1 Conduct natural and non-natural hazard mapping at National, Provincial, District, Sub-national and Community levels; estimate disaster risks; and maintain updated details of risk-prone places, communities, physical structures, natural resources, basic services etc. by entering them in National Disaster Risk Information System.
 - 8.1.1 Implement necessary financial planning according to determination of the volume of contingent liabilities by employing Financial and Actuarial Analytics to provide information about potential financial and economic losses and impacts from disasters.
- 8.2 Conduct investigation, study, research and analysis on nature of hazards and potential situations arising therefrom, and enter them in Disaster Information System of Federal, Provincial and Local Levels.
- 8.3 Make timely amendments in the National Disaster Risk Assessment and Management Information System- NDRA-MIS and enhance capacity thereof, enabling it to perform data collection and processing, and manage information about adverse impacts of climate change as well as all communities which are at risk of disasters. In addition, expand the Data System to the Provincial and Local Levels.
- 8.4 Implement disaster risk reduction measures and risk transfer instruments by making appropriate provisions of necessary standards/norms, conditional grants, reward, punishment, fine etc. in the implementation process of development plans and socioeconomic activities of Federal, Provincial and Local Levels.
- 8.5 Develop and expand the capacity of Hazard Monitoring and Disaster Early Warning Information Systems. In addition, develop and implement laws, guidelines and Common Alerting System (CAP) that are necessary for establishment and effective operation of Hazard Monitoring and Disaster Early Warning Systems.
- 8.6 Adopt the measures to economic recovery of Private, Public, and Sovereign Assets from disaster damage through life and non-life insurance products by pursuing necessary policy, structural and practical reforms.
- 8.7 Make a provision of Catastrophe Fund to cover the catastrophic loss in excess to first loss cover transferred to insurance disaster of public service infrastructures; especially historical, religious and cultural heritages; and sovereign liabilities.
 - 8.7.1 Create an enabling environment necessary to involve the private sector and capital market in disaster risk reduction and management.

8.7.2 Make arrangements of public and private financing for risk reduction and risk transfer through identification and measurement of economic and financial risk of public and private sectors related with disaster.

8.7.3 Make arrangements of liquid financial resources, such as Reserves, Catastrophe Bond, Contingent Credit, Insurance Linked Securities and other available disaster management financing instruments at the onset of catastrophe.

- 8.8 Make provision of adopting pre-arranged and well-planned protection measures like insurance and reinsurance to maintain financial stability of banks, insurance and financial service provider organizations and cooperatives for managing their financial risks during a disaster.
- 8.9 Encourage to prepare Business Continuity Plan to minimize the damage and immediately run the services smoothly during a disaster, by making legal provisions of risk reduction and safety measures required to be adopted while operating services of public service provider government agencies and firms, enterprises, businesses etc. of private sector.
- 8.10 Make the disaster preparedness and response more effective by ensuring proper management of Federal, Provincial and Local Disaster Management Funds to enhance financial capacity for response actions according to nature, magnitude and impact of various types of disasters.
- 8.11 Make provision of providing insurance security to persons engaging in various professions and occupations as a livelihood source, poor people, marginalized and vulnerable groups immediately for restoration of their livelihood after a disaster, in accordance with the law.
- 8.12 Establish and operate Pre-arranged Financing Mechanism.
- 8.13 Ensure Early Warning Information based pre-financing by making weather forecast dependable.
- 8.14 Conduct pilot test of, develop and implement the concepts and practices of promotion of new financing to be available for disaster risk reduction, economic resilience, institutional resilience and management.
- 8.15 Conduct pilot test of, develop and implement the concepts and practices of promotion of new financing to be available for regional and cross border (Regional and Cross Border e.g. SAARC, BIMISTEC, Nepal-India, Nepal- China) disaster risk reduction and management.
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Appendix 7:

Implementation Plan from Section 1.4 of the Disaster Risk Financing National Strategy 2078 Implementation Plan

Note: Action plan items are likely to be updated periodically. Refer to the original source or contact NDRRMA for the most updated information.

a) Short-term action plan (to be completed within two years)

S.N.	Goals and Indicators	Current Status (Baseline)	Outcomes	Responsible Entity	Supportive Entities
1	To bring market-based financial instruments into use (the detailed action plan, along with a cost-benefit analysis and projection of economic losses in an earthquake scenario, are given in Section 2)	Not yet enforced	Market-based financial instruments will have been in use	Ministry of Finance (MoF)	MoHA, NDRRMA, Insurance Board, Nepal Rastra Bank (NRB)
2	To integrate and bring into operation the various disaster financing funds (Prime Minister's Relief Fund, Prime Minister's Natural Disaster Emergency Fund, and disaster management funds) and identify the various financing sources and mobilize them through the integrated fund	Partially executed	Will have been arranged and mobilized	MoF	MoHA, NDRRMA, Insurance Board, NRB, provincial government, local government
3	To collect and analyse data related to various disaster events (such as floods, landslides, pandemics) and the resultant losses and feed them into the disaster information system		Will have been entered into the system	NDRRMA	MoHA, provincial government, local level
4	To develop trained/skilled human resources, physical resources, and technology for disaster response		Will have been developed	MoHA	NDRRMA, Department of Information Technology (DIT)
6	To develop a model that analyses climate change-induced disasters		Impact will have been measured through the model	Department of Hydrology and Meteorology (DHM)	NDRRMA

b) Medium-term action plan (to be completed between two and five years)

S.N.	Goals and Indicators	Current Status (Baseline)	Outcomes	Responsible Entity	Supportive Entities
1	To map the natural and non-natural disasters at the federal, provincial, district, local, and community levels; to assess the disaster risk and feed them in the national disaster information system		Will have been entered in the system	NDRRMA	MoHA, Financial and Comptroller General's Office (FCGO), provincial government and local government
2	To update the details of the vulnerable locations, settlements, communities, physical structures, natural resources, basic services, etc fed into the disaster risk information system		Details will have been updated	NDRRMA	MoHA, FCGO, provincial government, local government, and line offices concerned
3	To use financial, actuarial, and catastrophic risk modeling tools to inform about the economic and financial losses due to disasters and impact		Will have been used	MoF NDRRMA	FCGO, Insurance Board
4	To determine the amounts of contingent liabilities and protection gaps, make provision for a financial plan in the GoN's annual budget; mobilize resources of, among others, NGOs and international development partners; and formulate and implement a financial plan		Amounts will have been determined and a financial plan will have been executed	MoF	MoHA, NDRRMA
5	To formulate and approve required laws, guidelines, mechanisms, and protocols for the distribution of speedy financial relief from the disaster fund in the affected areas		Will have been approved and executed	MoHA	MoF, Ministry of Law, Justice and Parliamentary Affairs, NRB, NDRRMA
6	To prepare required laws, guidelines, and common alerting protocol and implement them for early warning system-based advance financing		Will have been prepared and enforced	NDRRMA	DHM, line ministries, and departments

C) Long-term action plan (to be completed within ten years)

S.N.	Goals and Indicators	Current Status (Baseline)	Outcomes	Responsible Entity	Supportive Entities
1	To explore, study, research, and analyse the nature of risks and their possible results in various sectors and feed the information in disaster information management system		Will have been fed into the system	NDRRMA	MoHA, line ministry, department, agency, provincial government, and local government
2	To make timely improvements in the National Disaster Risk Assessment and Management Information System (NDRA-MIS) and enhance its capacity		Will have improved and developed capacities,	NDRRMA	MoHA, provincial government, and local government
3	To expand the NDRA-MIS to provincial and local level and feed data		Will have fed data at provincial and local level	NDRRMA	MoHA, provincial government, and local government
4	To reduce disaster risks by making suitable provision of protocols, conditional grants, rewards, and fines and punishments in the implementation processes of development plans and socioeconomic activities at federal, provincial and local levels; To obtain prior consent of MoF for required legislation		Disaster risks will have reduced	MoHA, NDRRMA	MoF, National Planning Commission (NPC), Ministry of Federal Affairs and General Administration (MoFAGA), provincial government, and local government
5	To establish a disaster forecasting and monitoring and disaster early warning system and develop and expand the capacities of the disaster early warning system To enhance the disaster early warning system through disaster forecast and monitoring		Will have developed and expanded the capacities	NDRRMA	DHM, line ministries, department, agencies concerned
6	To adopt measures for compensation for human casualty through life insurance and for recovery of economic losses to private, public, and sovereign assets due to disasters through non-life insurance		Will have adopted recovery measures	MoF	MoHA, NDRRMA, Insurance Board
7	To carry out risk transfer through the first loss insurance and through the risk layer approach for post-disaster reconstruction of public service infrastructures, historical, religious, and cultural heritage and sovereign liabilities and use the disaster management funds set up at federal, provincial, and local tiers of government Use the funds of the three tiers without duplication		Funds will have been used	MoF	MoHA, NDRRMA, Insurance Board
8	To identify and measure the disaster-related economic and financial risks to the public and private sectors		Will have been identified and measured	MoF	MoHA, NDRRMA, Insurance Board
9	To promote public and private investments for risk reduction and risk transfer		Investments will have been promoted	MoF	NDRRMA, private sector

S.N.	Goals and Indicators	Current Status (Baseline)	Outcomes	Responsible Entity	Supportive Entities
10	To introduce mandatory taking of life and nonlife insurance while applying for approval for the construction of public structures for disaster risk management			MoF	MoHA, NDRRMA, Insurance Board
11	To introduce a provision linking the security of all types of physical and economic activities and private property and to coordinate for determining risk-based pricing		Will have determined the value based on risks	MoF	MoHA, NDRRMA, Insurance Board
12	To adopt secure and systematic measures like insurance and reinsurance to minimize financial risks to banks, insurance and financial service provider associations, and cooperatives and to maintain financial stability		Will have been adopted	MoF	NDRRMA, NRB, Insurance Board
13	To make legal provisions regarding safety measures to be adopted as well as minimizing risks while operating public service provider government entities and private sector firms, institutions and businesses		Legal frameworks will have been in place	MoHA	NDRRMA, Insurance Board
14	To formulate and implement business continuity plans to minimize losses from disasters and immediately resume the operation of services		Will have been executed	MoHA	NDRRMA, line ministries, private sector
15	To enhance the effectiveness of disaster preparedness and disaster response by making adequate financing through the federal, provincial, and local disaster management funds for effective response in accordance with the nature, intensity, and impact of disasters. While financing through such funds, to ensure that maximum output is achieved through economical and efficient low financing		Will become more effective	MoF	MoHA, NDRRMA
16	To make arrangements for rational and optimal use of the disaster management funds by ensuring that they are immediately available for post-disaster livelihood and rehabilitation of professionals and business people engaged in various professions and occupations, poor, marginalized groups, and vulnerable groups		Provisions are in place for rational and optimal use of the disaster funds	NDRRMA	
17	To introduce a provision requiring industries and businesses to submit their business continuity plans while applying for business loans to in order to minimize and manage disaster risks		Will have been arranged	NRB	MoF, NDRRMA Insurance Board

S.N.	Goals and Indicators	Current Status (Baseline)	Outcomes	Responsible Entity	Supportive Entities
18	To develop a risk transfer system for the search, rescue, relief, recovery, rehabilitation, reconstruction, and resilience building of people affected by catastrophes like earthquakes, floods and pandemics		Risk transfer system will have been developed	MoHA	NDRRMA, provincial government, local government
19	To set up pre-arranged financing mechanisms to cope with disasters		Will have been arranged	MoF	NDRRMA
20	To develop, pilot, and execute a concept and practices for the promotion of new financial investments that could be available for disaster risk reduction, financial resilience, institutional resilience, and management		Will have been executed	MoF	NDRRMA
21	To coordinate and collaborate with bilateral and multilateral development partners and international organizations in disaster risk and management as per the international development aid mobilization policy		Coordination and collaboration will have been established	MoF	MoHA, Ministry of Foreign Affairs, NDRRMA, development partner organizations
22	To safeguard low-income sections and communities through agriculture and micro-insurance schemes			Ministry of Agriculture and Livestock Development	NDRRMA, Insurance Board, DIT
23	To coordinate and collaborate with private, government, and other institutions for the development of information technology and mechanisms for expanding the access to agriculture insurance in rural areas through Weather-Based Insurance and Index-Based Insurance			Ministry of Agriculture and Livestock Development	NDRRMA, Insurance Board, DIT, and private sector
24	To develop and implement a protocol on the implementation of allocated budgets for disaster risk reduction and just distribution of available financial resources after a disaster, ensuring maximum output from the limited financial resources available through the existing mechanisms			MoF NDRRMA	NPC
25	To enhance capacities of local governments in disaster reduction financing			MoFAGA	NDRRMA
26	To establish simplified processes and procedure for lending facility for reconstruction and resilience			MoF, Rastra Bank, Bankers Association	NDRRMA
27	To develop a market-based micro-insurance strategy for developing social insurance for social security			Ministry of Labour, Employment and Social Security, Insurance Board	NDRRMA

Appendix 8:

Roadmap interventions for the UNDP-Milliman Global Actuarial Initiative in Nepal

Note: This information is subject to change. Contact the GAIN Working Committee for the most updated information on this project and its interventions.

Proposed roadmap interventions: Supply of Actuaries

Intervention	Expected outcome	Leading stakeholder	Discussion Priority
Exam focused tutorials. Host virtual tutorial focused on exams materials (with focus on actuarial mathematics & statistics, modelling and practise) and Q&A forums.	Increased passes for CM, CS and Core Practices exams	Milliman	Low
IFoA Accredited. Prepare for applying for IFoA examination exemptions process, including action to advance process	Derivation of strategy to become IFoA accredited university	TU	Medium
Mentorship program. Provide career support and guidance to actuarial professionals	Actuarial professionals with greater insights and understanding into their career	Milliman	Low

Proposed roadmap interventions: Demand for Actuaries

Intervention	Expected outcome	Leading stakeholder	Discussion Priority
Work application training through panel of experts. Provide regular virtual training, occasional on-site technical support, and on- demand guidance from panel of qualified expert actuaries to actuarial analysts	Increased work exposure and value of actuarial personnel by management	Milliman	Low
Actuarial analyst function. Establish in-house actuarial analyst functions with best practise: matching remuneration scale, study leave and opportunities to work with management	2-3 actuarial analyst head-counts per insurer with career support which follows best practice	Insurers	High
Survey. Conduct annual survey with insurers on understanding and tracking the progress of demand intervention roadmap	3 total survey reports which is circulated to the industry	Insurance association	Low
Webinar for senior management. Conduct virtual webinar series on case studies on application of actuarial skillsets, and value of actuarial expertise	Increased buy-in from senior management level of the necessity of in- house actuarial capacity	Milliman, insurers, insurance associations	Low

Proposed roadmap interventions: Public policy / regulatory environment

Intervention	Expected outcome	Leading stakeholder*	Discussion Priority
Insurance Academy. Provide actuarial training as part of the “Insurance Academy” included as part of Act (with overlap of proposed interventions focusing on supply and demand)	Increased actuarial capacity across the industry	Regulator	Low
In-house actuarial capacity at Nepal Insurance Authority. Establish process of in-house actuarial positions within the regulator’s office	In -house actuarial position established as part of the civil servant route	Regulator	High
Recommendation on Actuarial Analyst. Recommend for employers to establish Actuarial Analyst function over next 3 years in order to build capacity for in-house signatory function in the long-run	Guidance note on establishment of Actuarial Analyst	Regulator	High

Additional potential roadmap interventions

Intervention	Expected outcome	Leading stakeholder	Discussion Priority
Mortality table. Revise mortality life tables based on update date available	Updated mortality life tables	Regulator Milliman support	Low
Appointed Actuary. Review the definition of Appointed Actuary within the regulations	Potential revised derivative on the definition of appointed actuary to accelerate and retain local candidates	Regulator	High
Training with Banking Association. Provide virtual training to banking association on the role of actuaries	Webinar session on role of actuaries in banking sector	Milliman	Low
SSF actuarial support. Provide support on focused work with SSF to educate on actuarial issues and outline role for actuary	Defined SSF actuarial focused project	Milliman	Medium
Insurance information bureau. Provide support on the development of databank through training on data collection and segregation	Training on databank development	Milliman	Medium

Appendix 9: Inclusive insurance data

Number of policies issued (microinsurance and gov't Crop & Livestock program)

Types of Micro-insurance policy	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23*
Life	132,037	1,722,402	1,427,809	1,069,558	4,114,191	4, 105,755
Non-life	1,843	7,136	6,902	13,568	24,503	25,226
NIA	5,254	13,907	4,094	536		
Non-life (Crop & Livestock)	16,147	89,166	84,645	54,171	35,411	21,261
Total	155,281	1,832,611	1,523,450	1,137,833	4,174,105	4,152,242



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