Insights from Sumba:
Compilation of Ideas on Adaptive Social Protection against Climate Change

About this Report

Project
Towards Future-Proof Society: Adaptive Social Protection Against Climate Change.

Disclaimer
This report aims to present several valuable insights on formal and informal social protection practices towards adaptive social protection against climate change in East Sumba, East Nusa Tenggara. The report will unveil several ideas for future publications on existing formal and informal social protection systems, including various climate finance schemes that can facilitate anticipatory actions to improve climate resilience. This report is part of the results of research activities supported by KONEKSI on behalf of the Resilience Development Initiative (RDI), Charles Darwin University, Indonesia University of Education, The PRAKARSA, Wira Wacana Christian University, Habitat for Humanity Indonesia, and the Institute for Resource Governance and Social Change (IRGSC).

Prepared by:

- **Dr Saut Aritua Sagala**
  (Resilience Development Initiative)
- **Dr Jonatan Lassa**
  (Charles Darwin University)
- **Farijzal Arrafisena**
  (Resilience Development Initiative)
- **Rahmah Aulia Zahra**
  (Resilience Development Initiative)
- **Debby Paramitasari**
  (Resilience Development Initiative)
- **Dr Ayu Krishna Pribadi**
  (Indonesia University of Education)
- **Dr Maklon Felipus Killa**
  (Wira Wacana Christian University)
- **Elsa Christin Saragih**
  (Wira Wacana Christian University
- **Victoria Fanggidae, Ph.D.**
  (The PRAKARSA)
- **Darmawan Prasetya**
  (The PRAKARSA)
- **Andreas Hapsoro**
  (Habitat for Humanity Indonesia)
- **Sylvinus Jowi Pedor**
  (Habitat for Humanity Indonesia)
- **Dr Dominiggus Elcid Li**
  (IRGSC)
- **John Petrus Talan**
  (IRGSC)
- **Hestin Kezia Octalina Klaas**
  (IRGSC)

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Abbreviation

ASP	Adaptive Social Protection
Bappenas	Badan Perencanaan Pembangunan Nasional (Ministry of National Development Planning)
Balitbangda	Badan Penelitian dan Pengembangan Daerah (Regional Research and Development Agency)
BAZNAS	Badan Amil Zakat Nasional (Amil Zakat National Agency)
BNPB	Badan Nasional Penanggulangan Bencana (National Board for Disaster Management
BPBD	Badan Penanggulangan Bencana Daerah (Regional Disaster Management Agency)
BPS	Badan Pusat Statistik (Statistics Indonesia)
CCA	Climate Change Adaptation
CU	Credit Union
Dinsos	Dinas Sosial (Social Affairs Agency)
DLH	Dinas Lingkungan Hidup (Environmental Agency)
DFAT	Department of Foreign Affairs and Trade Australia
DP3AP2KB	Dinas Pemberdayaan Perempuan, Perlindungan Anak, Pengendalian Penduduk dan Keluarga Berencana (Women's Empowerment Child Protection and Population Control and Family Planning Agency)
DPMD	Dinas Pemberdayaan Masyarakat dan Pembangunan Desa (Community Empowerment and Village Development Agency)
DRR	Disaster Risk Reduction
FGD	Focus Group Discussion
GKS	Gereja Kristen Sumba (Sumba Christian Church)
ILO	International Labour Organisation
IRBI	Indonesian Disaster Risk Index

KONEKSI	Collaboration for Knowledge, Innovation, and Technology Australia and Indonesia
NTT	Nusa Tenggara Timur (East Nusa Tenggara)
PKH	Program Keluarga Harapan (Family Hope Program)
PT Pegadaian	A State-owned Pawnbroker
SMEs	Small and Medium Enterprises
SP	Social Protection
SOPs	Standard Operating Procedures

1. Background

Indonesia is one of the most disaster-prone countries in the world, frequently exposed to a range of hazards and ranking third on the disaster risk index of 193 countries (Bündnis Entwicklung Hilft & Ruhr University Bochum – Institute for International Law of Peace and Armed Conflict (IFHV), 2022; World Bank, 2019). Moreover, between 2010 and 2017, there was an increase of 887 hydrometeorological disasters, while geological disasters increased by 64 incidents during the same period.

In these conditions, it is logical that every community exhibits varying levels of vulnerability to disasters and climate change, influenced by scientific, geographical, and anthropological characteristics of their surroundings. Disasters and climate change have serious potential to increase people's vulnerability to poverty by causing infrastructure damage that hinders access to basic services, destruction of economic assets, forced migration that can damage social networks and access to resources, and disrupt livelihoods (Köhler, 2021). Communities vulnerable to shocks have limited coping and adaptation capacities, making it difficult for them to survive and recover from the effects of disasters.

Based on this urgency and relevance, social protection policies have found momentum to be actualised to deal with climate change and disasters. The International Labour Organisation (Sengupta, et.al., 2023) defines social protection as an integral component of social policy designed to guarantee conditions of income security and access to social services for everyone by paying special attention to vulnerable groups, protecting and empowering the community in all life cycles as well as providing affordable access to health and education services, which helps the long-term decline in well-being that results from disasters.

Indonesia positions social protection as a constitutional responsibility, further supported by various regulations like Law Number 11 of 2009 on Social Welfare and the country's national medium and long-term development plan. In total, there are more than 30 social protection programmes implemented, including social assistance (food assistance, educational assistance, cash assistance), social insurance (employment, health), and labour market (active labour market). However, these social protection programmes often operate independently, lacking flexibility and responsiveness when addressing disasters and climate change vulnerabilities. Regular social protection is frequently anchored to existing structures and budgeting, making it less adaptive to sudden changes caused by shocks. Furthermore, it often fails to address the specific needs of marginalised groups, such as indigenous peoples and people with disabilities.

Therefore, a more integrative, sustainable, and adaptive social protection mechanism is needed to address these issues. Adaptive Social Protection (ASP) is one of the protection

schemes proposed by the Indonesian Ministry of National Development that integrates policies, strategies, programmes, and measurements in three key areas: social protection (SP), disaster risk reduction (DRR), and climate change adaptation (CCA). This concept aims to enhance community preparedness, assist the mitigation process effectively and quickly, protect community welfare, and ensure that people do not fall into poverty due to disasters and climate change. Developing adaptive social protection in Indonesia can be achieved by integrating various existing programmes while mainstreaming ASP. This approach will have positive implications for fostering adaptive and sustainable communities in the face of disasters and climate change.

Nevertheless, as the ASP is still a relatively new framework to complement mainstream social protection systems, there is a lack of understanding at several levels. Firstly, there is a need to comprehend how ASP complements the overall development of social protection and climate-disaster-related protection, such as humanitarian cash transfers. A second challenge lies in the limited understanding of how ASP interacts with existing community-based protection mechanisms. These mechanisms include informal risk-sharing arrangements and other forms of community-based risk finance. Thirdly, there is a challenge in understanding how to govern ASP within the complex institutional context of Indonesia, where there are many layers and sectoral players from ministerial to district-level governance.

These challenges necessitate a new and deeper understanding of an established ASP model. Furthermore, understanding other forms of alternative protection utilising community-based financing can be very useful for the government in understanding a fuller picture of community response capacity and resilience. Therefore, this research aims to understand the potential use of a broader social protection system beyond the state-centric ASP mechanism. It should include community-based informal risk-sharing arrangements and alternative protection measures against climate impacts.

This proof-of-concept project tests the hypothesis that incorporating community-based protection mechanisms can strengthen formal social protection models. The project aims to determine if this combined approach can effectively protect against climatic shocks. Such a community-based mechanism includes access to protection that involves informal risk-sharing arrangements (e.g., family transfers, intermediaries, shariah funds, cooperatives, and other types of risk transfers). Certainly, some of the protection might be exploitative, such as intermediaries and loan sharks.

Therefore, this report aims to present several valuable insights on formal and informal social protection practices towards adaptive social protection against climate change in East Sumba, East Nusa Tenggara. **The report will unveil several ideas for future publications**

on existing formal and informal social protection systems, including various climate finance schemes that can facilitate anticipatory actions to improve climate resilience, especially among marginalised groups such as women, children, and socially excluded communities.

2. Methodology

This research project adopted a mixed-method approach that focused on a series of qualitative approaches and methods, including a desk and literature review, focus group discussions with relevant stakeholders, and key informant interviews. To gather quantitative data for the study, the researchers conducted household surveys.

2.1 Data Collection Methods

Several data collection methods were used in this study to gather information from various sources and actors who were directly and indirectly involved or concerned with this study.

- **Desk and Literature Review**
  The study began with a comprehensive desk and literature review. This review covered information from various sources, including journals, reports, regulations, articles, books, documents, and other relevant online resources. The review topics include social protection, disaster risk reduction, and climate change adaptation. Further, the concept of adaptive social protection was also introduced, along with interlinkages between social protection, disaster risk reduction, and climate change adaptation.

- **Household Survey**
  The household survey was conducted with about 300 participants in ten different villages in East Sumba. Multiple aspects were investigated through the household survey, including respondent and their family data, environmental and facilities conditions, social and economic conditions, respondent preparedness for disaster and climate change, and formal and informal social assistance and social security each respondent experienced.

Table 1. Household Survey Respondents

No	Sub-district	Village	Sample
1	Kahaungu Eti	Kotak Kawau	30
2	Pandawai	Mau Bokul	30
4	Kambata Mapambuhang	Marada Mundi	20
5	Umalulu	Watu Hadang	40
6	Wula Waijelo	Lumbu Menggit	30
7	Tabundung	Tarimbang	30
8	Pinupahar	Wangga Mbewa	20
9	Haharu	Wunga	20
10	Nggaha Ori Angu	Tana Tuku	30

- **Key Informant Interviews**
  The interviews were conducted with government officials in the East Sumba Regency. From the non-governmental side, interviews were conducted with private companies, community organisations, community groups, and individuals.

Table 2. Key-Informant Interview

Government	- Regional Research and Development Agency (Balitbangda) - Social Affairs Agency (Dinsos) - Regional Financial and Asset Management Agency - Cooperative and SMEs Agency - Agriculture and Food Agency - Marine and Fisheries Agency - Livestock Agency - Regional Disaster Management Agency (BPBD) - Housing, Settlement and Land Agency - Women's Empowerment Child Protection and Population Control and Family Planning Agency (DP3AP2KB) - Environmental Agency (DLH) - Community Empowerment and Village Development Agency (DPMD) - Manpower and transmigration Agency
Non-government	- Pawnshop (Pegadaian) - Amil Zakat National Agency (BazNas) - Credit Union (CU) - Cooperative Group - Arisan group - Loan Sharks - Individual

- **Focus Group Discussion through Transdisciplinary Workshop**
  Focus Group Discussions (FGDs) were conducted as a transdisciplinary workshop. It consisted of three sessions with government officials, local scholars, non-governmental organisations, community organisations, academia, and people from the community.

- **Household Interviews**
  Household interviews and participant observations were done in two selected villages, Mauliru and Tarimbang village.

Table 3. Household Interviews Respondents

Village	Respondent	Identity
Tarimbang	R1	Male, 51 years old

Village	Respondent	Identity
Tarimbang	R2	Male, 57 years old
Tarimbang	R3	Female, 54 years old
Tarimbang	R4	Male, 57 years old
Tarimbang	R5	Male, 44 years old
Tarimbang	R6	Male, 41 years old
Tarimbang	R7	Male, 38 years old
Mauliru	R8	Male, 74 years old
Mauliru	R9	Male, 65 years old
Mauliru	R10	Female, 60 – 65 years old
Mauliru	R11	Female, 38 years old
Mauliru	R12	Male, 63 years old
Mauliru	R13	Female, 39 years old

2.2 Data Analysis

Several methods were used to analyse the gathered data, as follows:

- **Content analysis**
  The content analysis method was used to conduct a literature review on the concepts of social protection, disaster risk reduction, climate change adaptation, and adaptive social protection.

- **Coding method analysis**
  After obtaining informed consent from participants, data was collected through audio recordings and field notes in the local Bahasa Indonesia language (primarily using the Kupang Melayu dialect). The data were transcribed and coded thematically for analysis. Coding method analysis was utilised for key informant interview transcripts using NVIVO.

3. Overview Sumba Context

Sumba Island is one of the small islands in the eastern Indonesian archipelago region, located between 9° 00′–11° 00′ and 119° 00′–121° 00′. Sumba Island is bounded by the Sumba Strait to the north, east by the Savu Sea, and south and west by the Indian Ocean. Usually, Sumba Island is accessible by flight via Bali Island (from the west) or Timor Island (from the east). The area of about 10,914 km2 is home to a relatively sparse population of over 835,390 people (BPS, 2024). Most of the islands of NTT are part of the non-volcanic Sunda-Banda arc, precisely at the front of the Lesser Sunda Islands volcanic arc. However, the island of Sumba is older, and its tectonic origins have been the subject of some debate (Rutherford et al., 2001:454).

According to BNPB (2022), over the past decade, East Nusa Tenggara (NTT) has experienced a total of 576 disaster events, with typhoons being the most prevalent, followed by floods, landslides, and droughts. The province has a risk index value of 139,23 (medium risk) based on the 2022 Indonesian Disaster Risk Index (IRBI). Specifically, all regencies in the Sumba Island region have a moderate risk index, with the highest value recorded in East Sumba at 139,14.

Table 4. Risk Index Value of Sumba Island Region in East Nusa Tenggara Province

Regency	2015	2016	2017	2018	2019	2020	2021	2022	Risk Class (2022)
East Sumba	145.20	145.2	145.2	145.2	145.2	145.2	145.2	139.14	Moderate
Southwest Sumba	138.0	138.0	138.0	138.0	138.0	138.0	138.0	138.0	Moderate
West Sumba	128.40	128.40	128.40	128.40	128.40	128.40	128.40	125.58	Moderate
Central Sumba	118.80	118.80	118.80	118.80	118.80	118.80	118.80	113.55	Moderate

Note: the value of the risk index has not changed due to the tendency of constant capacity values

Source: IRBI (2022)

In general, Sumba Island has an erratic rainfall climate. Rainfall generally occurs around January-April, while the dry season lasts for the next eight months, causing the area to have a semi-arid climate. Apart from some places with high rainfall in West and Central Sumba, the island has low rainfall intensity. So, Sumba's eastern and northern regions have an arid climate characterised by undulating grasslands and savanna landscapes. For example, over the past five years, the number of rainy days in some parts of East Sumba was less than 45 days, and the total rainfall during that period was less than 700 mm, while on the other hand, the Tabundung sub-district often experienced more rainfall than other areas (Lassa et al., 2014).

As more than half of the land area is savannah, with one rainy season lasting several months, agricultural options are largely limited to cassava and maise. In contrast, in the more humid central and western parts of the island, farmers use buffaloes to grow rice,

alongside the prevalence of pigs as livestock (Hoskins, 1989; Vel, 1994: 23-24; Twikromo, 2008: 42-50). Policulture is generally practised in upland areas, mainly because it minimises the risk of crop failure in a largely semi-arid region and diversifies income sources. While monoculture rice farming practices are common in the lowlands when water is reasonably available, rainfed rice farming practices in the lowlands dominate rice farming when water availability is a major constraint (Ngongo Y & Ngongo M, 2021).

There are eight ethnic groups settled on Sumba Island, Kambera, Wewewa, Kodi, Mamboro, Anakalang, Wanukaka, Loli, and Lamboya. Most of the ethnic groups have their local languages, which other ethnic groups cannot understand. However, people settled in the boundary can speak more than one local language or at least understand each local language near other ethnic groups. Although Dutch traders from the Dutch East India Company (VOC) had been in contact with the people of Sumba since 1750, Dutch involvement in Sumba society was limited until the arrival of the first Dutch missionaries in 1881 (Aritonang & Steenbrink, 2008:319–320). The Sumbanese initially resisted the new religious influence, with mass conversions to Christianity only occurring in the early 20th century alongside the expansion of formal missionary-led education and the emergence of national political structures (Vel, 2008:35–41). Therefore, currently, around 90 percent identify themselves as Christians.

Nevertheless, this figure may not fully capture the enduring significance of Marapu, a belief system in traditional sociocultural Sumba (Lovestrand, 2021; Ngongo Y & Ngongo M, 2021). The *Marapu* religion is rooted in the Sumbanese social, political, and cultural systems. In the social sphere, it underlies the formation of social layers. According to the *Marapu*, the indigenous population of Sumba is traditionally divided into three categories: *Maromba* or *Maramba* (nobility), *Kabisu* or *Kabihu* (clan/priestly class), and *Ata* (common people). *Maramba* is the highest caste nobleman who usually controls and overcomes the resources. *Kabihu* are ordinary people (middle class); they are all independent, and the majority of the community members are from the *Kabihu* caste. The lowest caste is *Ata*, or enslaved people, who should serve the nobleman. They do not have the right to decide on their own life and should follow what the nobleman commands.

However, in recent times, the rigidity of this stratification has diminished significantly due to the adoption of new religious beliefs, advancements in education, and improvements in economic and communication systems. While some remote rural communities still adhere strictly to this hierarchical system, the majority of Sumbanese society is experiencing a gradual shift, placing more emphasis on household wealth and education.

In the eastern part of Sumba Island, traditional social stratification values are more strongly adhered to, particularly among the Maramba elite, who hold privileges in controlling natural

resources, especially agricultural and grazing lands. This region is predominantly inhabited by the Kambera ethnic group. Conversely, the western part of the island exhibits a more complex social structure where traditional hierarchy holds less significance, resulting in a fairer distribution and access to natural resources.

Looking from a socio-economic point of view, the results of a national survey conducted by BPS (2024) show that in 2023 central Sumba became one of the districts that has the highest percentage of poor people in Sumba island, with 31,78% of its population classified as poor, followed by East Sumba (28,08%), Southwest Sumba (27,48%), and West Sumba (27,17%). While there have been fluctuations in poverty levels over the past year, the changes in poverty rates across the region have not been notably significant, with some areas witnessing decreases while others have seen slight increases. In general, the welfare condition in the Sumba Island region remained relatively low, with the poverty rate surpassing the provincial average of 19,96% in 2023.

Table 5. Socioeconomic Condition of Sumba Island Region in East Nusa Tenggara Province

Regency	East Sumba		Southwest Sumba		West Sumba		Central Sumba	
Years	2022	2023	2022	2023	2022	2023	2022	2023
Projected Population (thousand)	251.70	255.50	315.42	322.07	149. 80	152.41	88.70	90.52
Number of Poor People (thousand)	75.28	75.66	24.49	24.24	37.06	37.15	24.49	24.24
Percentage of Poor People (%)	28.22	28.08	27.16	27.48	27.47	27.17	32.51	31.78
Poverty Line (rupiah/capita/month)	414.832	443.502	432.375	475.879	395.592	422.382	341.513	362.089
Human Development Index	68.82	69.63	63.15	63.74	66.03	66.82	62.84	63.63
Unemployment Rate (UR)	2.61	2.21	1.97	2.08	2.98	3.52	1.21	1.89

Source: BPS (2024)

Economically speaking, the average resident of Sumba appears relatively impoverished by modern standards. However, these island-wide statistics do not indicate relative wealth differences between Sumba's population members (Vel & Makambombu, 2010). Most of the people of Sumba who live in rural areas make their living as animal breeders (horses, cattle, pigs and poultry). Some are farmers, fishermen and weavers, while people who live in urban areas mostly work as office workers or open small businesses (Devanastya, 2020).

Moreover, in Sumba, an individual's affluence has long been intertwined with animal ownership (Vel & Makambombu, 2010). Mulyoutami (2017) defines livestock as "*banda la marada*" or "possession in the field" and designates it as "*banda luri*" or "living goods" or

"life property." Owning more live property (banda luri or livestock) increases their social status. Livestock also functions as a liquidatable economic asset during times of hardship. Conversely, the most impoverished members of society lack any form of animal ownership.

4. Insights from Sumba: Towards Adaptive Social Protection Against Climate Change

This section will reveal some ideas for the development of future publications based on insights gained from the Sumba case. In general, the insights revolved around formal and informal social protection and the opportunities to integrate them, creating a future-proof society against climate change.

4.1 Overcoming Barriers to Mainstream and Operationalise Adaptive Social Protection in Local Regions with Multiple Risk Contexts

Adaptive social protection (ASP) is a collaborative effort that integrates social assistance, humanitarian aid, and disaster risk reduction strategies aimed to enhance the resilience of vulnerable households facing multiple risks. While ASP is gaining traction globally, its implementation, while facing challenges, requires the collective efforts of all stakeholders, particularly in regions with complex risk landscapes like Indonesia. Despite government initiatives, ASP remains unfamiliar to policymakers at local levels. Implementation challenges include distinguishing ASP from existing social protection programs, limited institutional capacity, and stakeholder coordination gaps. Furthermore, geographical barriers hinder effective program delivery, and fragmented data practices impede accurate targeting and response. However, by adopting recommendations such as enhancing awareness of climate change impacts among local governments, fostering collaboration between social protection, disaster risk reduction, and climate change adaptation efforts, establishing platforms for cross-sectoral coordination, facilitating multidimensional data integration, and developing a comprehensive National Action Plan on ASP. By adopting these recommendations, Indonesia can enhance its social protection system's resilience and responsiveness, safeguarding vulnerable communities against the impacts of climate change and disasters. Mainstreaming and operationalising ASP in regions with multiple risks require concerted efforts of all stakeholders to address institutional, coordination, and data challenges. Effective ASP implementation hinges on building a common understanding of ASP concepts among stakeholders, identifying synergies among existing programs, and enhancing coordination mechanisms to ensure targeted and timely assistance to vulnerable populations. Moreover, investing in capacity building, infrastructure development, and data management systems will strengthen ASP's effectiveness and contribute to building resilient communities in the face of evolving risks.

Keywords: adaptive social protection (ASP); vulnerable households; resilience; stakeholder coordination; climate change adaptation.

4.2 Navigating the Complexities of Formal Social Protection: A Case Study of Implementation Challenges in East Sumba, Indonesia

Indonesia's diverse landscape and rich cultural heritage starkly contrast with the harsh reality of widespread poverty, particularly evident in regions like East Sumba. Despite economic growth, deep-rooted factors such as unequal wealth distribution, limited access to essential services, and regional disparities persist, contributing to a complex poverty narrative. East Sumba, characterised by high poverty rates and susceptibility to natural hazards and climate change impacts, embodies the broader challenges marginalised communities face across the archipelago. This study explores the formal social protection landscape in Indonesia, focusing on East Sumba as a case study. Drawing from empirical research and official data, this study examines the implementation of social protection programs, particularly the Family Hope Program (PKH), in East Sumba. Despite the challenges that emerge, including ineffective communication, limited facilitator resources, and unclear Standard Operating Procedures (SOPs), there is a potential for improvement. These findings underscore the need for clearer guidelines and enhanced democratic participation to optimise program efficiency and effectiveness, instilling a sense of hope for the future of social protection in East Sumba. By delving into the multi-layered and multi-faceted formal social protection system in Indonesia, this research aims to address critical questions regarding the progress of Indonesia's social protection transition agenda, the effectiveness of existing programs, and the gaps in mitigating poverty. Through a comprehensive understanding of the formal social protection landscape, particularly in East Sumba, this study seeks to inform policy development and strategies to expand access to sustainable social protection. The urgency of these findings is underscored by the complex web of poverty, economic disparity, and environmental vulnerability in the region, demanding immediate attention and action.

Keywords: adaptive social protection, formal social protection, East Sumba, Indonesia,

4.3 Assessing Household Adaptiveness to Climate Challenges: Insight from Sumba

This research examines household adaptiveness to climate change in Sumba Island – a semi-arid, smallholder livestock-oriented community and one of the most disaster-prone regions in Indonesia. It focuses on the question of how rural households adapt to disaster and climate change risks. This paper defines household adaptiveness as the ability of households to prepare and adapt to shocks, the ability to save income and diversify livelihoods anticipating crises and shocks. The study hypothesised that several variables, including social participation, place attachments, trust in local government, access to social protection services, social capital, and climate risk perception, can be used to predict household adaptiveness and resilience. The

structural equation modelling analysis uses the assistance of SmartPLS software to analyse the developed model. Initial findings suggest that social participation significantly influences the level of household adaptiveness to climate challenges. In contrast, social capital, climate risk perception, and trust in the government do not significantly affect household adaptiveness. This research also highlights the role of social protection in enhancing household adaptation to climate change risk.

Keywords: household adaptiveness; climate change; climate risk; disaster risk; climate risk perception; Sumba; Indonesia

4.4 Understanding Informal Social Protection Arrangements as Existing Adaptive Climate Protection in Sumba

Globally, social protection is acknowledged for its role in assisting impoverished and marginalised individuals in navigating risks. It is commonly linked with mechanisms embedded within societies or specific communities aimed at aiding members in addressing diverse risks. Social protection has emerged as a worldwide priority aimed at safeguarding the welfare of individuals residing on the fringes of society, principally to ensure their well-being, and help them mitigate the risks that are intensifying as a result of climate change. The limited capacity of governments in various countries to manage social protection indirectly creates a gap that is then mapped into formal and informal social protection. Although informal mechanisms play a crucial role, there is still limited empirical research on informal social protection, particularly regarding its interaction with the formal mechanisms offered by the state. Empirical research efforts offer a significant advantage in delineating the unique characteristics of social protection development within individual communities to conceptualise the overall social protection mechanism more systematically. This study is conducted to answer the main question 'how does informal social protection perform in Sumba?' By conducting multi-site ethnographic research, we interrogate the informal social protection that exists in rural communities on Sumba Island. The respondents predominantly engage in subsistence living as fishermen and farmers, encountering challenges and alterations that impact their livelihood assets, disrupting established systems. These changes also hinder their capacity to address diverse risks encountered along the way. Social protection practices in Sumba are spread through various practices that take place at different scales; micro networks between families such as care and mutual assistance between families or neighbours, and where a family experiencing food difficulties borrows from other families or neighbours. These micro-level practices come through variations of reciprocity and solidarity with no obligation on the part of the recipient to return. At a more complex scale, informal social protection is present at the community level through practices such as *arisan* and traditional events. In addition to the forms of social adaptation that take place among residents and rural communities, there are also

opportunities offered by semi-formal microfinance institutions, such as *Koperasi*, which are accessed by residents when they experience difficulties, and the existing social capital is limited to help them. This can be categorised as semi-formal social protection.

Keywords: social protection mechanisms; informal social protection; Sumba; ethnographic research; community resilience

4.5 Informal Social Protection: The Role of Social Capital

In response to the escalating risks posed by climate change, the discourse on social protection has gained prominence, particularly in exploring the role of informal mechanisms operating within communities. This study delves into the intricate dynamics of informal social protection, focusing on Sumba Island, Indonesia, with a central inquiry: Does social capital qualify as informal social protection? Through empirical research, this study unveils a complex tapestry of informal social protection mechanisms deeply interwoven within the community fabric. These mechanisms, often operating beyond the ambit of state intervention, encompass a spectrum of practices ranging from micro-level networks of reciprocity to community-wide events like arisan and traditional ceremonies. The empirical findings shed light on the multifaceted nature of social capital, which emerges as a vital component of informal social protection in Sumba. Manifested through communal relationships and cultural practices such as gotong-royong and Mandara, social capital plays a crucial role in buffering communities against various shocks and crises. However, the study underscores the need for a nuanced understanding of social capital, cautioning against its overgeneralisation, particularly concerning vulnerable groups like Sumba's fallen nobility (Maramba). While social capital offers resilience and support, its efficacy may be contingent upon various factors, such as social stratification and power dynamics within communities. The study reveals that the typical social stratification with a caste system in Sumba society has inherent weaknesses when livelihood systems are disrupted by asset loss. Despite their previous high social status, the nobility (Maramba) and their dependents are susceptible to destitution and food insecurity when faced with crises. Hence, the study advocates for interventions that address these vulnerabilities and ensure equitable access to social protection mechanisms. Furthermore, the research emphasises the need for tailored social protection interventions that consider the unique socio-cultural context of communities. Interventions must be sensitive to power imbalances and ensure inclusivity concerning gender, equity, disability, and social inclusion (GEDSI) considerations. Moreover, the erosion of social capital in the face of compounding crises underscores the importance of reinforcing community resilience through targeted interventions. In light of these findings, the study recommends comprehensive policy frameworks integrating informal social protection mechanisms into formal social protection systems. Such frameworks should leverage community resilience and

cultural practices while addressing structural inequalities and vulnerabilities. Additionally, the study advocates for further empirical research to assess the performance of social capital amidst compounding and cascading crises with pervasive effects, such as locust infestations, disease outbreaks, and cyclones, which pose significant challenges to community resilience.

Keywords: informal social protection; social capital dynamics; vulnerable groups; community resilience; tailored interventions

4.6 Adaptive Social Protection: Leveraging Informal Arrangements for Climate Resilience in Sumba, Indonesia

As the world witnesses rapid and severe changes in weather and the effect of climate change, as well as the COVID-19 pandemic and social conflicts, it is pivotal to leverage social protection in responding to both slow-onset and sudden-onset disasters. This paper aims to map existing informal social protection arrangements in the context of understanding existing adaptive climate protection and how the arrangements can create pathways toward adaptive social protection. This paper utilises data from both quantitative and qualitative approaches. The paper finds that, firstly, understanding informal social protection arrangements is important in designing formal social protection in general, including social structures, exclusion, inclusion of the existing system, as well as targeting. Faith-based organisations and local organisations in Sumba, such as NGOs and cooperatives, have the most promising pathways for building transformative impacts that would open ways to create a more adaptive community. Second, the analysis of informal social protection arrangements reveals gaps and areas for improvement. This underscores the need for a stronger state presence to address issues of poverty and vulnerability within the community. Lastly, understanding informal social protection is key to building adaptive capacity. Being adaptive to disaster and climate change risks is closely related to community-based initiatives. Only by understanding how communities value relations, initiate collective actions, and structure socially might the utmost purpose of adaptive social protection be achieved.

Keywords: adaptive social protection; informal social protection; community-based protection; informal institutions; semi-informal social protection; Sumba; Indonesia.

4.7 Who are Looking After the Elders: An Ethnography Study on Family, Modernisation, and Generation Gap in Sumba

The process of modernisation in Sumba Island in the Eastern Part of Indonesia has had a serious impact on family relations. While in previous generations, the elders were

looked after by their children and clan, today, many families are struggling to maintain this position. Today, state service for people aged 65 or older is also limited. By conducting multi-site ethnographic research, this research gives a picture of how different generations see families and their responsibility to them. It also highlights the new generation's dynamic to keep the elders and families while struggling to define 'their own self', and at the same time, it also exposes how parents look at children after they introduce modernisation through education to their children. This ethnographic research intends to provide the latest portrait of families and the life of elders in the Eastern Part of Sumba. It explains how education, job opportunities, and migration contribute to loosening family structure and clans. The struggle to maintain family is the focus of the research. It also shows the changing notion of family and clan in Sumba society.

Key Words: Family, clan, modernization, social protection, generation gap, social capital

4.8 Integration of Formal and Informal Social Protection: Lessons learned from Sumba

In the face of disasters and social risks like illnesses, unemployment, or climate change-induced hazards, social protection emerges as a crucial mechanism to safeguard vulnerable households from falling into poverty. Indonesia, despite notable strides in poverty reduction, grapples with endemic challenges exacerbated by climate change and frequent natural disasters. Sumba Island, East Nusa Tenggara, epitomises the complexities of poverty, disaster, and climate change, with a significant portion of its population living below the poverty line. The island has endured the brunt of disasters like Cyclone Seroja amid chronic poverty and malnutrition, underscoring the urgent need for comprehensive social protection measures. Formal social protection programs, predominantly governed by the central government, aim to alleviate poverty through various schemes. However, they face inclusion and exclusion errors in distribution due to standardised criteria. In contrast, informal social protection mechanisms, deeply entrenched in Sumba's social fabric, operate through reciprocal relationships within the community, historically organised around a unique stratification system. This study investigates the intricate relationship between formal and informal social protection in East Sumba, Indonesia, in the context of socio-economic vulnerabilities, disasters, and climate change risks. Employing a mixed-method strategy, this research focused on various qualitative methodologies, including literature reviews, desk research, focus group discussions involving key stakeholders, and interviews with knowledgeable informants. Furthermore, quantitative data was gathered through household surveys. By delving into the dynamic interplay between these two schemes, it aims to identify potential pathways for their integration. Through a nuanced

understanding of how these systems interact, policymakers can devise more effective strategies to bolster community resilience and mitigate the adverse effects of multifaceted risks.

Keywords: Social protection; formal; informal; climate change; East Sumba; integration.

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