



**Social Protection and Climate Change
in Asia and the Pacific**



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1. Executive Summary

Asia and the Pacific is the most disaster-prone region globally, experiencing frequent natural hazards that have intensified due to climate change, resulting in significant human and economic costs. Since the 1970's, an average of 43,000 people per year have lost their lives due to disasters. The economic cost of these disasters is estimated to be over \$1.3 trillion since 1970. Storms, floods, and droughts are among the primary causes of disaster-related deaths in the region. Rising temperatures, changing precipitation patterns, and more frequent heatwaves caused by climate change are likely to further exacerbate existing vulnerabilities and destabilize ecological systems, with serious consequences for the region's population.

Climate change intensifies inequalities, disproportionately affects populations in vulnerable situations and creates new intersecting vulnerabilities across different groups, including marginalized groups based on factors like gender, age, race, geographical location and disability among others. Workers in the informal economy, including agriculture, fisheries, construction, and tourism sectors are especially vulnerable, and are often less protected, without access to social protection. Women face added challenges due to gender norms and economic disadvantages making them more susceptible to climate-related risks and disasters. They may be expected to take care of children and the elderly during disasters, limiting their ability to respond to hazardous situations, as well as disproportionately work in sectors (e.g. agriculture) which are particularly exposed to climate change effects. The COVID-19 crisis highlighted the need for inclusive and comprehensive approaches to address poverty and inequality and the effects of shocks and crisis.

The Paris Agreement, adopted in 2015, recognizes the importance of social protection in reducing climate impacts as well as in supporting mitigation and adaptation efforts. Since the adoption of the Paris Agreement, the role of social protection in the context of climate change has been repeatedly acknowledged and is gaining popularity as an effective policy tool to ensure sustainable and inclusive economic growth and a just transition in the wake of a changing climate.

Social protection plays a vital role in addressing the impact of climate change on employment and livelihoods. Climate-related hazards have led to an annual loss of 23 million working-life years between 2000 and 2015, with vulnerable groups being disproportionately affected. Social protection instruments like unemployment protection, social health protection, pensions, cash benefits, and public employment programs provide income security, access to healthcare, and can create job and income generating opportunities. Social protection systems not only have the potential to reduce poverty and inequality but also promote resilience, inclusive growth, and environmental sustainability. Robust social protection systems are effective tools for addressing life-cycle as well as climate-related risks and contingencies and are essential in safeguarding vulnerable communities.

The concept of a just transition has gained prominence in addressing the social aspects of climate change mitigation. It refers to a comprehensive and equitable approach to addressing the challenges and opportunities associated with transitioning to a more sustainable and net-zero economy. The Paris Agreement and subsequent UNFCCC COPs have emphasized the importance of just transitions, particularly in creating decent work and supporting workforce transition. Social protection plays a crucial role in safeguarding people during these transitions, but its relevance and potential role is often not being sufficiently taken into account when exploring policy options in this regard. Integrating social protection into policies addressing environmental impacts and transition



challenges is essential for achieving cumulative and transformative outcomes that are required in the context of climate policies. Effective policy packages involve inclusive social dialogue, linking labor market policies with social protection, and developing National Just Transition Strategies.

Climate policies can be categorized into two main approaches: mitigation and adaptation. Mitigation focuses on addressing the causes of climate change, while adaptation deals with managing its effects (Lambeau & Urban, 2023). These two approaches are interconnected and often complement each other. In addition, climate policies also recognize the need to respond to loss and damage that cannot be prevented through mitigation and adaptation and to build resilience around such events.

While mitigation efforts to reduce greenhouse gas emissions is essential to address the climate crisis, such policies can have far-reaching effects, including potential job losses and shifts in economic structures. Vulnerable populations may face challenges during this transition, and social protection is crucial in ensuring an equitable "just" transition. The creation of climate-resilient economies is essential for social stability, and it is projected to create millions of new jobs. While some industries may decline, others, like sustainable energy and green construction, offer significant job opportunities. Social protection can play a protective, preventive, and transformative role in climate mitigation strategies, ensuring that marginalized communities are integrated into environmentally friendly shifts and helping manage workforce transitions. It can also enhance the acceptability of climate policies and improve environmental outcomes, making it a versatile tool in addressing climate change challenges.

Likewise, social protection plays a critical role in supporting climate change adaptation measures, helping societies and economies deal with the challenges posed by a changing climate. Social protection acts as a buffer against climate shocks, offering cash and food transfers to households affected by climate impacts. It also anticipates and prepares for risks, boosting savings and enhancing adaptive capacity. Furthermore, social protection can address the root causes of climate vulnerabilities and inequalities, supporting transformative actions like Payments for Environmental Services (PES) that simultaneously protect the environment and provide livelihood support.

Incorporating social protection into national climate change strategies, particularly through Nationally Determined Contributions (NDCs) and National Adaptation Plans (NAPs), is essential for addressing climate-related vulnerabilities and ensuring inclusive, just transitions. While NDCs provide an opportunity to align climate actions with poverty reduction, gender equality, decent work, and inequality reduction, many countries in Asia and the Pacific currently lack consideration for these objectives. Only a small percentage of NDCs mention social protection to support climate mitigation and adaptation efforts. Similarly, only a few countries have integrated social protection into their NAPs and there is potential for improvement.

To establish comprehensive, resilient, and shock or climate-responsive protection systems, expanding fiscal capacity from domestic resources as well as exploring synergies with Paris aligned investments is pivotal. Diversified financial strategies going beyond frameworks exclusively designed for social protection should aim to incorporate and better coordinate with alternative financing mechanisms, including climate and disaster financing and insurance mechanisms, and other forms of Paris aligned investments (e.g. Green Bonds, Climate Funds, etc.).

Social protection plays an important role in supporting climate change adaptation and mitigation efforts, particularly in the Asia Pacific region where many remain without adequate coverage. Sustainably expanding social protection is essential, with a focus on vulnerable groups, including



informal workers, migrants, people with disabilities, and marginalized communities. To be effective, social protection systems must be rights-based, comprehensive, provide adequate benefits and uphold principles like universality and solidarity. Benefits will also have to take into account the heightened risks from climate change. Governments should explore synergies with disaster risk finance and Paris aligned investments like green bonds and climate funds. Climate-sensitive design, fiscal repurposing, and inclusion in national climate strategies are vital steps in crafting comprehensive, equitable social protection systems that address climate vulnerabilities and promote sustainable development. Gender-specific challenges must also be addressed to ensure effective climate adaptation and mitigation.

2. Climate change in Asia and the Pacific

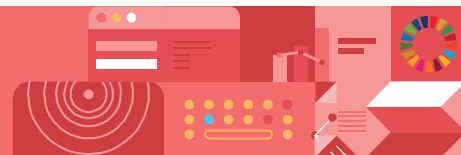
The Asia-Pacific region encompasses a vast geographical area, stretching from the northernmost to the southernmost parts of the globe. It is characterized by diverse climates, including various biomes such as rainforests, savannas, deserts, alpine, grasslands, and temperate deciduous forests. The region also boasts the largest land mass, highest mountains, and extensive bodies of water on Earth.

The Asia-Pacific region is highly susceptible to natural hazards, earning the title of the most disaster-prone area in the world. Climate change has amplified the occurrence of storms, floods, droughts, and heatwaves, leading to more frequent and severe natural hazards. This poses significant risks to human lives, infrastructure, and ecosystems (UNDP, 2019). Since the 1970's, an average of 39,000 people per year have lost their lives due to disasters, with a disproportionately high number of affected populations compared to global statistics (ESCAP, 2023c). The Asia-Pacific Disaster Report 2023 projects disaster-related deaths and economic impacts to amount to annual losses nearing \$1 trillion or 3 per cent of regional GDP under a scenario of 2°C warming. Floods, earthquakes and storms are among the primary causes of disaster-related deaths in the region.

The effects of climate change, including the increased variability of weather patterns exacerbate the vulnerability of the Asia-Pacific region. Mean temperatures have been steadily increasing, with a rise of 0.86°C above the 1981-2010 average and 1.41°C higher than the 1961-1990 average recorded in 2021 (WMO, 2022). Precipitation levels have also been higher than average, with an increase of up to 200% above the 1981-2010 average in annual precipitation in the same year. Rising sea levels and changes in rainfall patterns are projected, while some areas experience increased drought severity and frequency, and heatwaves are further expected to intensify.

Climate projections for the Asia-Pacific region from 2040 to 2059 indicate varying impacts across sub-regions. East and North-East Asia could experience temperature increases of 2.04-2.68°C and precipitation increases of 33.3-87.44mm. North Central Asia may see temperature increases of 1.86-3.80°C, with potential decreases in precipitation in Tajikistan. The Pacific region is projected to witness temperature rises of 1.18-1.84°C, with mixed precipitation changes. South-East Asia could face temperature increases of 1.35-1.74°C and significant precipitation increases. South and South-West Asia may experience temperature increases of 1.41-2.51°C, with varying precipitation changes (World Bank, 2021).

The Intergovernmental Panel on Climate Change (IPCC) highlights significant risks in the region, including heat-related mortality, water and food shortages leading to malnutrition, increased poverty



and inequality, coral reef decline, and species extinctions in mountainous areas. Medium-risk factors include water and vector-borne diseases, flood-related deaths, infrastructure damage, and crop failure. Despite these vulnerabilities, the region's progress in mitigating climate change remains insufficient. Factors contributing to this shortfall include heavy reliance on fossil fuels for economic growth, policy limitations, limited access to climate finance, lack of public awareness, and technology gaps. Asia and the Pacific accounts for 60 percent of the world's energy-related CO₂ emissions. In 2020, this region saw its highest-ever global share of energy-related emissions, releasing 18.9 billion tons of CO₂ from fuel combustion (ESCAP, 2023a).

3. Impact on people

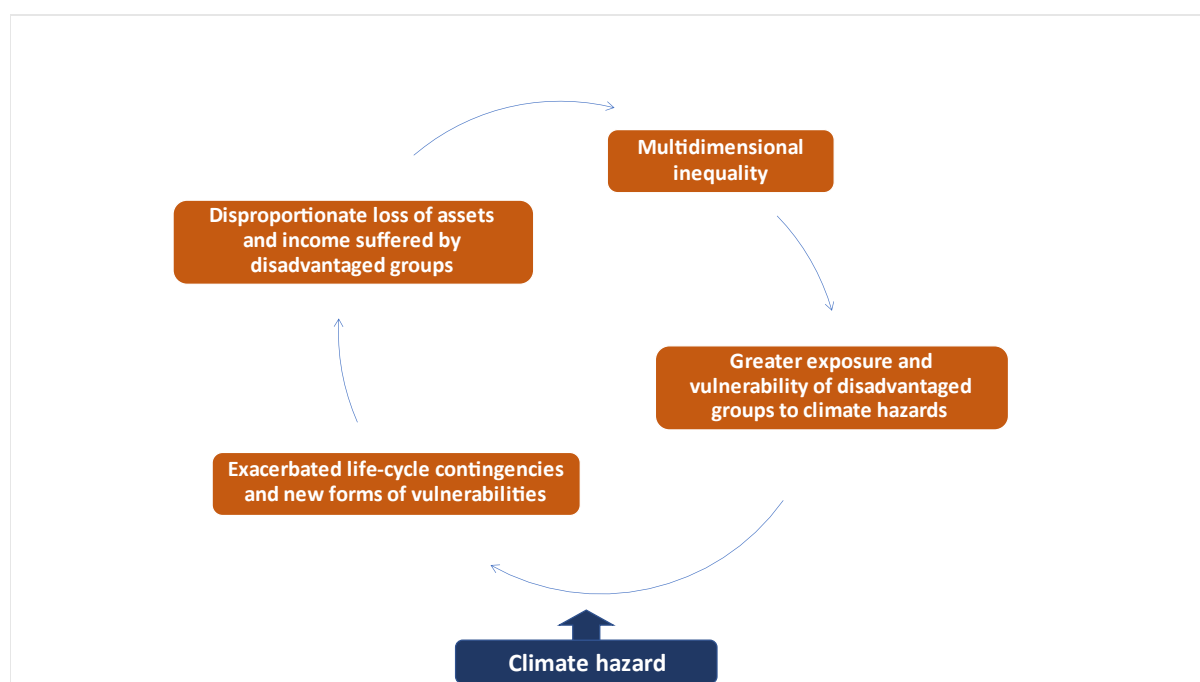
3.1 Exacerbating inequality

The 2014 IPCC report emphasizes climate change's tendency to exacerbate inequalities and the differentiated impacts on people. People in vulnerable situations – those marginalized by factors like gender, age, race, class, caste, geographical location, indigeneity, and disability – face disproportionate negative impacts from climate hazards, despite these groups producing only a fraction of cumulative emissions (OXFAM & SEI, 2020). The Covid-19 crisis amplified pre-existing socioeconomic and labor market disparities within and between countries. Systemic racism and discrimination further led to unequal infection and mortality rates among ethnic minorities and low-income groups. The crisis underlines the need for inclusive approaches to tackle poverty and inequality (ILO, 2020e).

To better understand how these mechanisms operate, consider the following example (Islam and Winkel, 2017). In certain areas, climate change leads to increased flooding. In cases of inequality, disadvantaged groups are frequently compelled to reside in flood-prone areas, heightening their vulnerability to climate-induced flooding. Secondly, among those residing in flood-prone regions, disadvantaged communities are more susceptible to damage caused by flooding. For instance, their homes are often constructed with less resilient materials, resulting in complete destruction or significant damage during floods, whereas wealthier individuals typically have sturdier brick or concrete houses that are less damaged. Finally, disadvantaged groups have limited resources to cope with and rebound from flood-related losses. Wealthier individuals may have insurance coverage, which helps them recover some of their losses, while disadvantaged groups often cannot afford such insurance and bear the full brunt of the damage, leading to a more significant erosion of their assets. Climate change and inequality are locked in a vicious cycle, whereby climate change hazards end up aggravating inequality.

Figure 1 provides an illustration of how this cycle operates. It intersects with multifaceted existing inequalities, which subsequently lead to heightened exposure of disadvantaged groups to climate-related hazards. This, in turn, amplifies their vulnerability to damage resulting from these hazards and diminishes their capacity to manage and recover from such hazards. Consequently, when climate-related hazards do occur, it exacerbates existing life-cycle contingencies and nurtures the emergence of new vulnerabilities. Moreover, as illustrated in the example above, disadvantaged communities experience a disproportionate loss of income and various types of assets, including physical, financial, human, and social assets. This exacerbation of inequality by climate change perpetuates the cycle, creating a self-reinforcing loop.

Figure 1: Vicious cycle of inequality in the context of climate hazards



Source: Adapted from UNDESA, 2017;

Empirical studies conducted in Viet Nam and Indonesia highlight that income inequality escalates alongside climate variations. The weight of climate volatility falls particularly heavily on marginalized groups, rural households, and minorities, propelling them into a cycle of impoverishment and social marginalization (Poggi et al., 2020). Most poor and marginalized groups in both Indonesia and Vietnam, for instance, typically can only afford to live in less desirable areas, which are often remote, rural and with infrastructure that is less resilient to climate impacts. In addition, over 30% of Vietnam's impoverished population consists of ethnic minorities. These communities face challenges in terms of limited political representation, marginalization, and societal norms, which often restrict their ability to access various productive resources, enhance their economic conditions, and reduce their susceptibility to climate-related risks. Additionally, gender disparities persist, with women frequently encountering unequal job prospects and social roles that confine them to household chores and childcare responsibilities, which altogether limit their resilience to climate induced shocks and crisis.

Simultaneously, a transition towards net-zero economies is advancing due to heightened awareness, technological innovation and increasing commitment to climate targets. This poses the question of who should shoulder the costs of climate action, potentially disproportionately and negatively affecting the vulnerable and jeopardizing social cohesion. For example climate change mitigation measures such as reducing subsidies for fossil fuels tends to increase not only fuel prices, but also prices of basic commodities (e.g. wheat, rice, sugar, etc.). As poorer households spend a larger share of their income on these goods, a price increase will affect them much stronger than other households, who can more easily absorb the price increase, without having to reduce consumption of other essential goods or services. Addressing these concerns is vital to ensure equitable climate action that benefits all without disproportionately affecting people in vulnerable situations.



Lessons on how shocks and crisis may exacerbate existing inequalities can be also learned from the most recent COVID-19 pandemic. The Covid-19 crisis amplified pre-existing socioeconomic and labor market disparities within and between countries. Systemic racism and discrimination further led to unequal infection and mortality rates among ethnic minorities and low-income groups. The crisis underlines the need for inclusive approaches to tackle poverty and inequality (ILO, 2020e).

3.2 Effects on labour markets

When examining the connection between the labor market and climate change, it's crucial to consider four key aspects (ILO, 2018):

1. Employment in various sectors depends directly and indirectly on ecosystem services, like agriculture, fishing, forestry, and tourism. Climate change poses a threat to the availability of essential services such as freshwater supply, biodiversity, storm protection, and stock replenishment, negatively impacting economic activities and associated jobs. This can lead to reduced labor productivity. For instance, agriculture, employing 1.1 billion people globally (ILO 2014), suffers from climate-induced crop losses and reduced physical capacity due to heat stress, leading to income and livelihood reductions. The fisheries sector faces challenges like ocean acidification and rising temperatures affecting marine life, amplified by pollution and overexploitation (FAO, 2020). Declining fish stocks impact incomes and decent work, while extreme weather further threatens the sector. Both sectors, agriculture and fisheries are predominately informal with no or limited access to social protection. They will therefore feel the consequences of climate change disruptions more severely.
2. Employment groups, such as the working poor, informal economy workers, seasonal/casual laborers, self-employed individuals, and micro/small enterprises are disproportionately affected by climate change (ILO, 2014), partly because they lack access to social protection and tend to earn lower levels of income and thus have limited coping mechanisms in case they are confronted with the effects of climate change.
3. Jobs and safe working conditions rely on the ability to manage environmental risks (such as storms and air pollution) and the stability of environmental factors (e.g., temperature and predictable rainfall patterns). Climate change, by altering temperature and precipitation patterns, renders regions unproductive and create work environments that are too hot for labor, potentially resulting in climate-induced migration, a rise in precarious and informal employment, and increased unemployment.
4. Vulnerable workers, including women, migrant laborers, individuals in poverty, indigenous and tribal communities, people with disabilities, and other disadvantaged groups, are disproportionately affected by the risks and dangers associated with environmental degradation. While their impact varies depending on the country or region, all of these groups tend to have lower access to resources for climate change adaptation, including land, credit, agricultural inputs, the support of decision-making bodies, technology, social insurance and training. As a result, they tend to be more vulnerable in the context of climate change.



3.3 Gender aspects of climate change

Climate change and disasters expose women and girls to vulnerabilities, stemming from cultural norms and their marginalized socio-economic standing. These norms can limit their access to resources, decision-making power, and educational opportunities. When disasters strike or climate change impacts a community, these existing gender norms may exacerbate vulnerabilities. For example, women may be expected to take care of children and the elderly during disasters, limiting their ability to respond to or evacuate from hazardous situations (UNFCCC, 2020). At the same time, women's economic disadvantage can make it more challenging for them to prepare for, cope with, or recover from the impacts of climate change and disasters. For instance, women in poverty may not have the means to relocate to safer areas or access necessary healthcare and support services during disasters.

Women in Asia and the Pacific also make up a significant portion of the labour force in sectors such as agriculture, fisheries, forestry, energy and manufacturing, sectors which are particularly exposed to the impact of climate change and are often informal, with limited or no access to social protection. Furthermore, during climate-induced disasters like tropical storms, severe floods, and landslides, women, girls, and gender minorities face an elevated risk of various forms of violence, including sexual assault, intimate partner violence, child marriage, trafficking, and sexual exploitation.

4. International Frameworks linking Climate Change and Social Protection

The 2030 Agenda for Sustainable Development, with its 17 Sustainable Development Goals, aims to align efforts globally in addressing poverty, protecting the planet, and fostering inclusive societies, which would have significant benefits in reducing climate change impacts on various aspects of society. SDG target 1.3 specifically stresses the need to implement nationally appropriate social protection systems to achieve substantial coverage of the poor and the vulnerable.

At the same time and in response to the detrimental effects climate change is having on people's lives and the projections that these effects will be amplified in the wake of a changing climate, exacerbating already existing inequalities, world leaders adopted the Paris Agreement at the UN Climate Change Conference (COP21) in 2015.

The Paris Agreement aims to drive national ambition and the development of climate policies at various levels of governance (IPCC, 2023). The Paris Agreement has prompted policy development and target-setting for mitigation and adaptation at national and sub-national levels. It has also enhanced transparency in climate action and support. Nationally Determined Contributions (NDCs) under the Paris Agreement have compelled countries to articulate their climate priorities and ambition. The establishment of the Warsaw International Mechanism on Loss and Damage in 2013, and the inclusion of Article 8 in the Paris Agreement, recognized the importance of addressing losses and damages from climate change. Other international frameworks recognizing the link between climate change and social protection include the Sendai Framework for Disaster Risk Reduction 2015–2030, underscoring the crucial connection between disaster risk reduction, poverty, and key social objectives, and the



United Nations Convention to Combat Desertification's Strategic Framework 2018–2030, which highlights social protection's relevance in drought occurrences.

Climate policies can be categorized into two main approaches: mitigation and adaptation. Mitigation focuses on addressing the causes of climate change, while adaptation deals with managing its effects (Lambeau & Urban, 2023). These two approaches are interconnected and often complement each other. In addition, climate policies also recognize the need to respond to loss and damages that can not be prevented through mitigation and adaptation and to build resilience around such events. Collaboration across sectors is essential to tackle the complex nature of climate risks, integrating adaptation, disaster risk reduction, and social protection and health policies. Agriculture, for instance, plays a crucial role in both mitigating climate change by reducing greenhouse gas emissions and adapting to it by ensuring food production. As such, nature-based solutions have gained attention for their potential to deliver economically, socially, and environmentally beneficial outcomes for climate mitigation and adaptation.

Since the adoption of the Paris Agreement, the role of social protection in the context of climate change has been repeatedly acknowledged and is gaining popularity as an effective policy tool to ensure sustainable and inclusive economic growth and a just transition in the wake of a changing climate. The following sections will elaborate on the linkages and synergies between climate change and social protection policy as well as present country cases from the Asia Pacific where social protection has been effectively utilized in this context.

5. How social protection supports the climate change agenda

The negative impact of climate change on employment and livelihoods, either directly or indirectly, heightens economic insecurity for vulnerable populations, increasing their exposure to life-cycle risks (Lambeau & Urban, 2023). Climate-related hazards have led to an annual loss of 23 million working-life years between 2000 and 2015 (ILO, 2018)¹. On the positive side lies the potential growth of green jobs due to adaptation and mitigation measures, safeguarding livelihoods with appropriate skill alignment (ILO, 2018b). Social protection, with its role in ensuring income security, emerges as a crucial policy tool. Covering different age groups, such as children, people in working-age, and older people, social protection systems contribute not only to income security but also to reducing inequality and poverty, enhancing human capital, promoting decent employment, inclusive growth and resilience.

The following table highlights key social protection instruments and their respective role in supporting people during and after shocks and in the context of climate change mitigation and adaptation:

¹ This can be due to unemployment, illness or employment injury;



Table 1: Social protection instruments and their relevance in the context of shocks and climate change mitigation and adaptation measures.

Social Protection Instrument	Description	During & after shocks	Mitigation	Adaptation
Unemployment Protection	Unemployment protection is a key instrument in the context of climate-related events and transitions. It has a dual impact on poverty reduction, providing immediate aid to those affected by climate shocks and fostering access to better employment opportunities. These schemes anticipate impacts like job loss, benefiting workers, employers, and governments. Beyond individual social protection, they facilitate macroeconomic adjustments by aiding labor market changes and transitions. Employment-focused social protection mechanisms bridge market misalignments, enabling labor market engagement, reducing exclusion risks, and promoting productivity and environmental sustainability.	✓ ✓ ✓	✓ ✓ ✓	✓ ✓
Social Health Protection	Social health protection offers coverage for health-related impacts of climate change and transitions. It covers	✓ ✓ ✓	✓	✓ ✓ ✓



	<p>varied risks, from altered working conditions to extreme event injuries. It ensures access to healthcare without financial burden, incorporating social health insurance and national health services, alongside income security via sickness benefits, is imperative to protect people from falling into poverty.</p>			
Pension	<p>Pensions, a widespread form of social protection, provide income security, including disability and survivors' pensions also in climate-related contexts. To ensure coverage and continuity, maintenance of pension systems throughout transition is crucial, with options like early retirement aiding those impacted by climate change mitigation for instance.</p>	✓ ✓ ✓	✓ ✓ ✓	✓ ✓
Cash and in-kind benefits	<p>Different schemes, like cash assistance or categorical benefits, ensure income and basic needs for vulnerable groups affected by climate policies and events. Regularity and predictability enhance effectiveness. Benefits can also encourage positive behaviors like Indonesia's Leluarga</p>	✓ ✓ ✓	✓ ✓ ✓	✓ ✓



	Harapan program, which provides cash benefit conditional on children's school enrollment and attendance and regular health check-ups for kids that include monitoring nutritional status.			
Public Employment Programs	Public employment programs can ensure income security in times of need and have the potential to contribute to public assets and sustainable natural resource management. Employment guarantee schemes, a form of public employment program, can ensure new opportunities for communities that can no longer sustain their livelihood activities due to environmental protection measures, among others.	✓ ✓	✓ ✓	✓ ✓ ✓

Degree of relevance: ✓: low relevance; ✓✓: medium relevance; ✓✓✓: high relevance;

The box below illustrates examples of countries that have used social protection in response to shocks and crisis.

Box 1: Social Protection responses in the wake of shocks and crisis

China – Subsidizing unemployment insurance schemes during the pandemic:

Amidst the COVID-19 pandemic, China bolstered its social insurance framework to support unemployed individuals. This involved offering an 80 percent subsidy to those who had utilized their benefits fully. Additionally, the country extended unemployment benefits to individuals approaching retirement within a year. Moreover, temporary unemployment assistance was introduced for workers not meeting the criteria for unemployment social insurance. These measures benefit two categories of individuals: those whose insurance benefits have lapsed but remain jobless, and those unemployed individuals who are ineligible for insurance claims (ILO, 2020b; ILO, 2020c).



Philippines – Public employment and health programmes supporting recovery from natural disasters:

The Philippines stands as one of the world's most disaster-prone nations, facing around 20 typhoons annually that impact millions and disrupt their sources of income. In light of this heightened susceptibility to both natural disasters and socio-economic challenges, the Philippines introduced the Integrated Livelihood and Emergency Employment Programme (DILEEP) in 2009. Serving as a public workfare initiative, this program offers short-term opportunities for dignified employment to informal economy workers. Notably, DILEEP provided essential income stability and played a vital role in restoring communities following the devastation of Typhoon Haiyan in 2013. Beyond this, the program ensures participants' access to health coverage, imparts knowledge on occupational safety and health, and grants entry to skill-enhancing training opportunities (ILO, 2015b)

Malaysia – Wage subsidies supporting workers and businesses during the pandemic:

Amidst the COVID-19 pandemic, Malaysia implemented an employment insurance system that introduced a wage subsidy initiative to aid employers in preserving their workforce. This program offers monthly subsidies of 600 to 1,200 Malaysian ringgit (dependent on enterprise size) for up to three months, benefiting workers earning up to RM4,000. To avail themselves of the support, businesses must commit to retaining their employees for a minimum of six months. The system not only extended unemployment benefits and wage subsidies to maintain the workforce but also aligned with physical distancing measures by providing training, including digital skill development across various disciplines (ILO, 2020b; ILO, 2020d).

Thailand – Unemployment insurance supporting recovery following extensive floods:

Following extensive floods in 2011 that impacted more than 13 million individuals, Thailand took steps to uphold the functionality of unemployment insurance through various relief initiatives. The timeframe for claiming unemployment benefits was prolonged from 30 to 60 days, providing ample opportunity for those directly affected by the flood to apply for assistance. Additionally, the contribution rate for both employers and workers was lowered, decreasing from 5 to 3 percent between January 1 and June 30, 2012, and further from 5 to 4 percent between July 1 and December 31, 2012 to ease the financial burden on affected people (ILO, 2015).

Vietnam – Social assistance measures supporting workers and businesses during COVID-19

During the COVID-19 pandemic, various social assistance measures were implemented to aid affected workers and businesses in Vietnam. Unemployed contracted workers and those without employment contracts, especially in closed establishments due to social distancing, received VND 1.8 million monthly. Informally employed individuals who lost work and earned below the poverty line were offered VND 1 million monthly for up to 3 months. Additionally, formally employed workers not eligible for unemployment insurance also received the same support. Businesses facing suspension due to COVID-19 received VND 1 million monthly for at least 3 months. The total budget of VND 28-30 trillion was allocated from central and local administrations. Moreover, veterans and social assistance beneficiaries received an additional VND 500,000 monthly for 3 months, aiding their contributions during the crisis until June 2020 (Gentilini et al, 2021).



In conclusion, a range of social protection instruments are available to address climate change's impact on employment and livelihoods and these instruments have the potential to support people adapt to crises and transitions, safeguarding vulnerable populations and fostering resilience.

The following sections will elaborate on the link between social protection and climate policies as well as highlight the role of social protection in building resilience and ensuring inclusive and sustainable socio-economic development.

5.1 Social protection supporting climate resilience

While social protection can support climate policies in multiple ways (e.g. supporting adaptation and mitigation efforts, supporting people in the case of loss and damage, as well as responding to the direct impact of climate related shocks), one of its core functions is to reduce and prevent poverty and vulnerability throughout the life-cycle (ILO, 2017) as well as to build people's resilience against the adverse effects of shocks and crisis (Bowen et al., 2020).

Social protection is therefore a uniquely placed policy tool to enhance people's resilience in the context of climate change and beyond. Social protection and climate resilience share a common purpose of uplifting and protecting populations. Leveraging this overlap could yield significant climate adaptation gains while bolstering social protection systems through streamlined policies such as Just Transition plans, National Adaptation Plans (NAP's), Nationally Determined Contributions (NDC's) and national development plans (Agrawal et al, 2019).

Climate change is increasingly affecting more and more people in Asia and the Pacific. Yet, social protection systems in the region merely cover a fraction of their population, with comprehensive coverage only being available in a handful of countries (ESCAP & ILO, 2021). Extending the reach of social protection systems at the national level will be therefore key to utilize social protection systems ability to fortify resilience against climate-related perils while also strengthening the systems against traditional life-cycle contingencies. By optimizing social protection systems' structure, funding, and execution, including strengthening social protection systems' adaptive and responsive capacities as well as its function to provide coverage against traditional life-cycle contingencies, governments can heighten climate resilience while curbing economic and social fragility.

Integrating climate resilience and social protection could strategically funnel Paris aligned investments into under-resourced social protection systems, alleviating the humanitarian and developmental toll of climate-induced disasters as well as responding to the needs of the missing middle, including agricultural workers, who are often disproportionately exposed with no or very limited access to social protection. Concurrently, it can bolster the effectiveness of social protection under changing climate dynamics. The synergies between these realms extend beyond their objectives. Existing social protection infrastructure already covers a substantial portion of the vulnerable population or has the framework to do so, potentially offering opportunities to scale climate adaptation efforts.

Efforts to make social protection systems adaptive and shock-responsive have similarly aimed to support people's resilience and their agendas closely overlap with the climate resilience agenda, making these slightly nuanced and different approaches part of the climate-resilience agenda (see box 2).



Box 2: How adaptive, shock-responsive and climate-responsive social protection fosters resilience in the wake of climate change shocks and crises.

Research has explored conceptual links between social protection and climate resilience, often describing integrated agendas as ‘adaptive’, ‘climate-responsive’, or ‘shock-responsive’ social protection. Depending on the country context, governments have adopted some of the principles and ideas put forward in these social protection frameworks. The main ideas behind each of the concepts is described below:

- Adaptive Social Protection (ASP) aims to optimize the collaboration between social protection and disaster risk reduction. It helps build the resilience of poor and vulnerable households by investing in their capacity to prepare for, cope with, and adapt to shocks, ensuring that they do not fall (deeper) into poverty (Bowen et al, 2020).
- In the realm of Shock-Responsive Social Protection, the convergence of social protection, disaster risk management, and humanitarian assistance is emphasized. This approach concentrates on enhancing the effectiveness of emergency responses to various shocks, including those beyond climate-related issues. This effectiveness is achieved by modifying existing social protection systems to better complement or facilitate these emergency responses (O’Brien et al 2018).
- The concept of Climate-Responsive Social Protection, initially proposed as a tool for managing risks, seeks to reinforce social protection systems through climate-informed planning and by cultivating connections across various sectors (Kuriakose et al, 2013).

Evolving perspectives seek to unify these approaches, focusing on preemptive household resilience-building, bolstering systems’ shock responsiveness and focusing on the integration of social protection and climate resilience efforts to support work and life-transitions in the face of climate change (Agrawal et al, 2019). While the above mentioned social protection frameworks have seen increasing popularity, the extent to which these need to be integrated into national social protection frameworks, depends on the characteristics (e.g. climate risk profile) of the country and to what extent it is expected to be adaptive or shock- and climate-responsive.

5.2 Just “climate” transition through social protection

While concepts such as adaptive and shock-responsive social protection have put more focus on social protection systems responsiveness and adaptive capacity in the context of shocks and slow-onset events, the idea of social protection supporting a just “climate” transition focuses more on people’s transition around climate change mitigation efforts (e.g. transition to low-emission energy) and slow-onset events.

The concept of just transitions originated in 1970s labor movements addressing job displacement during the phasing out of polluting industries for environmental benefit (Stavis et al., 2020). The United Nations Framework Convention on Climate Change (UNFCCC) of 1992 and the Kyoto Protocol acknowledged the need to address social aspects in climate mitigation, particularly in low-income countries. The Paris Agreement (2015) marked the first explicit mention of just transition, emphasizing workforce transition and decent work creation. The International Labour Organization introduced the Guidelines for a just transition towards environmentally sustainable economies and societies for all (also referred to as the Guidelines for a Just Transition) in 2015, focusing on aligning actions with Nationally Determined Contributions and SDG 8.



The concept gained prominence in subsequent UNFCCC COPs. COP24 (2018) adopted the “Silesia Declaration on Solidarity and Just Transition,” extending equitable responses to transition challenges (ADB, 2021). COP25 (2019) led to the Climate Action for Jobs initiative, promoting national plans for just transition (ILO, 2020). COP26’s Glasgow Climate Pact (2021) highlighted just transitions’ role in low-emission energy and job creation, with support for developing nations’ transitions (UNFCCC, 2021).

In this context, the importance of social protection in safeguarding people during transitions, especially against poverty and the multiple drivers of vulnerability, has been frequently acknowledged (ILO, 2023). However, the capacity of social protection systems to systematically address socio-economic costs of transitions is often not fully exploited. Beyond using social protection to manage intensified risks and adverse impacts, national transition policies must pursue social and environmental goals concurrently for cumulative and transformative outcomes. The Guidelines for a Just Transition of the ILO suggest integrating social protection into policies addressing environmental impacts and transition challenges, including climate and decarbonization.

Critical pathways toward effective policy packages, aligned with the Guidelines for a Just Transition, encompass:

1. Formulating and executing social protection policies through inclusive social dialogue involving relevant stakeholders, including social partners, recognizing climate change’s impacts on people and the social protection system’s role throughout transition.
2. Integrating climate commitments and strategies with socio-economic impacts and social protection as tools for shielding and enabling people during transition.
3. Linking active labor market policies with social protection, incorporating skill development throughout the transition.
4. Developing National Just Transition Strategies that unify social and climate policies, leveraging social protection and employment support for synergistic and transformative effects.

The UN Secretary-General’s call for a Global Accelerator on Jobs and Social Protection for Just Transitions underscores the interconnectedness of social protection and labor market policies in this process. It moreover recognizes the compounding effects that the COVID-19 epidemic, climate challenges and increasing food and energy prices as a result of the war in Ukraine have on people’s life’s.

An effectively coordinated just transition, aiding in achieving objectives such as universal decent work, social integration, and poverty eradication, involves assisting individuals in adjusting to climate change effects beyond potential short-term policy-related challenges. A just transition requires the integration of adequate social protection measures into national responses to climate change, as an essential part of climate change adaptation and mitigation policies. This also includes sectoral national action plans, such as National Adaptation Plans (NAP’s) and Nationally Determined Contributions (NDC’s).

5.3 Social protection supporting climate change mitigation measures

Countries’ efforts to reduce greenhouse gas (GHG) emissions and address climate change have far-reaching implications, both positive and negative. As climate change accelerates and the ambitious



task of decarbonizing economies alongside adaptation unfolds, the shift towards achieving net-zero emissions is anticipated to reshape growth trajectories over the next decades (Lambeau & Urban, 2022).

Without efforts to ensure an equitable “just” transition, climate change mitigation² measures may result in adverse social impacts. Vulnerable populations, such as lower-skilled or older laborers and communities heavily reliant on high-emission industries facing decline, may experience joblessness and migration at a much higher rate than other population groups. Moreover, the withdrawal of fossil fuel subsidies could increase consumer prices (UNDP, 2021). The transition costs, combined with possible growth contraction, could also shrink public budgets allocated for social protection and thus affect these hard-hit sectors and population groups even more.

In view of these challenges the creation of climate-resilient economies that generate sustainable employment, while absorbing labour market transitions, will be essential to maintain social stability and cohesion in societies. In the context of transitioning to a green economy, the ILO projects the creation of 24 million new jobs by 2030, while job losses are projected to be around 6 million (ILO, 2018). Workers and communities that don’t seamlessly transition might require assistance, including through social protection measures. For instance, industries tied to fossil fuels, such as oil, coal, and gas, are expected to shed five million jobs by 2030. The precise nature and extent of labor market transformations remain unquantified on a per-country basis, necessitating data-driven social policies for sectors prone to adverse effects due to high Greenhouse Gas emissions.

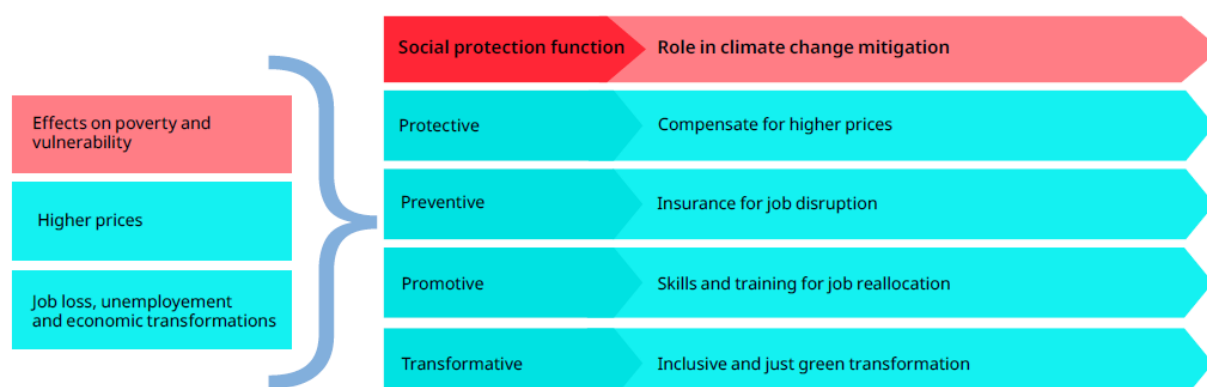
While risks of job losses exist, the potential for job creation in sustainable energy, green construction, electric vehicles, and circular economy practices outweighs them. Approximately 13 million net new jobs are projected in renewables, construction, manufacturing, services, waste management, and agriculture by 2030 (ILO, 2018). In contrast to those facing job declines, sectors benefiting from this growth must equip their workforce with relevant skills.

Applying core functions of social protection to climate policies (Malerba, 2021) proves valuable for strategic impact. Within climate mitigation strategies, social protection, sometimes in tandem with employment policies, can be:

1. Protective: Often tied to social assistance (e.g. cash transfers) for the most vulnerable individuals and families, this counters inflationary pressures like energy price hikes due to fossil fuel subsidy reductions. Low-income households, particularly those heavily reliant on energy-intensive needs, bear the brunt of this increase.
2. Preventive and Promotive: Typically resembling social insurance practices, such as unemployment insurance coupled with active labor market measures (e.g. training and employment support), these measures anticipate job losses and income uncertainty and can facilitate transition to a greener economy.
3. Transformative: This occurs when social protection directly or indirectly enhances environmental outcomes, advancing society toward a healthier eco-social equilibrium. For instance, Payments for Environmental Services (PES) initiatives contribute to such transformative effects.

² Climate Change Mitigation refers to efforts to reduce or prevent emission of greenhouse gases. Mitigation can mean using new technologies and renewable energies, making older equipment more energy efficient, or changing management practices or consumer behavior.

Figure 2: Core functions of social protection in supporting climate change mitigation measures



Source: Malerba, 2021;

Social protection and its overarching functions can fulfill various roles in the context of climate change mitigation, mirroring its contributions to climate adaptation (see Figure 2). Historically, the focus has predominantly centered on social protection as a mechanism to protect people from falling into poverty and to provide income security, at least at a basic level. The compensatory aspect of social protection arises from social protection's protective function to also support people during periods of increasing prices.

At the same time, social protection extends beyond mere price compensation and has the potential to integrate the most marginalized and susceptible segments of society into environmentally friendly economic and structural shifts. The passive labor market policies embedded in social protection, such as unemployment insurance, encompass a preventive role that can foresee and plan for temporary job losses. Conversely, active labor market policies, driven by their promotive function, are adept at managing the essential reallocation within the job market. Public employment programs can simultaneously facilitate additional training and skills development (Beazley et al. 2016). Especially in the context of reskilling low-skilled workers, active labor market policies play a crucial role, and social protection can facilitate workforce transitions between sectors through labor-focused strategies.

Finally, social protection can exert a direct influence on climate change mitigation endeavors, transcending its role as a counterbalance to potential negative socio-economic repercussions. This direct influence materializes through two primary avenues. Firstly, social protection can enhance the acceptability of climate mitigation policies while simultaneously addressing the distributional consequences of such measures, as illustrated in the examples presented in box 3 below (Malerba, 2021). This is particularly vital as low public acceptance poses a significant challenge to the implementation of climate mitigation policies. Secondly, social protection programs can directly or indirectly improve environmental outcomes. For instance, certain programs incorporate explicit conditions aimed at environmental improvement, such as the reforestation programme in the Philippines (see box 3). Additionally, cash transfers could inadvertently lead to reduced environmental degradation by decreasing the dependence of impoverished individuals on natural resources (Malerba 2020; Woolf et al. 2018).

The versatility of social protection is evident. Beyond preserving decent living standards, it fuels recovery and empowers decent livelihoods. Strategically deployed, these functions aid climate-resilient development. This aligns with Green Deal initiatives such as the European Green Deal, the



Green New Deal of the United States, South Korea's Green Growth Strategy, India's Renewable Energy Target and UK's Climate Change Act. Some of these initiatives connect post-COVID recovery to a just transition towards a sustainable green economy. The approach necessitates a global outlook, bolstering social protection, including social protection floors. Solutions extend beyond immediate needs, as seen in Iran's fiscal adjustment for social protection amid fossil fuel subsidy reduction measures (see box 3).

Box 3: Social protection supporting climate change mitigation policies and a just transition

Islamic Republic of Iran

The Islamic Republic of Iran undertook extensive energy subsidy reforms as part of a broader agenda for structural changes, aiming to promote inclusive growth and the creation of jobs. Previously, fossil fuel subsidies constituted the largest segment of an annual \$100 billion subsidy expenditure, resulting in double the fossil fuel consumption of other Middle Eastern nations. To offset the potential impact of subsidy reform on prices, the government introduced a universal cash transfer, akin to a universal basic income, with three primary objectives:

1. **Environmental Greening:** To counteract the rise in prices due to subsidy reform, the government introduced a universal cash transfer to households, with three main goals: curbing domestic fuel consumption and misuse of subsidies to promote environmental sustainability and reduce air and noise pollution.
2. **Social Acceptance and Inequality Reduction:** Leveraging social protection mechanisms to bolster the acceptance of reform and diminish disparities. Traditional energy subsidies often favor the wealthy over the poor, and by redistributing funds through a cash transfer, the government sought to enhance equality. The Gini coefficient, an indicator of inequality, improved from 0.41 in 2010 to 0.37 in 2011, with a particularly notable decline in rural inequality. However, subsequent inflation and sanctions may have eroded these gains.
3. **Enterprise Compensation and Competitiveness:** Enterprises facing competitiveness challenges due to the subsidy reform received compensation through fiscal strategies and other measures.

Approximately 80% of the savings generated by the subsidy reform were channeled into cash transfers. This approach yielded a positive effect on reducing inequality. The cash transfers led to an improvement in the Gini coefficient, indicating a decrease in inequality from 2010's 0.41 to 2011's 0.37. Rural areas experienced a particularly pronounced reduction in inequality. However, these gains may have been compromised over time by inflation and sanctions.

Furthermore, the health sector also benefited from the increased fiscal capacity resulting from these changes. Health reforms encompassed diverse interventions aimed at broadening the reach of basic health insurance, elevating hospital care quality, and lowering out-of-pocket expenses for inpatient services.

China:

Serious drought followed by a devastating flood in the late 1990s triggered reforms of environmental policies, introducing a ban on logging in 73 million hectares of natural forests, equivalent to 69 per cent of the total natural forest area. Almost 1 million state forest workers lost their jobs. In response to the socio-economic consequences, the Ministry of Human Resources and Social Security, in consultation with tripartite committees at national and local levels, including the



forest worker trade union, introduced measures to mitigate the effects on affected workers. Older workers were offered early retirement, while younger ones could opt for education and training programmes through employment service centres and were supported in finding employment elsewhere.

As of the end of 2010, 680,000 redundant younger workers had received one-off payments and 276,000 were reemployed or retired. Approximately 100,000 redundant workers who were unable to find new jobs received unemployment support to cover minimum living expenses and medical care. A variety of social measures also targeted local farmers affected by the logging ban.

Philippines:

In the Philippines, Environmental Cash for Work (ECW) program, a form of Payment for Environmental Service (PES), have been instrumental in addressing poverty and environmental conservation in coastal regions. Under the ECW programs, local communities, particularly those living in coastal areas, are engaged in reforestation activities, particularly the planting and maintenance of mangrove forests. Mangroves are crucial ecosystems that provide a range of benefits, including acting as natural buffers against coastal erosion, protecting against storm surges, and serving as nurseries for various marine species.

In exchange for their participation in these reforestation efforts, community members receive cash or other forms of compensation. This additional income helps alleviate poverty and provides economic incentives for people to engage in environmentally friendly practices.

The ECW programs not only generate short-term economic benefits for the participants but also contribute to the long-term sustainability of the coastal environment. By restoring and preserving mangrove forests, these initiatives contribute to biodiversity conservation, climate change mitigation, and ecological balance in the coastal regions of the Philippines.

Source : Urban, 2019 ; Lambeau & Urban, 2022 ; Malerba, 2021 ;

Box 4: Payment for Environmental Services (PES)

Shifting towards a climate-resilient future demands adjustments in personal and community behaviors, and social protection policies play a crucial role in encouraging such changes. For example, conditional positive incentives through payments for environmental services (PES) promote behavioral shifts and management outcomes essential for safeguarding critical ecosystems (e.g. mangrove forests). An illustration from the Asia-Pacific region is Thailand's "Green-Agri Project³," which complements the national cash transfer initiative by offering payments contingent on sustained adoption of eco-friendly agricultural practices.

In Southeast Asia, the "Rewarding the Upland Poor for Environmental Service" (RUPES) initiative integrates environmental service rewards into development programs to alleviate rural poverty and safeguard nature (RUPES, 2014). RUPES aimed for adaptable regional reward systems, collaborating with users, producers, and local partners. The pilot phase, RUPES I (2002-07), spanned six sites in Indonesia, the Philippines, and Nepal. Following RUPES I, RUPES II (2008-2012) expanded lessons, encompassing 16 sites across China, India, Vietnam, and more (Leimona et al., 2013).

³ [Thailand focuses on climate-smart agriculture to transform its climate action \(fao.org\)](https://www.fao.org/news/story/en/detail/country/thailand-focuses-on-climate-smart-agriculture-to-transform-its-climate-action)



Furthermore, the "Sustainable Rice Platform" in Vietnam offers financial support to farmers practicing sustainable rice cultivation, fostering responsible land and water management (UNEP, n.a.). Both initiatives incentivize climate-resilient actions while alleviating resource constraints.

The effectiveness of such incentives is evident in the results of programs like the Philippines' "National Greening Program," which rewards reforestation efforts with financial benefits. This contributed to a 62% increase in forest cover and a 34% decrease in deforestation rates (Commission on Audit, 2019).

In summary, harnessing social protection to promote climate-resilient behaviors is vital, and real-world examples from the Asia-Pacific region showcase the efficacy of incentives like PES. These initiatives not only drive positive environmental impacts but also provide much-needed support to vulnerable communities in their pursuit of sustainable livelihoods.

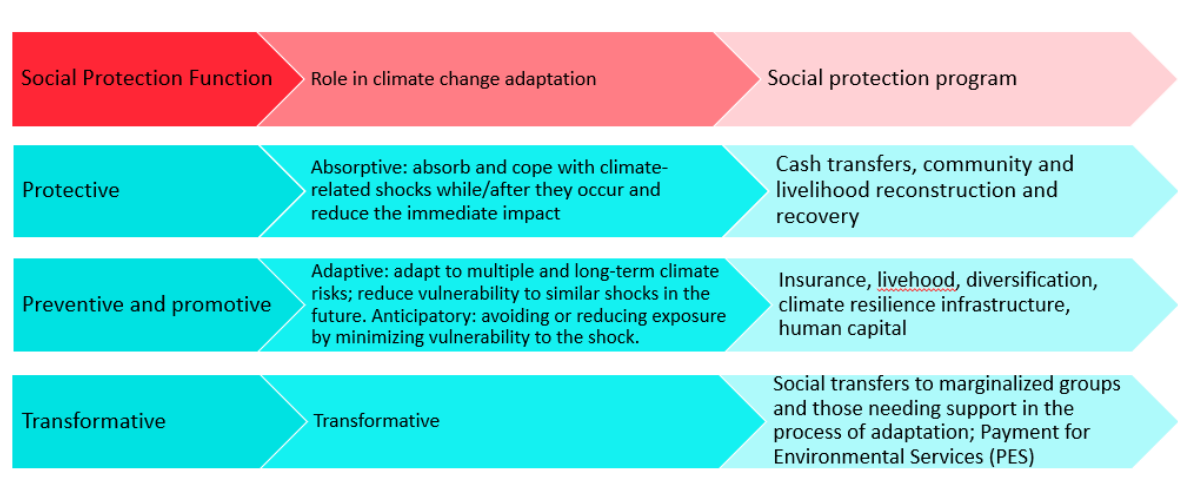
5.4 Social protection supporting climate change adaptation measures

Societies, economies, and ecosystems must adapt to a changing climate and its consequences, including more frequent climate extremes and changes to the physical environment (UNEP, 2021). Addressing the need for adaptive mechanisms and expanding social protection in vulnerable sectors requires integrated policies (Malerba, 2021). The functions of social protection in the context of climate adaptation⁴ can be described as:

1. "Promotive" and "Preventive": These align with the attributes of social insurance, foreseeing risks and diminishing vulnerability.
2. "Protective" or "Absorptive": This pertains to addressing shocks and their impacts.
3. "Transformative": In this role, social protection tackles the underlying causes of disasters, fostering a more balanced eco-social landscape.

⁴ Adaptation refers to adjustments in ecological, social or economic systems in response to actual or expected climatic stimuli and their effects. It refers to changes in processes, practices and structures to moderate potential damages or to benefit from opportunities associated with climate change. |

Figure 3: Core functions of social protection in supporting climate change adaptation



Source: Malerba, 2021;

Social protection's protective aspect buffers against climate shocks, especially unforeseen disasters, addressing absorptive capacity. Cash and food transfers act as crucial buffers for unprepared households facing climate impacts (Roberts and Pelling, 2018). Public employment assists infrastructure rebuilding post-disaster (Godfrey-Wood and Flower, 2018).

Social protection's preventive role tackles vulnerability by anticipating and preparing for risks. Social insurance covers income and asset loss uncertainties. Similarly, cash transfers boost savings pre-climate events for emergencies (Bastagli et al. 2016). The promotive function aids strategies like diversification and capacity-building to reduce disruptive impact of shocks. Public employment and integrated social protection programs incentivize asset creation and skill enhancement (Beazley et al. 2016), enhancing adaptive capacity.

Social protection's transformative function, addressing root causes and inequalities, can also play a role in climate adaptation. For instance, Payment for Environmental Services (PES) can support adaptation measures by protecting the environmental (e.g. restocking forests, protecting and planting mangrove forests) while providing livelihood support to individuals. However, realizing the transformative potential requires a long-term vision and systemic approaches (Tenzing, 2019).

After assessing climate risks, identifying preferred adaptation options, and devising an implementation framework, social protection can assist at each stage of planning, underscoring the value of cross-sectoral integration.

During adaptation planning, it's vital to recognize potential "maladaptations" or unintended incentives that might exacerbate vulnerability. For instance, while social protection measures aimed at disaster-prone areas might decrease short-term vulnerability, they might also discourage relocation from environmentally insecure zones (Aleksandrova, 2019).

Furthermore, instruments that promote environmentally beneficial behaviors should be considered, such as Payments for Environmental Services (PES) akin to conditional cash transfers. Notable examples include India's Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)," intertwining poverty reduction and ecosystem conservation within a broader social protection framework (ILO, 2016). Vietnam has also implemented PES programs for forest protection and reforestation. Under these programs, individuals or communities are compensated for maintaining or



restoring forests. Similar PES programs have been developed to encourage upstream landowners to adopt land management practices that reduce soil erosion and pollution in Vietnam. These practices help maintain water quality and reduce the risks of downstream flooding. Farmers and communities may receive payments for implementing such practices (ESCAP, 2009).

Adapting to climate change is more than an isolated act; it requires a comprehensive, cross-cutting strategy involving all sectors, impacting all aspects of society, and driving fundamental changes rather than piecemeal adjustments.

Box 5: Social protection supporting climate change adaptation policies and a just transition

Philippines

In Southeast Asia, the Philippines has tackled climate-induced migration through the National Disaster Risk Reduction and Management Framework (NDRRMF). This comprehensive strategy seeks to reduce vulnerability and enhance resilience for communities susceptible to displacement due to climate-related events. The Framework incorporates early warning systems, community-based adaptation initiative and social protection programs with the aim to support displaced populations and provide them with assistance during and after climate-induced migration.

Vietnam:

In response to a series of storms in 2020, Vietnam's Social Security branches took proactive measures to support businesses and participants in social and health insurance systems residing in the flood and storm-affected areas. The branches facilitated uninterrupted participation and receipt of benefits from the insurance schemes. Staff members were deployed to offices to ensure timely payments for social, unemployment, and health insurance allowances. Additionally, they collected contributions directly from participants in the affected regions. In addition, the government, partly in coordination with donors like USAID provided social assistance to support the most vulnerable.

To streamline the process, close coordination with local post offices was established to ensure punctual pension and insurance allowance disbursements during the storm and flood events. Emphasizing efficiency, the promotion of electronic transactions, online public services, and online payments was encouraged to reduce processing time and minimize costs for the participants and beneficiaries. These measures demonstrated Vietnam's commitment to safeguarding its citizens and businesses amid the challenges posed by frequent natural calamities.

Source: ESCAP EGM report, 2023; Sengupta et al, 2023;

5.5 Increasing uptake of social protection in Nationally Determined Contributions (NDC's) and National Adpatation Plans (NAP's)

Having exemplified the different functions and pathways social protection can take in the context of climate change adaptation and mitigation, we will look at ways in which countries can incorporate social protection into national climate change strategies and agendas, with a particular focus on strategies developed through Nationally Determined Contributions (NDC) and National Adaptation Plans (NAP).



NDC's outline climate actions, encompassing targets, policies, and measures that governments commit to implementing as part of the global climate effort under the Paris Agreement (ILO, 2022). These contributions serve as a significant opportunity to ensure poverty eradication, safeguard against adverse climate impacts, and promote inclusive participation in a just transition.⁵

At COP27, the Sharm El-Sheikh Implementation Plan emphasized a just and equitable transition that encompasses energy, socioeconomic, workforce, and other dimensions, guided by national development priorities and incorporating social protection to mitigate potential transition-related impacts. The plan also acknowledged the significant role of social solidarity and protection instruments in mitigating the effects of implemented measures. Along these lines, several non-Party stakeholders highlighted at the global stocktake under the Paris Agreement the significant opportunities to reducing poverty and inequality by shifting public financial flows from fossil fuels to clean energy and targeted social protection (UNFCCC, 2023).

However, many NDCs currently lack consideration for social protection-related objectives beyond health (Sustainable Development Goal 3, target 3.8), omitting critical goals like poverty reduction (SDG 1, target 1.3), gender equality (SDG 5, target 5.4), decent work (SDG 8, target 8.5), and inequality reduction (SDG 10, target 10.4).

An analysis of 185 NDCs in 2022 showed that while 55 per cent acknowledge vulnerabilities in terms of health due to climate change, social protection is mentioned in only 11 per cent. An even smaller share of NDCs outline specific actions for strengthening social protection systems to support climate change adaptation efforts. A list of countries referring to specific social protection measures in the context of their NDC's are mentioned in the box below.

Some (28 per cent) plan to address impacts on the workforce by including the concept of just transition in their overall NDC implementation; laws and strategies for protecting workers; a social mechanism for job creation, skills development and employment policies; and a consultation process for social protection. A few countries (3 per cent) paid special attention to addressing impacts of response measures on vulnerable groups and communities in relation to poverty, job opportunities and inequality during transition (UNFCCC, 2022).

A few countries (4 per cent), identified measures, phasing out inefficient fossil fuel subsidies or reforming them, including gradually phasing out subsidies on electricity and fuels in tandem with social protection measures for low-income households (UNFCCC, 2022).

Box 6: Examples of countries highlighting the role of social protection in their NDC's

Cambodia (2020):

The Government mainstreams gender and social inclusion in their NDC. While the Government highlights the need to improve the health care system and to enable remote village to have proper access to healthcare, it misses the potential role of social protection in fostering social inclusion and equality.

Indonesia (2022):

⁵ [Nationally Determined Contributions \(NDCs\) | UNFCCC](#)



Indonesia considers the importance of just transition of the workforce and the creation of decent work and quality jobs for an effective and inclusive transition to low greenhouse gas emission and climate resilient development. It further highlights the importance of adequate social protection with reference to past policy measures that led to the successful expansion of social protection coverage during for instance fuel subsidy reforms, which also took place as part of a climate change mitigation effort.

Myanmar (2021):

Myanmar NDC underlines the role of social protection in responding to and recovering from climate-induced disasters, risks, and health impacts, and to secure the country's social and economic development in a climate resilient manner. The Government emphasizes the need to strengthen the overall social protection system with a view to make it more shock-responsive and for adaptation measures to take gender and social inclusion into account.

Mongolia (2020):

The Government of Mongolia established adaptation targets, including targets for livelihood and social safeguards. These include insurance and prevention measures and aim to reduce the vulnerability of social groups and to build resilience to climate change impacts.

Nepal (2020):

While Nepal emphasizes the need to establish social safeguards and to address issues around gender equality and social inclusion, it misses to explicitly mention the potential and obvious role of social protection in this regard.

Pakistan (2021):

The Government of Pakistan highlights the need for social protection and insurance to address the struggles of vulnerable groups in the context of climate change as well as to foster the countries socio-economic development. It further emphasizes their efforts towards gender and social inclusion through various social assistance and cash-transfer programmes, some already clearly linked to climate change events. These include among others cash-transfer and social pension schemes that address the needs of disaster-affected communities.

Sri Lanka (2021):

The Government of Sri Lanka recognizes in its NDC the importance of integrating disaster management strategies into various policy areas, such as social protection, to enhance risk management. By aligning disaster preparedness and response measures with broader policy frameworks, Sri Lanka aims to strengthen its resilience against natural disasters and their socio-economic impacts. This approach aims to ensure a more comprehensive and coordinated effort in managing risks and safeguarding the well-being of its citizens.

Timor Leste (2022):

In Timor Leste, the NDC prioritizes social protection as a vital instrument for enhancing climate change adaptation and resilience. The NDC highlights the significance of comprehensive social



protection systems to assist vulnerable communities in coping with the adverse impacts of climate change and building resilience to future challenges.

Vietnam (2022):

Vietnam recognizes the role of social security in ensuring that climate change adaptation doesn't lead to social instability and fosters inclusive socio-economic development.

Source: ILO, 2023; UNFCCC NDC Registry⁶;

The potential synergies between climate change adaptation and social protection goals are extensively documented. The most recent assessment report from the Intergovernmental Panel on Climate

⁶ [Nationally Determined Contributions Registry | UNFCCC](#)



Change (IPCC) acknowledges the capacity of social protection to enhance resilience by assisting individuals in preparing for, enduring, and adapting to the adverse effects of climate change.⁷

The potential integration of social protection into climate change policies also extends to sector-specific national action plans, including National Adaptation Plans (NAPs). A 2021 report revealed that a notable third of the 21 NAPs submitted to the UNFCCC by March 31, 2021, explicitly referenced social protection, indicating a growing recognition of its importance in climate adaptation efforts.⁸ In the Asia Pacific, only Cambodia, Bangladesh and Timor-Leste referred to social protection in their respective NAP's (see box 7).

Box 7: Examples of countries in the Asia Pacific emphasizing the role of social protection in the context of climate change

Cambodia: In Cambodia's NAP emphasizes the role of social protection in enhancing resilience to climate change impacts. The plan acknowledges the importance of safeguarding vulnerable communities through improved social assistance programmes, livelihood diversification, and disaster risk reduction. By integrating social protection measures, such as cash transfer programs and community-based insurance, Cambodia aims to reduce the climate-induced vulnerabilities of its people, alleviate poverty, and promote equitable adaptation strategies, ensuring that no one is left behind in the face of a changing climate.

Bangladesh: Bangladesh's NAP includes considerations for social protection and focuses on building the resilience of vulnerable communities, particularly through measures such as livelihood diversification and through access to social assistance. It also elaborates on the potential to initiate climate change allowances and insurance under social security programmes and the need to expand social protection coverage to build community-based resilience and strengthen adaptive capacities.

Timor-Leste: Timor-Leste's NAP includes elements of social protection, aiming to enhance the resilience of vulnerable populations and to address poverty and inequality exacerbated by climate change impacts.

Source: UNFCCC NAP Registry⁹;

Integrating social protection into NDCs and NAPs can enhance climate action's inclusivity and effectiveness (Sengupta & Dahlet, 2023). Social protection ensures that the impacts of climate change do not disproportionately affect the most vulnerable. In alignment with the principles of social justice and solidarity, both benefits and costs of climate action are shared across society. Social protection measures can significantly enhance the effectiveness of climate policies by fostering social acceptance and participation. When climate actions are designed with social protection in mind, they are more likely to gain support from communities and individuals. This support is vital for the successful implementation of policies and projects. Including social protection within NDC's and NAP's reflects a holistic approach to climate action that acknowledges the interconnections between social, economic, and environmental policy.

⁷ [IPCC_AR6_WGII_SummaryForPolicymakers.pdf](#)

⁸ [National adaptation plans \(unfccc.int\)](#)

⁹ [National adaptation plans \(unfccc.int\)](#)



6. Making social protection systems financially sustainable and creating synergies between Paris aligned investments and social protection funding and policy frameworks.

To ensure social protection can bring meaningful change to affected communities, securing sustainable funding is crucial. The primary sources of social protection financing are domestic (such as taxes and social security contributions) and external (like overseas development assistance), the latter usually accessible for low-income countries only. To establish comprehensive, resilient, and climate-responsive protection systems, expanding fiscal capacity from domestic resources as well as exploring synergies with Paris aligned investments is pivotal.

The International Labour Organization (ILO), in collaboration with UN agencies and international financial institutions, has identified eight fiscal strategies to fund social protection using the latest evidence (ILO, 2019). These strategies encompass increasing tax revenues, broadening contributory coverage, eliminating illicit financial flows, reallocating public spending, using central bank reserves, managing debt, adopting flexible macroeconomic frameworks, and enhancing external aid and transfers in the case of low-income countries.

Social security contributions and taxation play vital roles in financing social protection. Social security contributions underpin the sustainability of modern systems, and expanding coverage directly enhances fiscal space as well as improves the adequacy of benefits. Contribution-based schemes are widespread globally, emphasizing the need to evaluate contribution potential and coverage extension strategies. Meanwhile, taxation is a primary source of public finance, presenting opportunities to increase revenue in developing nations with lower tax-to-GDP ratios.

Increasing tax compliance and/or raising tax rates are potential strategies to expand fiscal space for social protection. While increases in the tax-to-GDP ratio tend to occur only slowly over time, raising tax revenues is not an impossible task, especially with a strong political will to tackle corruption and tax evasion, to widen the tax base, to introduce innovative new taxes and to eliminate exemptions. Taxation of natural resource extraction (e.g. fossil fuels) as well as taxing products with negative externalities for instance, is a particularly interesting option in the context of climate change and have the potential to significantly raise government revenue for social expenditure. A carbon tax, reflecting the social cost of carbon, is viewed as an essential policy tool to limit carbon emissions, while at the same time offering an opportunity to raise government revenue for social protection expenditure.

Although contributions and taxation are core financing mechanisms, additional options like reallocating public expenditure or curbing illicit financial flows should be incorporated. Exploring innovative financing avenues is valuable, such as leveraging support from multilateral and national development banks, climate debt swaps, the Green Climate Fund (GCF), and the Climate Investment Fund (CIF) (Lambeau & Urban, 2023).

The Green Climate Fund (GCF), established by the UNFCCC in 2010, aims to redistribute the financial burden of the ecological, economic and social transition¹⁰ from wealthier nations to developing ones.

¹⁰ The ecological transition is the process of technological innovation to achieve change in our society considering compliance with the criteria for environmental sustainability ([Ecological transition and sustainable development: integrated statistical indicators to support public policies | Scientific Reports \(nature.com\)](#))



Currently backing 148 projects globally¹¹, the GCF's comprehensive approach aims to disrupt the harmful cycle of interconnected social and planetary imbalances. In theory, the GCF also supports social protection initiatives and recognizing its significance in the context of adaptation and mitigation. The GCF is designed to cater to the needs of developing nations, acknowledging their heightened vulnerability to climate change's impact and their limitations in adopting low-carbon development.

The Climate Investment Fund (CIF)¹², introduced by the World Bank in 2008, pursues a comparable mission. As one of the world's largest multilateral Paris aligned investment mechanisms, CIF assists developing countries in transitioning towards low-carbon, climate-resilient development, thereby accelerating climate action. CIF's contributions encompass financing to diminish risk for investors, reducing barriers to pilot innovative approaches, scaling up proven solutions, and creating sustainable markets. Consequently, this approach harnesses private sector capital to drive climate action. One of the components of the CFI focuses on strengthening people's adaptive capacities and resilience against the impacts of climate change on their communities, ecosystems, and infrastructures and thus also potentially links its programmatic agenda to social protection.

Likewise, disaster risk financing initiatives offer possibilities for social protection enhancement. Programs like forecast-based financing (FbF) and index-based insurance mechanisms enhance resilience and mitigate vulnerabilities. For example, the Caribbean Catastrophe Risk Insurance Facility and the African Risk Capacity provides quick financial support during crises, which can also supplement existing social protection benefits. The World Bank's Development Policy Loan with a Catastrophe Deferred Drawdown Option (Cat DDO) is another tool that provides immediate liquidity to countries to address shocks related to natural disasters and/or health-related events. It serves as early financing while funds from other sources such as bilateral aid or reconstruction loans are being mobilized (World Bank, 2018).

With the increasing number of disaster risk financing instruments, it is important for Governments to understand the mechanisms behind these instruments, the risks that they address and the prerequisites for mobilizing them. At the same time, there is potential to combine different instruments to reduce the overall cost of managing a diverse range of risks. Through a risk-layering approach, Governments can help reduce costs and improve the reliability of funding. This involves combining risk retention instruments for high-probability, low-impact events with risk transfer instruments for the lower probability, higher impact events (Longhurst et al., 2021).

While some financing mechanisms already exist, there is still scope for improvement and a need for better coordination and integration, with the overall purpose to strengthen the funding base for social protection systems, covering traditional life-cycle contingencies and climate change related risks. Use of government-backed insurance schemes can be effective in increasing coverage as pooling brings the average risk of the fund to an insurable level, while ensuring that insurance is still provided in areas where, despite pooling, risks remain too high (Lambeau & Urban, 2023). However, these schemes represent a systemic financial risk for the public sector in the medium to long term. There is thus an interest in diversifying financial strategies, going beyond frameworks exclusively designed for social protection to incorporate financing mechanisms that have the potential to support the financing of social protection, including contributory (insurance) schemes (disaster risk financing, climate risk reinsurance mechanisms, etc). The integration or coordination of different financing modalities also has the potential to better address the vulnerabilities and inequalities across the population, more

¹¹ [Countries | Green Climate Fund](#)

¹² [The Climate Investment Funds \(CIF\)](#)



widely integrating principles of social solidarity and collective financing, ensuring solidarity in financing and the pooling of risk across the wider population.

Box 8: Examples of public private partnerships to mitigate disaster risk and extend protection to vulnerable groups

Mongolia:

Layering social protection instruments and complementing them with risk management mechanisms such as insurance schemes can help cover different levels of risks and protect households from a wider variety of hazards. The Index-based Livestock Insurance Project implemented by the Mongolian government is a good example of such an initiative that complements existing social protection programs. It aims to provide affordable insurance options to the country's herder population, comprising about one-third of the total population. This innovative scheme utilizes comprehensive data from annual livestock censuses and easily trackable geographical triggers to determine payouts. When livestock losses surpass 6 percent of the herd, the insurance payouts come into effect, with the government taking on the responsibility of catastrophic losses exceeding 30 percent. By doing so, the project effectively spreads climate risk across all herders, alleviating the burden on individual households and transferring a portion of the overall risk to the government.

For such insurance initiatives to thrive in the face of climate-related challenges to agriculture and livestock-rearing, three essential elements should be incorporated: accurate estimates of losses, government underwriting to manage risks, and the inclusion of producer surplus to finance insurance policies. This integrated approach ensures the sustainability and success of insurance programs in safeguarding farming and livestock-rearing communities from climate-induced vulnerabilities.

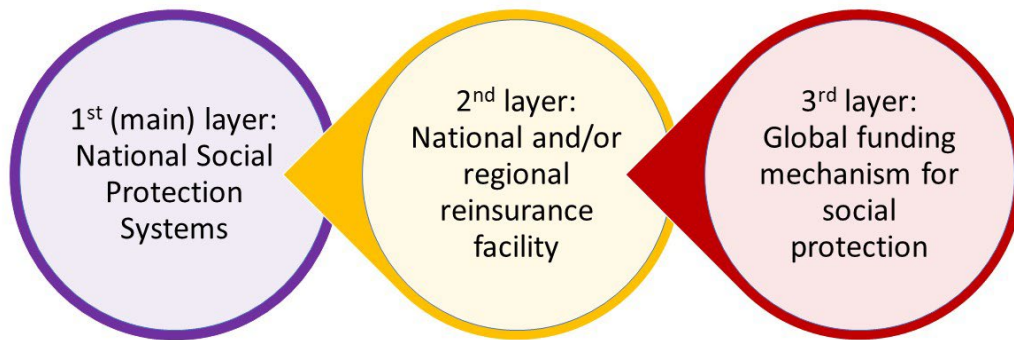
Source: Agrawal et al., 2019;

While there is a wide range of financing tools that can be used to strengthen social protection systems and, above all, to extend their coverage, it would be useful to consider a multi-layered system (see figure below) that could give national systems a much greater guarantee of continuity, also in the wake of climate related shocks or crises. While this is not yet often institutionalized, regional financing mechanisms (second layer) could build on the infrastructure of national social protection systems (first (main) layer), avoiding duplication and exploiting synergies and economies of scale. Channeling funding from regional financing mechanisms through existing national social protection systems in the wake of crisis/shocks would ensure that key principles of social protection are enforced and people are better protected against traditional life-cycle and new (e.g. climate related) forms of risks and contingencies. As a third layer, and since climate change is a global phenomenon, the idea of a global funding mechanism would complement the other two layers. Such a fund had been proposed a number of times, more recently by the Special Rapporteur on the Right to Food, Mr. Olivier De



Schutter, together with the Special Rapporteur on Extreme Poverty and Human Rights, Ms. Magdalena Sepúlveda.¹³

Figure 4: Multi-layered financing instrument

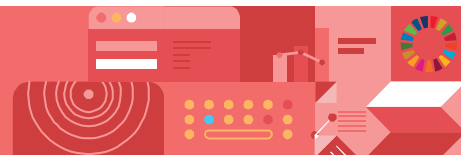


A multi-layered financing infrastructure would therefore aim to create an infrastructure that would allow social protection systems to better operate, with more robust funding instruments, in the wake of crisis/shocks and to provide support to countries in the medium term to establish basic systems, that can then act as the main layer in the model and become an integral part of a multi-layered financing infrastructure.

Financing social protection is a strategic investment in the fight against climate change, as it actively strengthens the three priority areas in interaction (economic, social, and ecological), supporting adaptation and mitigation measures, providing support to people in the event of loss and damage and in response to shocks and crisis.

Last but not least, to better support climate change adaptation and mitigation policies and plan appropriate social protection measures, it will be important to identify, map and quantify the potential social, environmental and economic challenges and impacts related to different scenarios of climate change, climate commitments and transition policies. These should take into account labour aspects, income security, food security and nutrition as well as social and health aspects, in order to inform policy making.

¹³ [The Global Fund for Social Protection and the Global Accelerator for Jobs and Social Protection: can these two initiatives be strategically combined?](#)



7. Recommendations and moving forward

Social protection is an important and effective policy tool in supporting both climate change adaptation and mitigation measures as well as in the context of both life cycle, idiosyncratic as well as covariate events, respectively shocks and crisis. While some countries in the Asia Pacific region have already started utilizing existing social protection schemes and programmes in the context of climate change and just transition, potential for better utilization remains and a large share of the population in the region is still unprotected, both against traditional life-cycle risks as well as against climate change related risks.

- I. With less than half of the Asia and the Pacific having access to social protection, expanding social protection coverage, both contributory as well as non-contributory must be a priority for the region. Any extension of social protection coverage should pay particular attention to workers and families in the informal sector, migrants, people with disabilities as well as other vulnerable or marginalized groups, and recognize and address gender and intersecting inequalities. Social protection should be also expanded to new forms of risks and take into account the geographic aspects of these new or exacerbated risks.
- II. At the same time, social protection systems should provide the protective, promotive and transformative functions and strengthen their adaptive and shock-responsive capacity to be able to provide adequate and comprehensiveness protection during shocks as well as in the context of climate change mitigation and adaptation.
- III. In order to better respond to life-cycle risks as well as support inclusive growth in the context of climate change adaptation and mitigation, social protection systems must be rights based and incorporate key principles of social security, such as the principle of universality, adequacy, solidarity and collective financing.
- IV. Besides low coverage, existing schemes and programmes often provide very basic benefits, rarely covering the most basic needs and thus provide very limited income security. Governments must therefore focus on improving the adequacy of transfer levels. Benefit levels must also take into account heightened risks due to climate change. Respective schemes will therefore likely require increased and more robust funding frameworks. Synergies between social protection, disaster risk finance and Paris aligned investment instrument should be explored. Paris aligned investment instruments, including carbon market, green bonds and climate funds such as the GEF and GCF should be leveraged to support the horizontal and vertical expansion of social protection systems as well as their ability to respond to shocks.
- V. While creating fiscal space through domestic resource mobilization (e.g. raising government revenue through carbon tax, tax on natural resource extraction, etc.) will remain a priority for countries, it is important to build synergies between Paris aligned investment instruments and social protection finance to achieve the extension of coverage as well as to improve the adequacy of benefits.
- VI. For social protection systems to be climate sensitive, climate information like seasonal forecasts or forecasts on extreme weather events should be incorporated into the design of social protection programmes. For example, social protection payment cycles can be timed according to the onset of a region's main climate hazards.
- VII. Governments must refrain from sustaining expenditure in environmentally hazardous activities and focus on repurposing resources towards more environmentally friendly practices, for example repurposing fuel subsidies to support investment into social



protection and other key policies that ensure climate action is inclusive and effective. Payment for environmental services can also support these processes, incentivizing people to transition to a green economy as well as for building climate resilient infrastructure.

- VIII. As an important national guidance and policy tool, Governments should consider the inclusion of social protection in the NDCs and NAPs to support communities affected by the transition to a net zero economy and by climate change adaptation and to ensure that they incorporate key principles of social security.
- IX. In the present landscape, the imperative to establish all-encompassing and inclusive social protection systems, actively involving potential beneficiaries in the design and management of schemes and programs becomes paramount, intertwining climate-resilient development and an equitable transition that leaves no one marginalized.
- X. Within the climate change context, crafting social protection necessitates tailored designs aligned with each country's unique circumstances. This forms part of a comprehensive strategy responding to climate vulnerabilities interlinked with economic, environmental, and social policies. Active labor market policies come into play, equipping individuals with fresh skills and avenues for employment, such as in the emerging green economy, while at the same time supporting environmentally sustainable economic activity.
- XI. It is important to note that climate change impacts and coping strategies vary based on socio-economic status, cultural norms, resource access, poverty, and gender. Notably, women and children face higher risks, as climate change effects are not gender-neutral. Addressing these gender-specific challenges is crucial for effective climate change adaptation and mitigation strategies as well as for social protection measures to have the desired effects. It is thus vital that relevant actors, including gender equality advocates, participate in the formulation of social protection and climate change mitigation and adaptation strategies and policies.



8. Bibliography

ADB. 2021. Just Transition Beyond the Energy Sector. ADB Briefs No. 195, November 2021.

Agrawal, A., C. Costella, N. Kaur, J. Tenzing, C. Shakya, A. Norton. 2019. 'Climate resilience through social protection.' Background paper to the 2019 report of the Global Commission on Adaptation. Rotterdam and Washington, DC. Available at: www.gca.org.

Aleksandrova M. 2019. Social protection as a tool to address slow onset climate events: Emerging issues for research and policy, Discussion Paper, No. 16/2019, ISBN 978-3-96021- 108-2, Deutsches Institut für Entwicklungspolitik (DIE), Bonn, <https://doi.org/10.23661/dp16.2019>

Aleksandrova M. 2020 "Principles and Considerations for Mainstreaming Climate Change Risk into

Aleksandrova M. 2021. The Untapped Potential of Global Climate Funds for Investing in Social Protection. Briefing paper. German Development Institute.

Asia-Pacific Disaster Report 2017: Leave No One Behind - Disaster Resilience for Sustainable Development. United Nations publication.

Available at: Building Coastal Resilience to Protect Lives and Livelihoods in Bangladesh (worldbank.org)
Bastagli, F., J. Hagen-Zanker, L. Harman, V. Barca, G. Sturge, T. Schmidt and L. Pellerano. 2016. Cash transfers: What does the evidence say: A rigorous review of programme impact and the role of design and implementation features. London: Overseas Development Institute.

Beazley, R., A. McCord and A. Solórzano. 2016. Public works programmes for protection and climate resilience. International Policy Centre for Inclusive Growth.

Béné, C., Newsham, A., Davies, M., GodfreyWood, R., Ulrichs, M., and Godfrey-Wood, R. 2014. Resilience, Poverty and Development. Journal of International Development. Available at: 2019-Agrawal-Climate resilience through social_0.pdf (socialprotection.org)

Bowen, Thomas Vaughan; Del Ninno, Carlo; Andrews, Colin; Coll-Black, Sarah; Gentilini, Ugo; Johnson, Kelly; Kawasoe, Yasuhiro; Kryeziu, Adea; Maher, Barry Patrick; Williams, Asha M. 2020. *Adaptive Social Protection : Building Resilience to Shocks*. International Development in Focus Washington, D.C. : World Bank Group. Available at: [World Bank Document](#)

Chomsky, N. & R. Polin. 2020. Climate Crisis and the Global Green New Deal. Verso.

Commission on Audit. 2019. Performance Audit Report: National Greening Programme. Republic of the Philippines. Available at: [National Greening Program \(PAO-2019-01\) \(intosai.org\)](#)

Davies, M., Guenther, B., Leavy, J., Mitchell, T., and Tanner, T. 2009. Climate Change Adaptation, Disaster Risk Reduction and Social Protection: Complementary Roles in Agriculture and Rural Growth?. IDS Working Papers, (320), 01–37.

FAO. 2019. Proactive approaches to drought preparedness – Where are we now and where do we go from here? Food and Agricultural Organization, Rome.



FAO. 2020. FAO's work on climate change Fisheries and aquaculture 2020. Rome; Available at: [fao.org/3/cb3414en/cb3414en.pdf](https://www.fao.org/3/cb3414en/cb3414en.pdf)

Financial Times (FT). 2020. Available at: Flooded Asia: Climate change hits region the hardest | Financial Times (ft.com)

Gentilini et al. 2021. Social Protection and Jobs Responses to COVID-19: A Real-Time Review of Country Measures. Living paper, Version 15 (May 14, 2021), World Bank, Washington, D.C.; Available at: [Open Knowledge Repository \(worldbank.org\)](https://openknowledge.worldbank.org/)

Godfrey-Wood, R. and B.C.R. Flower. 2018. Does guaranteed employment promote resilience to climate change? The case of India's Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). Development Policy Review 36 (S1), O586–O604.

ILO and AFD. 2019. Social Protection for a Just Transition: A Global Strategy for Increasing Ambition in Climate Action, 2019. Available at: [Présentation PowerPoint \(social-protection.org\)](https://www.social-protection.org/)

ILO. 2016. ESS – Extension of Social Security “Protecting people and the environment: lessons learnt

ILO. 2015. Guidelines for a just transition towards environmentally sustainable economies and societies for all. Available at: [Microsoft Word - Guidelines for a just transition - copyrighted.docx \(ilo.org\)](https://www.ilo.org/public/---dgreports/---dcomm/---publ/documents/publication/wcms_604882.pdf)

ILO. 2015b. Social Protection and Climate Change: How did the Philippines combine emergency relief with lasting protection after Haiyan? Available at: RessourcePDF.action (social-protection.org)

ILO. 2017. "World Social Protection Report 2017-19: Universal social protection to achieve the Sustainable Development Goals". Geneva: International Labour Organization. Available at: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_604882.pdf

ILO. 2018. World Economic and Social Outlook 2018: Greening with Jobs. ILO, Geneva; Available at: [World Employment and Social Outlook 2018 – Greening with jobs \(ilo.org\)](https://www.ilo.org/public/---dgreports/---dcomm/---publ/documents/publication/wcms_604882.pdf)

ILO. 2018b. The Employment Impact of Climate Change Adaptation: Input Document for the G20 Climate Sustainability Working Group.

ILO. 2020. Climate Action for Jobs Initiative. Available at: [CLIMATE ACTION FOR JOBS INITIATIVE con sangrado \(ilo.org\)](https://www.ilo.org/public/---dgreports/---dcomm/---publ/documents/publication/wcms_604882.pdf)

ILO. 2020b. “Social Protection Responses to the COVID-19 Crisis: Country Responses in Asia and the Pacific”.

ILO. 2020c. “Social Security Policy Monitor China”

ILO. 2020d. “Temporary Wage Subsidies”. 21 May 2020.

ILO. 2020e. “Social protection responses to the COVID-19 pandemic in developing countries: Strengthening resilience by building universal social protection”. Social Protection Spotlight. Geneva;

ILO. 2021. Financing Gaps in Social Protection: Global Estimates and Strategies for Developing Countries in Light of the COVID-19 Crisis and Beyond.



ILO. 2021b. Global call to action for a human-centred recovery from the COVID-19 crisis that is inclusive, sustainable and resilient.

ILO. 2023. Social protection for a just transition. Just Transition Policy Brief Series. January 2023. Available at: [Just Transition Policy Brief - Social protection for a just transition \(ilo.org\)](#)

India Today. 2019. Cyclone Fani: India's Success in Minimizing Casualties.

IPCC. 2012. “Managing the risks of extreme events and disasters to advance climate change adaptation”. New York, Cambridge University Press, 2012.

IPCC. 2014. “Climate Change 2014, Synthesis Report”, Intergovernmental Panel on Climate Change. Geneva. Available at https://www.ipcc.ch/site/assets/uploads/2018/02/SYR_AR5_FINAL_full.pdf

IPCC. 2023. Synthesis Report of the IPCC Sixth Assessment Report (AR6).

Kartha S., E. Kemp-Benedict, E. Gosh, A. Nazareth, T. Gore. 2020. The Carbon Inequality Era. Oxfam and SEI, September 2020. Available at: [The Carbon Inequality Era: An assessment of the global distribution of consumption emissions among individuals from 1990 to 2015 and beyond \(sei.org\)](#)

Kuriakose, A.T., Heltberg, R., Wiseman, W., Costella, C., Cipryk, R., and Cornelius, S. 2013. “Climate-responsive Social Protection.” *Development Policy Review*, 31, 019–034; World Bank. 2013. Building Resilience to Disaster and Climate Change through Social Protection. Washington, DC. Available at: <https://openknowledge.worldbank.org/handle/10986/16492>.

Lambeau, J.-L., Urban, S. 2022. Social Protection and Climate Change. The role of Social Insurance. ILO. Geneva, Switzerland.

Leimona, B.; Finlayson, R.; Wijaya, C.; Prawisuda, A.; Duque Pinon, C.; Dam, V.B.; Pasha, R. 2013. Rewards for, Use of, and shared investment in, Pro-poor Environmental Services schemes (RUPES) Phase Two (Bogor, Indonesia, World Agroforestry Centre (ICRAF) Southeast Asia Regional Program).

Longhurst, D., Evans, S., Connolly, D., Lung, F., McCord, A., Allan, S., Plichta, (2021) ' What are future financing options for shock responsive social protection? A technical primer ', Social Protection Approaches to COVID-19 Expert Advice Service (SPACE), DAI Global UK Ltd, United Kingdom. Available at: [SPACE Future Financing Options for Shock Responsive Social Protection.pdf](#)

Malerba, D. 2020. Poverty alleviation and local environmental degradation: An empirical analysis in Colombia. *World Development* 127, 104776. Available at: <https://doi.org/10.1016/j.worlddev.2019.104776>

Malerba, D. 2021. Climate change. in: Esther Schüring / Markus Loewe (publisher), *Handbook on Social Protection Systems*, Cheltenham: Edward Elgar, page 688–704; Available at: [Climate Change and Social Protection.pdf](#)

National Center for Environmental Information. 2020. Annual 2020 Tropical Cyclones Report. Available at: Annual 2020 Tropical Cyclones Report | National Centers for Environmental Information (NCEI).(noaa.gov)

National Social Protection Frameworks in Developing Countries”. *Climate and Development* 12 (6): NPR, 2023. Facing floods: What the world can learn from Bangladesh's climate solution. Available at: Bangladesh is ground zero for climate disaster — and a hot spot for solutions : Goats and Soda : NPR



O'Brien, C., Scott, Z., Smith, G., Barca V., Kardan, A., Holmes, R., et al. 2018. Shock-responsive Social Protection Systems Research: Synthesis Report. Oxford, UK: Oxford Policy Management

Ortiz I., A. Chowdhury, F. Duran-Valverde, F. Muzaffar, S. Urban. 2019. Fiscal Space for Social Protection – A Handbook for Assessing Financing Options. ILO, Geneva; Available at: [wcms_727261.pdf \(ilo.org\)](#)

Poggi, Cecilia, et al. 2020. Who Bears the Burden of Climate Variability? A Comparative Analysis of the Impact of Weather Conditions on Inequality in Viet Nam and Indonesia. AFD.

Roberts, E. and M. Pelling. 2018. Climate change-related loss and damage: Translating the global policy agenda for national policy processes. *Climate and Development* 10 (1), 4–17.

RUPES. 2014. Website. Available at: [Rewarding upland poor for environmental services | World Agroforestry | Transforming Lives and Landscapes with Trees](#)

Sengupta, S., Dahlet, G. 2023. Policy coherence between social protection and climate action: initial findings from global studies and projects. Red Cross Red Crescent Climate Centre. Available at: [RCCC-SP-CC-policy-coherence-Brief-V4.pdf \(climatecentre.org\)](#)

Stavis, D., Morena, E., & Krause, D. 2020. Introduction: The genealogy and contemporary politics of just transitions. In D. Stavis, E Morena, & D. Krause (Eds.), *Just transitions: Social justice in the shift towards a low-carbon world* (pp. 1-31), London: Pluto Press.

Tenzing, J.D. 2019. Integrating social protection and climate change adaptation: A review. *Wiley Interdisciplinary Reviews: Climate Change*;

Islam S. N. and John Winkel. 2017. Climate Change and Social Inequality. DESA Working Paper No. 152 ST/ESA/2017/DWP/152. Available at: [Climate Change and Social Inequality | United Nations](#)

UNDESA. 2017b. World Economic and Social Survey 2017. Reflecting on seventy years of development policy analysis.

UNDP. 2008. Myanmar Information Management Unit (MIMU). Post-Nargis Joint Assessment: An Overview of Affected Areas and Populations. Available at: Myanmar: Post-Nargis Joint Assessment - Myanmar | ReliefWeb

UNDP. 2019. Climate change in Asia and the Pacific. What's at stake? Available at: Climate change in Asia and the Pacific. What's at stake? | United Nations Development Programme (undp.org).

UNDP. 2021. Fossil Fuel Subsidy Reforms: Lessons and Opportunities. United Nations, New York. Available at: [Fossil Fuel Subsidy Reform: Lessons and Opportunities | United Nations Development Programme \(undp.org\)](#)

UNDRR. 2021. Disaster Management in Bangladesh: Good Practices and Lessons Learned.

UNEP. 2020. The devastating impact of floods in India—and what can be done. Available at: The devastating impact of floods in India—and what can be done (unep.org)

UNISDR. 2014. The Human Cost of Weather-Related Disasters 1995-2015. United Nations Office for Disaster Risk Reduction. Available at: <https://www.preventionweb.net/publications/view/41488>

United Nations, Economic and Social Commission for Asia and Pacific. 2017. World Economic and Social Survey 2017. Reflecting on seventy years of development policy analysis. Available at: [World](#)



[Economic and Social Survey 2017: Reflecting on 70 years of development policy analysis | Department of Economic and Social Affairs \(un.org\)](#)

United Nations, Economic and Social Commission for Asia and Pacific. 2020. Ready for the dry years: Building resilience to drought in South-East Asia: With a focus on Cambodia, Lao People's Democratic Republic, Myanmar and Viet Nam. Available at <https://repository.unescap.org/rest/bitstreams/a1565ccf-3222-4bbd-b82e-42dc555ba83a/retrieve>

United Nations, Economic and Social Commission for Asia and Pacific. 2021. Resilience in a Riskier World: Asia-Pacific Disaster Report 2021; Managing Systemic Risks from Biological and other Natural Hazards. Available at: [Resilience in a riskier world : managing systemic risks from biological and other natural hazards | ESCAP \(unescap.org\)](#)

United Nations, Economic and Social Commission for Asia and Pacific. 2023a. THE RACE TO NET ZERO Accelerating climate action in Asia and the Pacific. 79th Commission Session, United Nations, Bangkok. Available at: [The race to net zero : accelerating climate action in Asia and the Pacific | ESCAP \(unescap.org\)](#)

United Nations, Economic and Social Commission for Asia and Pacific. 2023b. Advancing Gender Equality in Asia and the Pacific in the Context of Climate Change. Social Development Division. Policy paper No. 2023/08.

United Nations, Economic and Social Commission for Asia and Pacific. 2023c. Asia-Pacific Disaster Report 2023 – Seizing the Moment: Targeting Transformative Disaster Risk Resilience. United Nations, Bangkok. Available at: [Seizing the moment : targeting transformative disaster risk resilience | ESCAP \(unescap.org\)](#)

United Nations, Economic and Social Commission for Asia and Pacific. 2009. Innovative socio-economic policy for improving environmental performance: Payments for ecosystem services. Greening of Economic Growth Series. Available at: [PES 00 \(unescap.org\)](#)

United Nations. 2021. Sink or swim: Can island states survive the climate crisis? Available at: Sink or swim: Can island states survive the climate crisis? | UN News

United Nations, Framework Convention on Climate Change. 2021. Report of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement on its third session, held in Glasgow from 31 October to 13 November 2021. Available at: [Report of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement on its second session, held in Glasgow from 31 October to 12 November 2021. Addendum \(unfccc.int\)](#)

United Nations, Framework Convention on Climate Change. 2023. 2023 Synthesis report on GST elements. Available at: [SYR Views on Elements for CoO.pdf \(unfccc.int\)](#)

Urban. 2019. "Iran: Creating Fiscal Space for Social Protection through Energy Subsidy Reform". Social Protection Floors in Action. ILO, Geneva. Available at: [ILO | Social Protection Platform \(social-protection.org\)](#)

WEF. 2022. Sea level rise: Everything you need to know. Available at: Rising sea levels are a global threat – here's why | World Economic Forum (weforum.org)

WMO. 2020. Report of the United Nations Secretary-General on Oceans and the Law of the Sea 2020 "Sea-level rise and its impacts". Available at: 24WMO.pdf (un.org)



WMO. 2023. Global Sea-Level Rise & Implications: Key facts and figure.

Woolf, D., D. Solomon and J. Lehmann. 2018. Land restoration in food security programmes: Synergies with climate change mitigation. *Climate Policy* 18 (10), 1260–70.

World Bank. 2018. Product Note. IDA Catastrophe Deferred Drawdown (Cat DDO). Available at: [productnotecatddoenglish2018.pdf \(worldbank.org\)](https://www.worldbank.org/publications/cpd/products/2018/07/ida-catastrophe-deferred-drawdown-cat-ddo)

World Bank. 2021. ‘World Bank Climate Change Knowledge Portal’. Available at: <https://climateknowledgeportal.worldbank.org/>.

World Bank. 2021. Building Coastal Resilience to Protect Lives and Livelihoods in Bangladesh.

World Bank. 2022. Spearheading Vietnam’s Green Agricultural Transformation: Moving to Low-Carbon Rice. Washington, DC: World Bank.” Available at: [World Bank Document](#)

World Bank. n.a. Adaptive Social Protection: Building Resilience to Shocks. Available at: [Adaptive Social Protection: Building Resilience to Shocks \(worldbank.org\)](#)

World Meteorological Organization (WMO). 2022. *State of the Climate in Asia 2021*. Geneva, WMO.

