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International Social Security Review

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Special double issue: Social security: Enabling and supporting resilience

- Resilient people, resilient systems: The essential role of social protection in a polycrisis world
- Understanding organizational dynamism: Fostering creativity and agility for resilience in social security institutions
- Exploring the resilience of social insurance systems in the light of endogenous welfare austerity: Insights from Sweden
- Supporting coordinated approaches across health and social protection systems to enhance resilience
- Building resilient social protection: Lessons from Turkiye's earthquake response
- Social protection and the climate crisis: The case of Brazil's emergency responses to the 2024 Rio Grande do Sul floods
- Do public works programmes foster climate resilience? Conceptual framework and review of empirical evidence
- Social protection and resilience in protracted crises
- Social assistance and informal social networks and the resilience of the population in Ukraine



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International Social Security Review

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SOCIAL SECURITY: ENABLING AND SUPPORTING RESILIENCE

Foreword

This special double issue of the *International Social Security Review*, "Social security: Enabling and supporting resilience", is framed by the current programme orientation of the International Social Security Association (ISSA), the United Nations 2030 Sustainable Development Agenda, the fundamental human right to social security and the international social security standards, most notably those of the International Labour Organization.

The contemporary global context is characterized by heightened uncertainty and risk involving the more frequent occurrence of fragile situations and extreme events. Against this backdrop, reference to the concept of resilience has become increasingly commonplace.

In social policy discourse, resilience has traditionally been used to convey the positive process of recovery following a trauma experienced by a person. The more recent application of the concept of resilience to the policy field of social protection is intuitive. Yet, it has also revealed the need to adjust the definition of resilience. Specifically, the policy insights learnt from the COVID-19 pandemic have underlined a need for social protection organizations and policy to "build back better". Simply put, to recover successfully only to the state held prior implies, in most instances, falling short with regard to meeting policy ambitions.

Accordingly, the content of the special issue presents international research that addresses two distinct but interlinking aims. First, to strengthen the capacities of social security systems, organizations and programmes to enable them to cope with challenges and then to exhibit resilience, to "build back better", after having been confronted with major challenges. Second, to implement social protection and wider public policies that better enable and support the resilience of populations, which is dependent upon people having access to appropriate, reliable and comprehensive coverage and mechanisms of solidarity across the life course.

The findings provide a valuable additional knowledge resource for ISSA member organizations concerning the design and implementation of resilient social security systems and programmes.

This year, the World Social Security Forum (WSSF 2025), organized by the ISSA, will be held in Kuala Lumpur, Malaysia from 29 September to 3 October. Of course, resilience will be one of the WSSF's major discussion topics. More generally, as the most important international event in social security, the World Forum provides an opportunity for global leaders in social security to shape the future of social security, to network, and to share and learn. In this regard, the

content of the special issue offers one further important means to collate, analyse, develop, and disseminate high-quality knowledge for use by ISSA member organizations, a key strategic priority during the triennium 2023–2025.

The international promotion of social security and close collaboration with key regional and global organizations is fundamental to strengthening the ISSA's institutional role and its capacity to promote social security on behalf of its member organizations. The research findings of this 2025 special double issue complement the ISSA's continuing endeavours to develop and disseminate knowledge on resilient social security. This rich work includes the ISSA Guidelines on Continuity and Resilience of Social Security Services and Systems, as well as the publication of technical reports and analysis articles, and recent innovative experiences presented in the ISSA's Database of Good Practices. The dissemination of this knowledge is facilitated by ISSA Webinars and ISSA events and gatherings held around the globe.

As the 2023–2025 triennium concludes, the knowledge presented in this special issue, and its dissemination, supports the ongoing operational objectives of ISSA member organizations, to excel in administration, and constitutes the basis for further social security analysis and knowledge development during the triennium 2026–2028.

Marcelo Abi-Ramia Caetano Secretary General International Social Security Association

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Introduction

SOCIAL SECURITY: ENABLING AND SUPPORTING RESILIENCE

Roddy McKinnon

International Social Security Association, Geneva, Switzerland

Abstract This special double issue of the *International Social* Security Review addresses the topic of "Social security: Enabling and supporting resilience". Two key aims underpin the production of this special issue. The first is to identify, critically evaluate and share knowledge on how to strengthen the broader operational environment of social security systems, organizations and programmes in a manner that will be conducive to their ability to avoid shocks and ensure administrative continuity but also supports their capacity to respond with resilience and "build back better" after having been confronted by shocks. The second is to identify, critically evaluate and share knowledge on how individuals as members of households, families and society can be better enabled by social security benefits and services to be resilient when confronted by livelihood and life-cycle shocks and which, in a dynamic manner, should also contribute to the achievement of positive transformative change for people across the life course.

Keywords social security reform, resilience, international

Introducing "Social security: Enabling and supporting resilience"

This special double issue addresses the topic of "Social security: Enabling and supporting resilience". The content is framed by the current programme

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In developing this introduction, the many guiding comments and suggestions provided by the Chairperson of the Editorial Board, Krzysztof Hagemejer, the members of the ISSR Editorial Board as well as the substantive contributions of the authors to this special double issue are gratefully acknowledged.

orientation of the International Social Security Association (ISSA), the United Nations 2030 Sustainable Development Agenda, the fundamental human right to social security and the international social security standards, most notably those of the International Labour Organization. The aim of the combined content of the nine substantive articles is twofold.

The first is to identify, critically evaluate and share knowledge on how to strengthen the broader operational environment of social security systems, organizations and programmes. Specifically, how can their ability be strengthened to avoid shocks and ensure administrative continuity while also supporting their capacity to respond with resilience and "build back better" after having been confronted by shocks. In particular, this aim is important for this journal's sponsors, the member organizations of the ISSA, concerning the design and implementation of resilient social security systems and programmes.

The second is to identify, critically evaluate and share knowledge on how individuals as members of households, families and society can be enabled by social security benefits and services to be resilient when confronted by livelihood and life-cycle shocks. Moreover, as part of this dynamic process, how can this contribute to the achievement of positive transformative change for people across the life course.

Resilience: A complex and challenging concept

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Definitions of resilience are many and different, with the origins of the modern use of the concept lying in the physical sciences. More familiarly, the concept has been adopted widely to guide clinical practice in the medical sciences, especially in psychiatry. If we consider the concept of resilience from a clinical medical perspective, it may be understood to convey solely the positive process of recovery by a person following a trauma. Here, resilience is the process whereby the person, who is necessarily accompanied by the continuing positive support of close family and friends as well as their wider socio-cultural community, recovers sufficiently to permit the pursuit of a "new evolution" (Cyrulnik, 2019) in their personal development. However, resilience is not an immutable state. Backsliding may occur, often because of the loss of those socio-cultural conditions/actors that accompanied the person, enabling them first to cope, and which then made a longer-term process of recovery initially possible.

The international context can be considered as one of heightened uncertainty and risk and the occurrence of extreme events (i.e. severe economic crises,

^{1.} For a detailed discussion (in French) of the origins and the "multiple faces" of the concept of resilience, see Cyrulnik (2024). This cross-cutting and deeply insightful co-authored work is acknowledged as having informed and help shape the development of this introduction.

Introduction

humanitarian emergencies, natural disasters and other shocks, which may be associated with climate change, conflicts or pandemics). Partly in response to this, the application of the concept of resilience has become ubiquitous to help define, articulate and map out successful responses to contemporary multiple challenges in society.

However, the widening use of the concept has been the source of critical commentary, with the concern voiced that the original meaning applied to the concept has not been fully respected by some of its more recent advocates (Cyrulnik, 2024).

Commonly, it has become a catch-all adjective to intimate an immutable individual characteristic of personal strength and versatility. This distorted viewpoint may be used to suggest, incorrectly, that a lack of resilience is a sign of personal failing. This perspective openly challenges the importance for resilience of community and solidarity for which collective action and mutual support are intrinsic components.

In yet other instances, it is used in an overly simplistic manner as a synonym to define organizations as "sustainable", with little effort taken to distinguish whether this speaks to financial, political or indeed social sustainability. More problematically, this usage incorrectly conflates an absolute steady-state outcome (to be sustainable) with a process (exhibiting resilience) which, in the possible event of the loss of necessary supporting conditions and networks, may be reversed.

The concept of resilience and social protection

The application of the concept of resilience to the broad policy field of social protection, which by definition includes health systems, is intuitive. Yet, mirroring some of the criticism presented above, its use is often casual and simplistic, thus defining a need for greater assiduousness and rigour. Nonetheless, the policy insights learnt from the responses to the COVID-19 pandemic or recent natural disasters have directed attention not only to a need for comprehensive social protection systems, but for such systems to "build back better".² This important realization incorporates the dynamic notion of the need to follow a new evolutionary path, which acknowledges that as a consequence of a shock a permanent and immutable change may have occurred. Things may never be the same again, but progress is always possible, just as it is essential.

Therefore, it is widely accepted that the application of the concept of resilience to social protection policy must have a dynamic add-on to articulate the

2. The origin of this term is commonly attributed to the United States' 2021 Build Back Better Act, a public investment framework implemented in response to the COVID-19 pandemic. The term has now entered common usage, typically when paired with crisis policy responses generally.

international ambition to realize social justice for all. This is so even with the necessary complementary roles played by wider progressive public, fiscal, labour market, housing and natural disaster management policies. Indeed, for a household to recover successfully only to the relative state of insecurity it held prior, for example, to a socioeconomic crisis is insufficient.

For the purposes of this special double issue, and to better ensure comprehensive social protection systems, this demands that we consider the goals of enabling and supporting resilience in relation to two interrelated objectives.

The first objective is organization centred. Social protection practitioners and scholars should consider the concept of resilience as part and parcel of the achievement of politically trusted, socially and financially sustainable as well as legally enshrined social security systems, organizations and programmes. In this regard, there is a need for robust but agile administrations (comprising information and communication technology, business processes and staff) that are essential for business continuity and the effective delivery of quality social security benefits and services. Beyond a focus on conventional life cycle and labour market risks, such systems should be capable of contributing to enabling and supporting the resilience of populations confronted by natural and climate-change induced risks and disasters and other crises, as well as being institutionally resilient to the same.

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The second objective is people centred. Resilience cannot be disassociated from the achievement of inclusive social security coverage for individuals, households and families, as defined by the universal, comprehensive and dynamic social protection ambitions of the 2030 agenda "to leave no one behind". This also acknowledges the need for positive transformative change in behaviour and attitudes across the life course to promote inclusion and which avoids entrenching existing inequalities, not least of which is gender inequality. Even with well-functioning national-level social protection institutions, the fuller promotion and realization of inclusion may necessitate the better orchestration of a continuing role for complementary humanitarian aid alongside spontaneous traditional forms of solidarity at the local level, especially in situations of protracted crisis.

An important contribution to the debate

The context of heightened uncertainty and risk and the rising occurrence of extreme events inevitably leads to detrimental effects that impact upon the organization of societies and the lives of people in those societies. When affected by stress events and trauma and to be able to begin the process of recovery from these, there is a need first to cope, to absorb the shock, and then to exhibit

resilience, to adapt positively to the new reality. A wider discussion about and a clearer understanding of the concept of resilience is therefore of great importance for policy makers and society more generally. As a contribution to this critical discussion from the perspective of the broad field of social protection, the contributions to this special double issue each offer a definition of resilience. The nine papers address different aspects of the need to ensure resilient social security systems, appropriately coordinated with other related organizations and programmes, and how these can enable and support the resilience of populations when confronted by multiple conventional as well as emerging risks (in this vein, the first article by Devereux and Solórzano opens the discussion by arguing forcibly for a holistic approach to these issues that is fit for purpose in a "polycrisis" world).

If social security systems are to remain resilient, as they must, in the pursuit of social security for all they must first meet the bureaucratic and operational challenges and demands associated with state-of-the-art social security administration and, second, address the life cycle and labour market risks set out in the international social security standards. Of course, these important objectives remain essential – the pursuit of organizational agility and creativity in reimagining governance structures and enhancing institutional responsiveness (as discussed by Bhamra and Brodersohn in their paper) to ensure coherently integrated and well-designed, social protection systems for all is non-negotiable. Moreover, there must be public trust and transparency in the manner in which these systems operate (as Börjesson and Karlsson are correct to underline in their contribution).

What is more, for social protection systems to be better able to ensure their own resilience as well as better able to enable and support the resilience of people requires a systemic approach to effectively coordinate the management of risk across the life course (as Both and Tessier address in their paper). This must also take into account the contemporary and rapidly evolving environment in which these systems operate and in which the life course takes place. Just as we have discussed that the "concept" of resilience must have an "add on" to realize the ambition of social protection systems to build back better, similarly for "systems" an "add on" to their primary responsibilities is required. Social protection measures manage "conventional" social and labour market risks across the life cycle. However, there is a need to acknowledge that similar detrimental social and labour market outcomes for people do originate in, for example, natural, environmental (see Karadeniz's contribution concerning Türkye's earthquake response) and climate-related risks (see Tebaldi's contribution on Brazil's response to regional flooding; and that of Burchi, Terskaya, Sakketa and Aurino discussing how public works programmes can foster climate resilience). Currently, the shocks associated with these risks are perceived typically as cases

necessitating stand-alone, time-bound emergency humanitarian responses. In this special issue, the case is made that they must come to be seen as they should be – as unmet gaps in social protection coverage. Bridging these gaps is challenging, and perhaps by necessity this can initially only be done incrementally and according to set priorities. However, on the path to the universal human right to social security these challenges must be met. This is even more so in cases of protracted crises, defined as where conflict and displacement persist for five years or longer. In such situations, to be underlined is the importance of factoring in the local context and the vital complementary roles that should be played by international, national as well as local actors (in this regard, the contribution from Holland-Szyp and Jeremy Lind offers a critical evaluation; while Kupenko, Ivanova, Kostenko and Opanasiuk offer a detailed local case study from Ukraine). In this, the need to address the challenges associated with multiple actors and fragmented provision is important.

Once such a broader appreciation of managing risk is more widely perceived as a legitimate concern for social protection systems – and thus demanding of responses to complement those of existing programmes guided by the international social security standards – this "add-on" role may be considered natural. Indeed, one might ask why – as is the case for any risk when it is first perceived as such – this was not perceived as such earlier. Progress towards this will strengthen ability of social protection systems to enable and support resilience.

The Editorial Board warmly thanks the authors for their respective important contributions.

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Resilient people, resilient systems: The essential role of social protection in a polycrisis world

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Abstract Resilience, increasingly emphasized in both development and humanitarian discourses, is a complex concept that is often treated simplistically, leading to residualist or reactive interventions that do not consider the structural causes of vulnerability. Moreover, there is often confusion between "people-centred" and "systems-centred" approaches. This article argues for a holistic approach. Resilient individuals, households and communities (IHC) are a desired outcome that can only be achieved by building social protection, disaster risk management (DRM) and food systems that are efficient, sustainable and resilient. Resilient social protection systems must be constructed to deliver appropriate, adequate and timely support that builds the resilience of all IHC, in the context of rising shocks, stressors and polycrisis. This article presents resilience-building through social protection not as a static endpoint, but as a continuum within the broader humanitarian-development trajectory. These two perspectives - resilient people and resilient systems - delineate three core pathways of social protection's contribution to resilience outcomes: enhancing IHC assets, strengthening systemic capacities, and coordinating with other sectors and systems. Two case studies are analysed. Brazil's integrated approach includes delivering adequate and comprehensive social protection to realize the human right to adequate food, but also strengthening delivery mechanisms using the social registry

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and coordinating with DRM and other sectors. India's Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) builds absorptive and adaptive resilience, by choosing community public works projects that drought-proof rural livelihoods against climate risks. Although innovative ideas are being piloted through MGNREGS, an important conclusion of this article is that projectized responses should not be introduced if they divert attention and resources away from strengthening the core social protection system and extending coverage.

Keywords social protection, economic and social development, livelihoods, disasters, poverty, resilience, international

Introduction

The twenty-first century is increasingly defined by a confluence of interconnected and cascading crises; a phenomenon often termed a "polycrisis". From economic shocks and climate change to conflict and mass displacement, these events have profound impacts, they have introduced new risks and exacerbated the vulnerability of people, jeopardising their food security and eroding the development gains made in recent decades. These compounding crises create a state of persistent uncertainty, making a stronger case for resilience-building approaches to support individuals, households and communities (IHC).

Polycrises are understood as multiple crises converging and interacting such that the overall impact exceeds the sum of each part (WEF, 2023). These risks and shocks are interconnected and interact in complex ways. They are typically economic (e.g. the cost-of-living crisis), environmental (e.g. climate change, earthquakes, loss of ecosystems), geopolitical (e.g. conflict, war, terrorism) and/or societal (e.g. mass involuntary migration). For instance, the economic impacts from the COVID-19 pandemic and the war in Ukraine have amplified the risk of food insecurity in some African countries, particularly through rising food and energy prices. Additionally, the increasing frequency and severity of protracted droughts have led to significant loss of livelihoods, deepening food insecurity and poverty. The compounded impacts of these shocks are pushing fragile and conflict-affected states such as Somalia, Ethiopia and Yemen closer to a hunger catastrophe, while exacerbating conflict risks.

Resilient people need resilient systems – notably, social protection, disaster risk management (DRM), and food systems – that can provide effective protection against risks and shocks. These systems must be robust, adaptable and able to function effectively even in the face of significant disruptions. Social protection, encompassing a range of policies and programmes designed to build resilient livelihoods, protect people against impoverishing shocks and stresses and eradicate the social origins of vulnerability (Sabates-Wheeler and Devereux, 2008), is uniquely positioned to enhance resilience by strengthening the ability of individuals, households and communities to manage risks, cope with shocks and adapt to changing circumstances. A well-designed and effectively implemented social protection system can buffer vulnerable populations against the negative impacts of crises, preventing them from falling deeper into poverty and fostering their long-term well-being.

This article moves beyond the notion of resilience as a static endpoint, presenting a framework that views resilience-building through social protection as a dynamic process. This perspective acknowledges that resilience is not a fixed state that individuals, households and communities can reach and maintain in perpetuity, but rather an ongoing process of adaptation. As the frequency, magnitude and interdependence of crises increase, it becomes clear that no individual, household or community is ever 100 per cent resilient, due to idiosyncratic and covariate shocks that cannot be predicted or fully insured against. This is why reliable systems are key to building people's resilience in a polycrisis context.

By considering both resilient people and resilient systems, this article identifies three core pathways through which social protection contributes to resilience in the face of a polycrisis: i) enhancing assets; ii) strengthening protection systems; and iii) fostering complementarity across systems, including with food systems, and DRM. Enhancing IHC assets involves providing individuals and communities with the resources and capabilities they need to withstand shocks and adapt to changing circumstances. Strengthening protection systems entails building robust and responsive social protection programmes that can effectively mitigate the negative impacts of crises. Fostering complementarity across systems requires aligning social protection with other relevant sectors to create a more holistic and integrated approach to resilience-building.

To illustrate the diverse approaches to building resilience through social protection, the article includes case studies from two of the largest social protection systems in the world. Brazil exemplifies a comprehensive approach to building resilience, while safeguarding people's fundamental human rights to food and to social protection. It recognizes the interconnectedness of social protection, DRM and food security. It has established an institutional framework for better coordination and complementarity. India is working to integrate social protection with digital public infrastructure to reach marginalized populations

more effectively. The Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) is piloting innovations to support climate resilience. While India's social protection schemes were designed many years ago, the country is acknowledging the importance of considering new sources of risk and vulnerabilities. These examples demonstrate the necessity of adapting social protection systems to the specific contexts and challenges of a polycrisis.

This article is primarily conceptual, focusing on low- and middle-income countries and applying generally to polycrisis scenarios rather than individual crises such as conflict or climate change. While the article offers a framework for understanding the role of social protection in building resilience in the face of interconnected crises, it must be complemented by in-depth empirical analyses of specific crises and their impacts on different populations.

By adopting a holistic and dynamic approach to resilience-building, and by focusing on both people and systems, this article provides valuable insights and guidance for policy makers and practitioners seeking to understand the potential of social protection as a cornerstone of resilience in an increasingly uncertain and complex world.

Conceptualizing social protection for resilience

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There is at best a "fractured consensus" on what is meant by resilience (Lindgren and Lang, 2023). Some definitions focus on people: "The ability of countries, communities and households to manage change by maintaining or transforming living standards in the face of shocks or stresses, without compromising their long-term prospects" (DFID, 2016). Others focus on systems: "The ability of a system and its component parts to anticipate, absorb, accommodate or recover from the effects of a hazardous event in a timely and efficient manner, including ... its essential basic structures and functions" (IPCC, 2012, p. 3). Relatively few definitions recognize the interplay between people-centred and system-centred approaches. Our argument in this article is that they are inextricable: resilient people require resilient systems.

It follows that strengthening the resilience of people requires strengthening and coordinating the systems – notably, social protection, DRM and food systems – that collectively can provide effective protection against risks and shocks. Our conceptual framework identifies three entry points for strengthening the resilience of individuals, households and communities: 1) building IHC assets, 2) strengthening social protection systems; and 3) coordinating with other sectors and systems.

Resilience has been used as a conceptual umbrella that underpins various frameworks and strategies aimed at facilitating integrated approaches and coordinated efforts to address different forms of risks posed by climate change,

disasters and poverty (Bahadur, Ibrahim and Tanner, 2013). Resilience "allows multiple risks, shocks and stresses and their impacts on ecosystems and vulnerable people to be considered together in the context of development programming" (Mitchell and Harris, 2012, p. 6).

Historically, the term "resilience" was first used in physics and engineering to describe the ability of solid bodies to restore their shape after mechanical pressure (Grygorenko and Naydonova, 2023). It comes from the Latin *resilire*, meaning "to leap" or "bounce back" (Manyena et al., 2011; Alexander, 2013). The social-ecological systems (SES) literature expanded the understanding of resilience by including adaptation approaches, where resilience is not only about coping with change, but also about living with it. So, resilience focuses on processes of change (Adger et al., 2011). This SES understanding of resilience had growing influence in development discourses (cf. Fischer and Kothari, 2011; Béné et al., 2014) and was progressively adopted as a policy narrative.

In the international development arena, resilience features in the Sendai Framework of Disaster Risk Reduction, the Sustainable Development Goals, the Paris Agreement on Climate Change, and the World Humanitarian Summit 2016 (Solórzano, 2016). These frameworks recognize that integrated approaches are needed that break down disciplinary silos and address the root causes of vulnerability to different shocks and stressors (Solórzano and Cárdenes, 2019). They highlight the importance of strengthening the capacities and resources of systems, communities and individuals to cope with a wide range of risks and shocks (OECD, 2020).

Despite widespread use of the concept, a precise and unique definition of resilience remains elusive, creating ambiguity and confusion for governments, donors and partners in its application and operationalization. One review of the use of resilience in the risk and disaster management literature (Graveline and Germain, 2022) found at least 25 attributes of resilience. In general terms, resilience is portrayed either as an outcome or as a process.

From an outcome perspective, resilience refers to the end-state that arises from withstanding or recovering from specific shocks and stresses. It represents the degree to which a system is able to maintain its essential functions and structure when confronted with external pressures and crises (Herrman et al., 2011). This view focuses on the end results of resilience-building efforts, such as reduced vulnerability, increased adaptive capacity, and improved socioeconomic well-being.

This approach has faced criticism for focusing solely on individual-level adjustments, while overlooking the broader socio-political and economic factors that shape vulnerability. Resilience programming following this perspective frames resilience as an external "thing" to be sought by vulnerable individuals. From a policy standpoint, it offers residual solutions, transferring responsibility

From a process perspective, resilience is not a static attribute, but rather an ongoing and iterative process of building the ability to learn from past experiences, proactively adjust strategies and innovate to navigate uncertainty and manage complex risks (Williams et al., 2017). As a process, building resilience involves supporting the capacity of individuals, communities, and States to adapt through assets and resources relevant to their context (Manyena, 2006). This approach showcases the importance of context and emphasizes that resilience can manifest differently depending on the specific challenges and resources available.

This article conceptualizes resilience building through social protection as a continuum rather than a static outcome, beginning with strengthening of assets, progressing to the reinforcement of social protection systems, and culminating in the coordination of different systems in a coherent and holistic way.

Building assets

Individuals, households and communities hold stocks of up to five types of assets: financial or economic, human, natural, physical, and social or political (Scoones, 2015). Higher levels of any of these assets are associated with higher levels of resilience, since vulnerability is associated with low levels of assets, or susceptibility to loss of assets. Social protection can reduce people's vulnerability by providing immediate relief. Its protective and preventive features can increase resilience by smoothing short-term consumption and safeguarding household assets against shocks. Social assistance and social insurance give poor households a basic level of security, enabling them to spend on current consumption as well as invest in productive assets, which boosts their adaptive capacity, preventing deprivation in the face of future shocks.

Social protection can build all categories of assets, mainly at the individual or household level but also at community level, as in the case of public employment programmes. Cash transfers themselves can build the resilience of individuals and households. Evaluations of Ethiopia's Productive Safety Net Programme (PSNP) and Kenya's Hunger Safety Net Programme (HSNP) found that cash recipients were better able than their neighbours to avoid damaging coping strategies, such as selling key livelihood assets during periods of drought (Béné, Devereux and Sabates-Wheeler, 2012; Bharadwaj, Karthikeyan and Mitchell, 2024). Building resilience is also cost-effective. An assessment of "The economics of early response and disaster resilience" concluded that every dollar spent pre-emptively on disaster resilience could save almost three dollars of

humanitarian spending in Ethiopia and Kenya (Venton et al., 2012). However, resilience is strengthened most when interventions enhance multiple types of assets, rather than one.

Understanding resilience as a dynamic process helps to highlight the trade-offs between different assets that can emerge from social protection. Programmes with promotive objectives may prioritize maximizing economic productivity, accepting higher risks and returns even at the expense of stability. In contrast, protective interventions typically aim for more stable, but potentially lower, returns (Solórzano, 2016). Pursuing promotive social protection objectives could potentially undermine the core protective and preventive roles of social protection, which need to be reprioritized in contexts of polycrisis.

Livelihood trajectories are not linear, but "local, complex, diverse, dynamic and unpredictable" (Chambers, 1999). Injecting assets such as cash or agricultural inputs into poor households does not automatically lead to higher incomes and poverty reduction, especially in contexts of heightened vulnerability, disrupted livelihoods and underlying uncertainty. In such conditions, protecting people and their assets against compounding shocks and hazards must be paramount, using safety nets, insurance mechanisms, rights-based claims, and installing a social protection floor. Rather than graduating people out of social protection systems, the focus could be on creating bridges between social assistance and social insurance schemes (ILO and IPEA, 2025). In contexts of fragility, promotive objectives can be sought in a post-conflict setting.

Moreover, social protection programmes must mitigate potential trade-offs between protective, preventive and promotive objectives, which can be achieved through an adequate design and implementation, but often only with layered or sequenced complementary interventions. For instance, resilience analysis from the public index-based climate risk insurance scheme *Garantia Safra* in Brazil found that the programme contributes notably to the adaptive capacity of its participants by its protective feature – providing relief after climate extremes – but that it lacks a preventive function. Kuhne (2020) explains that difficulties in the areas of trust, incentives, and economic preconditions, related to opaque indices and unreliable, irregular or late payout mechanisms, undermine its preventive features.

Social protection and maladaptation. A dynamic understanding recognizes that resilience at one level can influence and be influenced by resilience at other levels. For social protection this means there are risks of maladaptation, where interventions that aim to address immediate needs or reduce vulnerability in the short term, inadvertently increase vulnerability in the medium to long term (Magnan, 2014). It can also lead to negative impacts on different scales, sectors

and contexts. For example, a development project in Botswana aimed to provide drought-resistant crops and groundwater irrigation to smallholder farmers. However, in practice, only the wealthier commercial farmers were able to access the support, exacerbating existing inequalities. Additionally, class differences inhibited the traditional reciprocity practices that typically benefit poorer farmers, especially women, during times of crisis (Pereznieto and Holmes, 2023).

Maladaptation results from failing to consider the full range of potential impacts and unintended consequences of an action. Social protection programmes that are designed as isolated interventions, rather than as part of a holistic approach that considers vulnerability contexts at different scales, can lead to maladaptive outcomes, further exacerbating risks (Solórzano, 2016). Examples of maladaptation that are related to social protection include:

- farm input subsidies (e.g. chemical fertilisers and genetically modified organism (GMO) seeds) that increase short-term productivity but degrade natural assets, compromising the sustainability of food systems (Solórzano, 2016);
- public works programmes that strengthen community-level risk management activities and absorptive capacities in areas with poor long-term environmental prospects (e.g. due to desertification or sea level rise), rather than facilitating livelihood transitions such as relocation (Solórzano and Cárdenes, 2019);
- cash transfers that provide income support but inadvertently contribute to price inflation in local food markets (Sabates-Wheeler and Devereux, 2010) or increase consumption of unhealthy diets, eroding human capital (Solórzano, 2016);

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- political coercion or clientelist use of social protection, that excludes the poorest and most vulnerable, increases inequality, and erodes social capital (Hickey, 2011);
- targeted income support programmes designed and implemented with no understanding of gender, conflict and other local dynamics of social inclusion and exclusion, that reinforce rather than reverse socioeconomic inequalities (Desai et al., 2023).

Transformation and social protection. To avoid a possible return to conditions of vulnerability and unprotected exposure to hazards, the concept of transformation has been introduced in the development discourse. Transformation addresses the power imbalances in society which underpin vulnerability (Pelling, 2011; Kates, Travis and Wilbanks, 2012). Social protection has the potential to be transformative and address socioeconomic risks underpinning vulnerability, by redressing inequities faced by disadvantaged identity groups (e.g. on the basis of age, gender, disability or ethnicity), contributing to changes in discriminatory social norms, behaviours and practices (Sabates-Wheeler and Devereux, 2008).

Evidence from climate resilience shows that social protection usually does not support transformation but offers a stronger emphasis on absorptive capacities (Solórzano, 2016; Ulrichs, Slater and Costella, 2019; Desai et al., 2023), even more so in contexts of fragility and conflict (see Holland-Szyp and Lind in this issue). This is because most activities are too short in duration to achieve transformative impact, and because top-down policy approaches lack substantial consideration of local context and feedback processes.

Local power dynamics where programmes operate must be closely examined, so that strengthening the assets and resilience of one group does not happen at the expense of another. This includes identifying why some individuals are more at risk and assessing who benefits and who pays the costs of the interventions and their unintended effects. If social protection cannot be transformative, at the very least it should not be maladaptive and create harm.

Social protection systems

A social protection system can be defined as "an integrated national portfolio of interventions which aims to serve four basic functions for households and individuals: protection of a minimum standard of living, prevention of deprivation through increasing resilience to shocks, and promotion of sustainable livelihood improvements" (White, 2016, p. 1). The distinction between reducing poverty and increasing resilience is clear in this vision statement from Malawi's first National Social Protection Policy: "Enhanced quality of life for those suffering from poverty and hunger and improved resilience of those who are vulnerable to risks and shocks" (Republic of Malawi, 2008, p. 20). It follows that resilience is an intrinsic function of social protection. But this problematizes the introduction of concepts such as "shock-responsive" and "adaptive" social protection: if social protection does not (by definition) provide protection and resilience against shocks, what is its purpose?

Social protection programmes must not be conflated with social protection systems, which are much broader. A comprehensive social protection system has three levels – policy, programme, and administrative – with coordination as a fourth cross-cutting component (ISPA, 2016). Key elements at the policy level include a national social protection strategy, framework legislation, and financing mechanisms. Social protection programmes should aim to cover all people and all needs, and should deliver adequate levels of support. At the administrative level, adequate capacity is needed in terms of staffing, equipment, payments and social accountability mechanisms, and management information systems (MIS), among other requirements. Finally, for efficient management, coordination mechanisms and linkages must be established both horizontally (intersectoral or inter-ministerial, and between policies), and vertically (from central to local administrative units, and between the state and non-state partners).

A person whose survival depends on social protection is not self-reliant, but is resilient to the extent that the social protection system is well-functioning, rightsbased, and delivers adequate and timely assistance even during shocks. In high-income countries, citizens are resilient against poverty, life-cycle risks and employment-related shocks, precisely because social welfare and social security offer effective safety nets as part of the social contract between governments and citizens. In low-income countries, establishing similar systems is often unjustifiably critiqued as creating "dependency syndrome" (Handa et al., 2017). Quite the reverse - social protection creates resilience, not dependency. Even in fragile contexts, the policy objective should be to move from ad hoc humanitarian assistance towards building a comprehensive social protection system that reliably delivers adequate assistance to all who need it, whenever they need it. In these contexts, resilience means helping people to cope and rebuild their ability to handle risks. While this is a limited form of resilience, it can be vital for the poor affected by long-term crises, especially when they face exploitation, discrimination and violence (see Holland-Szyp and Lind in this issue).

Social protection systems themselves must be resilient, otherwise their capacity to deliver assistance to people who need support could be compromised precisely when it is needed most urgently. In low-income countries and fragile and conflict-affected states with weak institutions and infrastructure deficits, social protection is fragmented, resource-constrained and narrowly targeted, with significant gaps in coverage, inadequate benefits, and limited agility when faced with surges in needs following shocks. In high- and middle-income countries, social protection is often rights-based, inclusive, relatively generous, and efficiently administered (Devereux, 2023). Such countries were better positioned to react quickly and effectively to COVID-19 in 2020, by extending coverage and benefits provided through their social protection systems to meet the new temporary needs created by mass involuntary unemployment during lockdowns.

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Social protection frameworks have been developed that encompass systematic measures to reduce vulnerability and build resilience in the face of covariate shocks. These frameworks include "adaptive social protection" (Davies et al., 2009; Bowen, et al. 2020), "climate-responsive social protection" (Kuriakose et al., 2013), "shock-responsive social protection" (O'Brien et al., 2018), and "anticipatory social protection" (Bharadwaj, Mitchell and Karthikeyan, 2023). Often, they are interpreted and implemented in ways that reflect the institutional mandates and priorities of the agencies and organizations that support them. These approaches have demonstrated their ability to use social protection systems to address humanitarian needs. They enhance absorptive capacities by ensuring that people can recover from shocks while retaining their productive assets. However, evidence on longer-term adaptive resilience is lacking.

These frameworks have also led to a common misunderstanding that any investments to support people in the face of covariate shocks, or of a polycrisis, fall under the realm of "adaptive" or "shock-responsive" systems, by emphasizing their links to climate adaptation, humanitarian aid and DRM. Hence, they are perceived as separate or disjointed from regular social protection systems, which is perceived as focusing mainly on life-cycle and idiosyncratic shocks. Any resilience-building efforts against covariate shocks are seen as outside the mandate of routine social protection. Moreover, these approaches tend to react to one threat at a time as they arise, rather than strengthening resilience against multiple compounding risks.

The risk of investing in temporary programmes as stand-alone responses to

The risk of investing in temporary programmes as stand-alone responses to individual crises is that this could divert resources away from equipping regular social protection systems, building social protection floors, to become more effective at protecting all people at all times against a range of potential risks and shocks. An important learning from COVID-19 is that resilience can be strengthened simply by "improving the coverage, adequacy, quality, responsiveness, and comprehensiveness of regular social protection programmes" (Devereux, Solórzano and Wright, 2024, p. 14).

Social protection floors, as per the Social Protection Floors Recommendation, 2012 (No. 202), of the International Labour Organization (ILO), are nationally defined sets of basic social security guarantees that aim to prevent or alleviate poverty, vulnerability and social exclusion across the life cycle (ILO, 2012). They provide a foundation for building social protection systems with progressively higher levels of social security. Especially in contexts of a polycrisis, investing in social protection floors is arguably more sustainable than investing in ad-hoc programmes or models introduced to deal with the crisis or shock of the moment.

In Brazil, for example, Bolsa Família has delivered monthly cash transfers to approximately a quarter of the population since 2003. Despite being a mainstream social assistance programme, recent findings show that Bolsa Família has enhanced absorptive and adaptive resilience against droughts. On the one hand, the regular provision of income support prevents destitution (e.g. by distress sales of productive assets to finance food purchases) when droughts are severe but manageable. On the other hand, in cases of extreme drought, Bolsa Família cash helps affected farmers to migrate in search of opportunities elsewhere (Tafner et al., 2025).

Of course, temporary emergency programmes should form part of social protection's mandate, but not at the expense of regular social protection system strengthening. Also, their design and implementation should move on from temporary fixes and aim to contribute to building strong systems, especially as crises bring opportunities for learning for future resilience.

After COVID-19 had passed, useful guidelines were produced by the International Social Security Association (ISSA) on how to improve the responsiveness of social protection systems, to make them more resilient against future shocks (Brodersohn, 2023). Also, in the wake of the pandemic, Botswana initiated a national dialogue to address the inadequacies and fragmentation of its social protection system. Over the decades, a patchwork of programmes had been devised to respond to crises such as drought, poverty, HIV and AIDS, and COVID-19. In 2020/21, 29 social assistance schemes were consolidated into a comprehensive National Social Protection Framework, with five flagship programmes covering the life cycle from childhood to old age, consistent with the ILO's Social Protection Floors Recommendation (Devereux, 2021).

Social protection working with other systems

Understanding resilience as a process involves interactions across multiple levels and systems, from individuals and households to communities and institutions (Masten, 2019). It follows that combining different social protection measures with other sectoral instruments and systems – such as DRM, food systems, peace-building efforts, and climate action – is more likely to support long-term resilience, as opposed to short-term stand-alone social assistance responses.

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A food system can be defined as "the entire range of actors and their interlinked value-adding activities involved in the production, aggregation, processing, distribution, consumption and disposal of food products that originate from agriculture, forestry or fisheries" (FAO, 2018, p. 1). Food systems should be economically, socially and environmentally sustainable into the future, as well as resilient in the present. "Resilient food systems have the capacity to provide enough, safe, and affordable food and healthy diets to all – even in the face of structural vulnerabilities, shocks and stressors" (WFP, 2022, p. 4). This definition draws attention to the supply side. Most social protection interventions boost the demand for food (and other basic necessities), but food systems must be strong enough to respond by delivering adequate supplies. A weak food system exposes people to the risk that a shock to local production or trade will leave them unable to meet their subsistence needs, even if the social protection system is strong and responsive.

A holistic and integrated approach in a polycrisis setting recognizes that resilience is not just about individual actions or sectors, but about how different systems and actors interact and influence each other. This involves expanding the circle of responsibility of relevant stakeholders and understanding how different sectors each have a role to play. Public policy should be consistent and reliable over time, meaning future policy makers should not be motivated to abandon or

alter it when faced with a crisis. It includes a combination of political commitments, laws or other legal frameworks, and financial pledges (Nesbitt-Ahmed, Clarke and Poole, 2024). Good practices for better cross-sectoral coordination include joint planning and budgeting exercises, joint monitoring and evaluation frameworks, joint training and capacity building activities, and the establishment of intersectoral committees or working groups (Devereux, Solórzano and Wright, 2024).

During recent decades, national efforts to strengthen the coordination between DRM and social protection have been increasing, with the response to the COVID-19 emergency showcasing the relevance of building these linkages and progressively working on the institutionalization of this coordination. The purpose of DRM is to reduce underlying risk factors and to prepare for and initiate an immediate response should disaster hit (Naheed, 2021). As Solórzano and Cárdenes (2019) argue, social protection can also build resilience by being layered to DRM activities such as early warning, climate projections, anticipatory action and disaster risk financing.

Mozambique, for example, has established an inter-ministerial DRM committee, which includes representatives from social protection, agriculture, health and education. This coordination has strengthened the social protection system, which is now capable of scaling up assistance even in anticipation of shocks. Key areas of progress include establishing a national disaster fund, sovereign risk transfer insurance and early warning protocols into social protection, including in anticipation of forecasted droughts (Beazley, Poole and Plichta, 2024). However, as the national policy discourse on "adaptive social protection" tends to focus on expanding coverage for emergencies – climate-related or the COVID-19 response – social protection programmes do not monitor conflict-sensitive concerns or the effectiveness of conflict-sensitive measures that might prevent tension or conflict dynamics arising, given the fragility experienced in some parts of the country – or even as the result of social protection interventions (Oosterom and Alcorta, 2024).

National systems planning and implementation should be informed by the interconnected nature of multiple risks, and moving beyond treating crises as isolated events. Governance structures often remain fragmented, focused on individual risks or crises, without adequately considering the need to engage across multiple sectors. For example, conflict prevention and DRM are often addressed separately, with limited collaboration and documented integration (see Holland-Szyp and Lind in this issue). Humanitarian aid tends to focus on saving lives rather than reducing structural vulnerabilities (Naheed, 2021), while the social protection sector often occupies a weak political position in the national context, hindering its effective integration into decision-making and planning processes.

Effective governance systems to address multiple risks rely not only on regulatory and institutional frameworks, but also on the capacities of systems at different levels to manage risks and integrate risk policy and politics (Naheed, 2021). Integrated approaches must be flexible and adaptable, allowing for adjustments based on new information and changing circumstances. Engaging local communities in the design and implementation of resilience-building initiatives is crucial to ensure relevance, effectiveness and sustainability.

Case studies

Brazil: Comprehensive systems working together for resilience and food security

The human rights to food security and social protection. Brazil exemplifies an integrated approach to building resilience while safeguarding people's fundamental human rights to food and to social protection. It shows that sustainable food systems working together with social protection systems can contribute to achieving the Sustainable Development Goals, including SDGs 1, 2, 7, 8, and 13 (UN, 2023). The Brazilian Constitution outlines the State's responsibility to organize and legislate social security according to principles of universality, adequacy, and uniformity of benefits and services (ILO, 2016). This legal framework has been instrumental in shaping Brazil's comprehensive social protection system, while also safeguarding access to adequate food as a fundamental human right, through the National System for Food and Nutrition Security (SISAN) (Fagundes et al., 2022). Fighting hunger became a national priority, which led to the progressive institutionalization of policy and legal frameworks, plans, programmes and activities across different sectors, with integrated long-term goals and targets to improve food and nutrition security (Domingos et al., 2023).

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As an essential component in building sustainable food systems, social protection programmes were tailored to address the food insecurity of the most vulnerable segments of the population (Marques and Ponzilacqua, 2022). The conditional cash transfer programme (CCT) Bolsa Família provides a basic monthly income to families living in extreme poverty while simultaneously fostering human capital development by supporting families to enrol their children in school and attend health check-ups. The National Programme for Food Acquisition channels food produced by family farming to those experiencing food insecurity. The National School Feeding Programme provides healthy meals to over 40 million children daily, while incentivizing the purchase of diverse, locally produced foods, with a preference for family farming and rural family entrepreneurs (Fagundes et al., 2022). Whilst the two latter programmes

are the main public instruments for the purchase of produce from family farming, the vast majority cannot survive only on agriculture, often depending on income support programmes such as Bolsa Família (Alves and Rocha, 2010).

Adequate and comprehensive social protection. Investing in adequate social protection programmes with extensive coverage plays a crucial role in strengthening resilience and building sustainable food systems. Bolsa Família is recognized as one of the largest CCT in the world, with a progressive design to alleviate poverty (Ed, Gonzalez, Aparecida Ferreira 2023, p. 24). It has more than 20 years of existence and, by 2024, it supported over 20.7 million families, 54.3 million people of a total population surpassing 200 million, covering all 5,570 municipalities in the country (Government of Brazil, 2024). Moreover, simulations from the World Bank show that approximately 90 per cent of households in Brazil have at least one member eligible for income protection measures, supporting a social protection floor (Ed, Gonzalez and Aparecida Ferreira, 2023).

Strong social protection delivery systems, including the social registry (*Cadastro Único*) and the national social assistance network (*Sistema Único de Assistência Social* – SUAS), working in coordination with the DRM sector also have a crucial role in resilience building, enabling the effective expansion of assistance during crises. During emergencies, Early Warning Systems are activated, enabling Civil Defence and SUAS to identify affected individuals, enrol them in the social registry, and provide support through social protection, while facilitating access to essential services, including shelter, health care, and social care (Tisei and Ed, 2024). The maturity of the social protection system and its integration with the DRM sector allowed a timely and comprehensive response to the COVID-19 emergency. Bolsa Família was expanded to 1.2 million additional families (Ed, Gonzalez and Aparecida Ferreira, 2023), including highly vulnerable groups usually excluded such as migrants and refugees. This was possible due to the inclusivity of the social registry (IPC-IG, UNICEF LACRO and WFP, 2021).

Integration of social protection, DRM and the food system. A strong legal and policy framework underpins Brazil's intersectoral integration, regulating interactions between DRM and social protection agencies. The Social Assistance Policy acknowledges that social protection must be adaptive and integrated with DRM for effective responses to multidimensional risks (Bowen et al., 2020). The 2012 National Policy on Protection and Civil Defence provides a foundation, defining roles across national, state, and local governments within the DRM domain. Through the National System for Protection and Civil Defence

(SINPDEC), Brazil integrates prevention, mitigation, preparedness, response, and recovery actions. Likewise, the Guidelines for the Implementation of the Social Assistance Policy in Contexts of Social Assistance Emergency foster both vertical and horizontal coordination, addressing the distinct roles and competencies of federal, state, and municipal entities, aiming to achieve synchronized efforts across all tiers of governance (Tisei and Ed, 2024).

Brazil has also developed a DRM system for rural producers within a broader social protection strategy, contributing to the resilience of food systems. The Agricultural Activity Guarantee Programme (PROAGRO) is a purely public insurance scheme. It protects farmers, especially family farmers (through PROAGRO-Mais), from income shocks. By guaranteeing their loans, these programmes ensure that farmers can recover from losses from natural hazards or pests and continue producing (FAO, 2021). The Crop Guarantee Programme (Garantia Safra) is a public climate risk insurance scheme designed to protect smallholder farmers against losses due to drought or excess rainfall (Kuhne, 2020). It provides financial assistance directly to farmers, enabling them to meet their immediate needs and invest in recovery (FAO, 2021). The Premium Subsidies Programme for Agricultural Insurance (PSR) encourages commercial farmers to take up agricultural insurance by subsidizing the premiums. This reduces the financial burden on farmers, making it more accessible for them to invest in risk management (FAO, 2021).

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Challenges ahead due to ongoing risks. Even strong systems such as Brazil's continue to face challenges in achieving sustainability and resilience. A recent review by the World Bank (Ed, Gonzalez and Aparecida Ferreira, 2023) reveals gaps and constraints that restrict the system's potential to fully support shock response and resilience building outcomes. It calls for strengthening intersectoral coordination, fiscal sustainability, including through disaster risk financing, improving risk data within the social registry, addressing programme duplication and efficiency, and enhancing monitoring and evaluation to assess the effectiveness of social protection interventions (Ed, Gonzalez and Aparecida Ferreira, 2023). Moreover, coordination and complementarity, layering and sequencing of the different social protection instruments need to be improved so that resilience is strengthened.

Between 2019 and 2022, the COVID-19 pandemic, compounded with an ongoing economic and fiscal crisis, contributed to a political crisis that significantly eroded Brazilians' access to adequate and nutritious food. The internal political crisis weakened key public policies and institutions, such as the SISAN and the social protection system, relegating food security as a lower political priority (Da Cruz and Hespanhol, 2025). In 2022, an estimated

33.1 million Brazilians, representing 15.5 per cent of the population, were experiencing hunger – a more severe situation than in the 2000s (UN, 2023). Anti-discrimination measures and the protection of indigenous peoples were also negatively impacted, as specialized agencies were weakened and their funding cut. Currently, the country is working to bounce back, restoring the rights to food and to social protection through a multi-sectoral and participatory "Brazil Without Hunger Plan" involving 24 ministries to address these critical issues (UN, 2023). But for Brazil to build back better and build more reliable systems, it is imperative to safeguard the human rights to food security and to social protection, with the required institutional, social and political support, ultimately reflecting the nation's social contract.

India: Building on MGNREGS to build farmers' resilience

India's Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) is one of the world's largest social protection programmes (Desai et al., 2023). It entitles every rural household to claim up to 100 days of employment each year at the local minimum wage, or the cash equivalent if suitable employment cannot be provided. MGNREGS evolved out of India's long history with public works programmes. Launched in 2005, its most innovative feature is that employment is rights-based (demand-driven) rather than discretionary (supply-constrained). The principal benefit of MGNREGS is cash wages that enable low-income rural households to supplement their income and smooth consumption throughout the year, especially during the agricultural off-season. A high proportion of workdays (e.g. 90–94 per cent in Kerala in 2017–2021) and income earned are accrued by women (Mohanakumar and Padmanabhan, 2021).

A secondary benefit of MGNREGS is the work that participants undertake, which is intended to create or maintain rural assets and infrastructure such as feeder roads and irrigation, while protecting the natural resource base. MGNREGS environmental conservation activities have improved soil fertility and water conservation at the community level, to "drought-proof" agrarian households and create more resilient agriculture-based livelihoods. MGNREGS activities also focus on post-shock recovery, by rebuilding damaged physical infrastructure. After the floods in Kerala in 2018/19, MGNREGS participants worked on repairing cattle sheds, stormwater drains, wells, and rural feeder roads (Mohanakumar and Padmanabhan, 2021). These interventions can be modelled as investments in resilience against future climate shocks.

A study of MGNREGS in Odisha state found that 15–25 per cent of participants surveyed had improved their resilience, in all three dimensions:

- absorptive resilience (defined as the "capacity to absorb the impact of drought and flooding") due mainly to MGNREGS's guaranteed wages;
- adaptive resilience (the "ability to manage future risks and bounce back better" after shocks) due to investments in infrastructure and skills training that allowed many participants to use irrigation and diversify their crops; and
- transformative resilience ("a system's ability to fundamentally change its structure to move beyond vulnerability thresholds") due to the adoption of new livelihood activities that are not susceptible to climate hazards (Steinbach et al., 2017).

However, there is only limited evidence that MGNREGS builds transformative resilience. Evaluations indicate that participation in the programme's meetings with communities to prioritize or select public works activities is low, despite the design following a "bottom-up, people-centred" approach. This is due to access barriers that fail to consider the intersectionality of participation, such as factors related to gender, age, disability, and ethnicity (Desai et al. 2023). Moreover, 19 per cent of respondents in Jharkhand and Odisha reported that their well-being had declined because of frequent droughts or floods, suggesting that MGNREGS is not building their resilience at all. These households had very low levels of income and assets and relied heavily on MGNREGS wages, which are not enough to protect them against climate hazards. Complementary asset-building and risk management interventions are needed that strengthen households' productive base and enable them to diversify their livelihoods to reduce climate risk (Kaur et al., 2019).

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A recent innovation is the "Climate Resilience Information System and Planning Tool" for MGNREGS (CRISP-M), developed by the International Institute for Environment and Development (IIED) in partnership with the Madhya Pradesh Council of Science and Technology, and piloted in collaboration with the Ministry of Rural Development, with financial support from the United Kingdom's Foreign, Commonwealth and Development Office (FCDO) programme on "Infrastructure for Climate Resilient Growth" (IIED, 2025). CRISP-M has been piloted in Madhya Pradesh with two main components: i) drought early warning, and ii) using Geographic Information Systems (GIS) to plan asset-building activities.

Drought early warning system. This app uses rainfall data, weather forecasts and remote sensing to provide regular updates to MGNREGS officials and communities about emerging drought conditions, with two purposes: to allow participants to prepare for possible crop losses or livelihood shocks, and to allow officials to implement mitigating measures. Once a drought is declared,

MGNREGS provides an additional 50 days of wage labour to offset lost income or crop production. In the terminology of shock-responsive or adaptive social protection, this is "vertical expansion" (providing more benefits during a shock). Other states also increase MGNREGS workdays provided during climate shocks, as a form of insurance and resilience-building. In Kerala, for instance, many households worked more than the prescribed 100 days during the catastrophic flood year of 2018/19, in response to a surge in demand for MGNREGS employment (Mohanakumar and Padmanabhan, 2021).

Asset planning using GIS. CRISP-M uses digitized layers of GIS information about conditions on the ground – topography, land use, ground water supplies, etc. – linked to climate projections, to allow local MGNREGS officials to plan for public works activities (such as watershed management and community forestry) that take account of climate risks. A mobile app allows communities to identify and invest in livelihood activities that will reduce their climate vulnerability. Remote sensing also shows how MGNREGS activities impact on physical indicators such as changes in areas of farmland, forests and bodies of water, thereby either reducing or enhancing resilience.

The CRISP-M project has potential to build the resilience of MGNREGS participants and their communities. An innovative feature is that it integrates and delivers useful real-time information both to community members and to government officials, thereby empowering both sides to plan climate-resilient activities and infrastructure better, even jointly.

One important criticism is that this small and technologically sophisticated pilot project is an example of expensive innovation that risks diverting attention and resources away from the core functions of MGNREGS. It covers a tiny fraction of MGNREGS participants, and it does little to strengthen institutions at local, state or national level. Such investments are fragmented and do not contribute to building comprehensive, inclusive and resilient social protection systems across the country.

Conclusion

This article has argued that strengthening the core protective and preventive functions of social protection is paramount to building resilience in the context of polycrises, rather than investing solely in promotive activities or launching new initiatives that could detract from social protection's main goals. Social protection systems primarily serve to "protect", especially in the Global South, where they have historically emerged in response to shocks.

In line with the Universal Social Protection 2030 agenda, priority should be given to strengthening regular social protection systems by expanding coverage, increasing adequacy and supporting a wider range of needs arising from different shocks and stressors. This requires enhancing assets, strengthening protection systems, and fostering complementarity across systems, including food systems and DRM. When individuals, households and communities can rely on systems then they are inherently more resilient.

Investing in mechanisms that support shock response for specific crises should not come at the expense of strengthening the social protection system. Efforts should focus on both strengthening the system and providing relief, ensuring sustainable measures rather than temporary fixes. Support is needed for these institutions to meet immediate needs and ensure long-term stability by investing in the system's structural resilience.

Social protection is intertwined with a society's social contract, reflecting an agreement between people and their government. By prioritizing the strengthening of core social protection functions and fostering a holistic, system-wide approach, societies can build the resilience of individuals, households and communities against various idiosyncratic and covariate shocks. Furthermore, integrating social protection with other relevant sectors such as food systems and DRM lays the foundation for a more institutionalized approach to resilience-building, further enhancing the well-being and security of all.

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Understanding organizational dynamism: Fostering creativity and agility for resilience in social security institutions

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Abstract In an era defined by unprecedented global complexity and change, social security institutions are confronted with significant challenges in maintaining organizational effectiveness and cultivating the resilience necessary to serve evolving community needs. Institutions need to maintain organizational solidity and stability to ensure reliability in the provision of benefits and services, whilst at the same time ensuring that they are adaptable to keep up with evolving environmental changes over time. This article critically examines the transformative potential of organizational agility and creativity reimagining and governance structures enhancing institutional responsiveness within these vital public-sector entities. Contemporary social security systems often exhibit inherent rigidities that can impede adaptive capabilities. This article analyses the mechanisms through which governance organizations can develop robust resilience characteristics, focusing on fundamental organizational capabilities that enable dynamic and proactive institutional frameworks. By exploring these organizational elements, this article offers insights for developing more resilient, creative, and dynamic institutional structures. The key factors identified for fostering creativity and agility within governance ecosystems decentralized include decision-making

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comprehensive stakeholder engagement strategies, adaptive leadership models, flexible organizational structures, and strategic technological integration. The methodological approach is qualitative and incorporates literature, theory, and a survey of member organizations of the International Social Security Association. A research-grounded framework for institutional resilience is proposed, offering practical strategies for enhancing organizational adaptability. This research contributes to a deeper understanding of governance structures, positioning social security institutions as dynamic, adaptive entities capable of effectively navigating increasingly complex and unpredictable global landscapes.

Keywords social security administration, social security planning, resilience, governance, public sector, bureaucracy, international

Introduction

The contemporary global landscape is characterized by an unprecedented level of complexity, driven by interconnected political, economic, technological and social factors. Social security institutions, tasked with providing essential support and services to communities, are particularly vulnerable to the impacts of these dynamic forces. From shifting demographic needs and economic volatility to technological disruptions and evolving societal expectations, social security organizations face a constant barrage of challenges that demand a fundamental re-evaluation of their operational models and governance structures.

A core problem confronting many social security institutions is inherent rigidity. Rooted in traditional hierarchical structures and standardized procedures, these systems often struggle to adapt swiftly and effectively to emerging needs and unforeseen crises. This lack of adaptability can lead to operational inefficiencies, delayed responses to beneficiary needs and, ultimately, potential erosion of public trust. In this context, the question of how these crucial public-sector organizations can become more dynamic and responsive is paramount.

The purpose of this article is to explore how the concepts of organizational agility, creativity, and resilience can serve as transformative forces within social security institutions, enabling them to reimagine their governance structures and enhance their institutional responsiveness. By drawing on interdisciplinary literature from management, public administration and organizational behaviour,

this article aims to provide a conceptual framework for understanding and fostering organizational dynamism in this critical sector.

This research seeks to address the following key questions:

- How can organizational agility and creativity enhance institutional resilience within social security institutions?
- What key capabilities are essential for developing dynamic governance structures and frameworks that enable adaptability and proactive responses in these organizations?
- Are there functions or units in social security administrations which can absorb disruptions or have greater need for agility than others?

To address these questions, this article is structured as follows: A comprehensive literature review explores the concepts of governance structures in social security – organizational resilience, agility, and creativity – as well as the barriers to adaptability in bureaucratic systems and existing relevant models. Second, the methodology underpinning this conceptual exploration is outlined. Third, the specific challenges facing social security institutions in the current global context are examined in detail. Fourth, the core mechanisms through which organizational agility and creativity can be developed within these institutions is analysed. Finally, practical strategies for building dynamic and resilient governance are proposed, followed by a conclusion summarizing the key findings, contributions, limitations and directions for future research.

Literature review

Governance structures in social security institutions

The governance of social security institutions and their networks is complex, encompassing the structures, rules and practices by which these organizations are directed and controlled. This includes aspects such as legal mandates, policy formulation, administrative processes, accountability mechanisms and stakeholder engagement. Traditional models of public-sector governance often exhibit hierarchical structures and centralized decision-making, which, while ensuring accountability and standardization, can also contribute to bureaucratic inertia (Weber, 1948; Cordella and Tempini, 2015). Understanding the inherent characteristics of these existing governance structures is crucial for identifying avenues for fostering dynamism.

Concepts of resilience, agility and creativity in organizations

Organizational resilience can be defined simply as "an organisational characteristic, incorporating survival and renewal, exhibited over a long period of time" (Bhamra

agility – the ability to adapt and change in response to adversity.

Organizational agility, in the context of a volatile business environment, is a "learned permanently available dynamic capability that can be performed to a necessary degree in a quick and efficient fashion and whenever needed in order to increase business performance" (Walter, 2021). It encompasses the capacity to respond, adapt quickly, and thrive in a changing environment, and is characterized by components such as future focus, customer-collaboration, iteration, experimentation, and empowerment. While initially studied extensively in the manufacturing sector, the principles of organizational agility are increasingly recognized as vital for public-sector effectiveness (Holbeche, 2018). A key aspect of agility is the development of agility capabilities, which are realized through specific interdependent enablers, driven by internal and external agility drivers. These capabilities allow organizations to sense and respond to changes effectively (Walter, 2021).

Organizational creativity is the process through which organizations generate novel and useful ideas, processes, or products and it is intrinsically linked to innovation and is seen as key to organizational-level innovation (Amabile and Pratt, 2016). Fostering a climate for innovation is essential for cultivating creativity among employees. Such a climate encourages, nurtures, and enhances individual creative potential through elements such as idea support, autonomy, freedom, feedback, and challenging work (Amabile and Pratt, 2016). The dynamic componential model of creativity and innovation highlights the individual-level psychological processes involved, influenced by the organizational work environment, and includes factors such as a sense of progress, meaningful work, affect, and synergistic extrinsic motivation (Amabile and Pratt, 2016).

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Barriers to adaptability in bureaucratic systems

Traditional bureaucratic structures, while offering benefits such as efficiency through specialization and adherence to rules, can present significant barriers to adaptability (Weber, 1948; Cordella and Tempini, 2015). The emphasis on hierarchical control and standardized operating procedures can stifle initiative and slow down decision-making processes (Amabile and Pratt, 2016). A substantial body of literature discusses information and communication technology (ICT) as a potential instrument for reducing bureaucracy in government, yet Amabile and Pratt (2016) posit a complementary argument that ICT can also support the operations of bureaucratic organizations through concepts such as e-bureaucracy and functional simplification and closure. The New Public Management (NPM)

ideology often advocates for ICTs to reduce bureaucracy by adopting private-sector approaches, but empirical evidence suggests ICTs can enable alternative solutions that enhance bureaucratic coordination and efficiency within an e-bureaucratic framework (Cordella and Tempini, 2015).

Furthermore, a lack of decentralization, autonomy and discretion at various organizational levels can impede adaptive practice. Studies have shown that granting greater autonomy to mid-level public-sector managers can increase project completion and potentially improve organizational performance. However, managers must balance flexibility with accountability to ensure effective adaptation (Rasul and Rogger, 2017).

Existing models of organizational resilience and dynamism

While specific models of organizational resilience and dynamism within social security institutions may be limited in the provided sources, broader organizational theory offers relevant frameworks. The concept of dynamic capabilities suggests that organizations can develop the ability to integrate, build and reconfigure internal and external competencies to address rapidly changing environments (Walter, 2021). Organizational agility itself can be viewed as a dynamic capability. Furthermore, Amabile and Pratt's (2016) dynamic componential model of creativity and innovation provides insights into how organizations can foster the creative processes necessary for adaptation and innovation. The literature on organizational change management (Al-Haddad and Kotnour, 2013) also offers models and frameworks for navigating the transition towards more agile and resilient structures, emphasizing the importance of aligning change types with appropriate change methods and considering the organizational context.

Gaps in current research

The literature review reveals several gaps relevant to this study. While the concepts of agility, creativity and resilience are increasingly discussed in organizational theory, their specific application and the mechanisms for fostering them within the unique context of social security institutions require further exploration (Walter, 2021). Existing research on organizational agility has often focused on the manufacturing sector or specific aspects such as enablers without a holistic conceptualization at the organizational level that integrates drivers, enablers, capabilities, and dimensions. Furthermore, the mediating role of individual innovative work behaviour in the relationship between the organizational climate for innovation and organizational performance, while increasingly recognized,

Methodology

This research adopts a qualitative approach. It draws upon a comprehensive review of key ideas within the existing academic literature, including peer-reviewed journal articles, books and relevant reports, to explore the concepts of organizational dynamism, creativity, agility, and resilience within the context of social security institutions. The primary sources of data for this study are the provided excerpts, which represent a diverse range of perspectives on these key concepts from the fields of management, organizational behaviour, public administration, and innovation studies. Additional data were gathered via International Social Security Association (ISSA) webinars and interviews. The analysis in this article will be primarily based on the provided literature sources to ensure direct and verifiable support for all claims.

The analytical framework employed is thematic analysis. Key themes related to creativity, agility, and resilience within organizational settings, particularly in public-sector contexts, will be identified, examined and synthesized across the provided sources. This will involve a systematic process of coding and interpreting the text to identify recurring patterns, common threads, and divergent perspectives on the research questions. The aim is to build a conceptual understanding of how these themes intersect and contribute to organizational dynamism in social security institutions.

This study acknowledges several limitations. First, the analysis is based on a limited set of provided sources, which may not represent the entire breadth of literature on this topic. Second, the thematic analysis is subject to potential researcher bias in the interpretation of the data. Third, the conceptual insights derived from this literature-based study may require further empirical testing to assess their generalizability and applicability in real-world social security settings.

Challenges facing social security institutions

Social security institutions operate in an increasingly complex and demanding environment, facing a multitude of interconnected challenges. First, as highlighted earlier, inherent rigidities pose a significant obstacle to effective adaptation framework (Cordella and Tempini, 2015). While standardized procedures allow organizations to benefit from efficiencies, hierarchical decision-making and a culture of risk aversion can hinder the ability of these

institutions to respond quickly and creatively to evolving needs and unexpected disruptions. The focus on rule adherence can sometimes overshadow the need for flexibility and innovation in service delivery and policy implementation.

Second, global complexity, encompassing political instability, economic downturns, technological disruptions, and shifting social demographics, creates a highly uncertain operating environment framework (Cordella and Tempini, 2015). Economic recessions can increase demand for social security benefits and services while simultaneously straining resources. Rapid technological advancements necessitate digital transformation and the development of new service delivery channels, requiring agility and adaptability. Changing demographic trends, such as ageing populations or increased migration, demand adjustments in benefit structures and service provision.

Third, social security institutions often face stakeholder expectations and trust deficits. Beneficiaries expect timely, efficient, and responsive services tailored to their individual needs. Political pressures for fiscal responsibility and efficient administration can create conflicting demands. Negative perceptions of bureaucratic inefficiency or instances of service failure can erode public trust, underscoring the need for greater transparency and responsiveness.

Finally, resource constraints and operational inefficiencies are persistent challenges. Budgetary pressures often necessitate finding more efficient ways to deliver services without compromising quality or coverage. Outdated IT systems, cumbersome administrative processes, and a lack of inter-agency coordination can contribute to operational inefficiencies and hinder the effective allocation of resources.

Understanding resilience in organizational functions in social security institutions

The concept of resilience in social security organizations is not new. The ISSA Guidelines on Continuity and Resilience of Social Security Services and Systems (ISSA, 2022) establish resilience in social security as a set of different approaches that include reinforcing the governance structure to enable the organization to build human and technological capacity to ensure the continuity of services and benefits to their members and the overall population, while extending, changing and even creating new programmes that better support the population in the event of a crisis. Ultimately, it is the ISSA Guidelines on Good Governance (ISSA, 2019) that establish the core principle of "Dynamism" as essential in social security organizations that need a greater capacity to quickly adapt and

 Available to ISSA member organizations only, a series of ISSA events and webinars on resilience provide an overview of the diversity of approaches to enhance resilience. remain flexible, especially in the event of a crisis, as established in the ISSA Guidelines on Continuity and Resilience of Social Security Services and Systems.

In a recent survey carried out by the ISSA that examined resilience in social protection, the majority of organizations recognized that both flexibility and speed of response to a crisis are equally important, highlighting various strategies to ensure responsiveness against a shock (ISSA, 2024b). These ranged from full risk management and resilience governance frameworks to business continuity plans (ISSA, 2022). Other strategies included a combination of prevention, detection and recovery strategies, periodic testing and simulations.

Organizations' "mindset" in relation to being resilient to disruptions observed in the survey is varied. While a few organizations indicated to have a reactive mindset, most organizations (75 per cent) responded to have an anticipatory mindset, by having an open communication culture to encourage risk mitigation and a culture of preparedness to enhance operational resilience and ensure continued support for vulnerable populations.

Among the biggest challenges organizations face is agility (speed and flexibility) of the organization to change quickly as well as with respect to the legal frameworks that govern them. The efficient use and availability of resources that are in some cases limited also represent a challenge to respond to a crisis.

Previous work (ISSA, 2024a; ISSA, 2024b) identified the diversity in organizational functions and structures in social security organizations. Within this diversity, a set of core functions in the different types of organizations were identified and examined (see Appendix A.1) and are summarized as:

- Governance, finance and administrative functions: Run the organization, including roles ranging from directing the organization strategically to oversee the general function of the organization.
- Business owner functions: Define business needs, establish service requirements, and translate strategic objectives into operational solutions. Data stewards of the organization, establishing processes that ensure consistency, quality and efficiency, while defining services and service levels that translate strategic objectives into operational delivery.
- Operations and ICT functions: Manage daily processes, infrastructure and service providers, ensuring operational excellence through daily oversight of access and usage of organizational resources.
- Customer service, service delivery and communication functions: Interface with members, beneficiaries and the population, ensuring efficient service delivery, accessibility, and continuous improvement through clear communication and member engagement.
- Control and audit functions: Ensure organizational integrity and compliance, safeguarding assets, detecting fraud, and conducting risk assessments and audits.

Fostering dynamism and creativity for increasing organizational resilience

The ISSA survey on *Enhancing Resilience through Creativity and Agility* (ISSA, 2024b) explored how agility and creativity play a role in social security organizations. Table 1 shows the outcome of this survey.

Table 1. Core functions of social security organizations improved by agility and creativity

Social security core functions	Agility	Creativity
Governance, finance and administrative functions	Faster decision-making Streamlining resource allocation Adaptive learning Enhanced transparency and stakeholder management Proactive and responsive risk management Promote agility through: Short-term strategic planning Data-driven methodologies Agile organizational culture, improved communication and adaptive learning	Adaptive planning design Engaging stakeholder communication Creating/adjusting business model to provide new strategic direction Promoting an organizational culture to promote experimentation and openness.
Business owners	 Rapid solution design and prototyping Co-design methodologies Design of flexible service delivery models Cross-functional collaboration to quickly adapt service delivery based on stakeholder needs/feedback Near real-time data-driven service-delivery design 	 Innovation in service design Process reengineering Establishing new partnerships Development of new business models Stakeholder engagement and codesign Promoting flexible process frameworks to provide alternatives for service delivery Embedding culture of innovation in service design
Operations and ICT	Faster response to service disruptions Iterative infrastructure improvements Scalable solution deployment Real-time operational monitoring and performance tracking	Innovative workflow design Innovation in the use of emerging technologies Proactive problem-solving beyond reactive solutions Building culture of experimentation
Customer service, Service delivery, and Communication	Responsive, client-centred service delivery Multi-channel flexibility Crisis adaptability Collaborative coordination with stakeholders	Engaging communication techniques to simplify complexities Human centred service design Empathic grievance resolution Personalized service delivery
Control and Audit functions	Real-time risk identification and response Iterative audit processes Continuous improvement of control frameworks Proactive, data-driven oversight	Adaptive and crisis-ready control frameworks Reframing of audit outcomes into actionable improvements New approaches to fraud detection Promoting a culture of integrity an innovation

Source: Authors' elaboration, based on ISSA (2024a) and ISSA (2024b).

Injecting agility and creativity in social security functions

Examining the different functions in social protection outlined in Table 1, provides an overview of how agility and creativity can have a significant influence on the core functions of social security organizations. While there is likely no one-size-fits-all model, the functional outlook of social protection organizations shows a spectrum in which there are functions that could be the main drivers behind driving agility and creativity in an organization, and others that can help coordinate and establish an environment for these to flourish.

Analysis indicates that although governance and administrative functions can have a degree of influence over agility in an organization, they are also essential in facilitating and creating an environment where agility and creativity can be fostered in an orderly manner. A further example are business units, which are likely to have dual roles in both driving agility to solve problems as experts in the operation as social protection organizations, as well as establishing processes and procedures that provide flexibility to allow for creativity and to respond to organizational needs quickly. Alternatively, control, compliance, and audit functions are functions where creativity is less important, as the main driving force is to ensure that things remain within established processes and procedures, while still understanding that the need for exceptional measures to make exceptions exists, especially during emergencies.

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The meaning of agility and creativity and the benefits of developing these attributes into functional units, would have different effects on the various functions. The descriptions above show how agility, creativity and problem solving can benefit functions in social protection differently. This implies that we think of agility and creativity in terms of functions that can act as catalysts which have a greater circle of influence over agility and creativity in the entire organization, especially in order to better adapt, absorb and build capacity to face a crisis.

However, agility and creativity in an organization cannot act alone. These need to be accompanied by organizational-wide resilience and capacity improvements to further review the risk mitigation plans in order to understand how a shock would impose further requirements on the different units in the organization. There would also be undesirable effects from excessive levels of agility, creativity and problem solving to each of the different functions, so striking the right balance of these skills requires further examination.

These multifaceted challenges underscore the critical need for social security institutions to develop greater organizational dynamism, enabling them to navigate uncertainty, adapt to change, and effectively serve their communities.

Fostering dynamism and creativity for increasing organizational resilience

Enablers for developing organizational agility and creativity

To address the challenges outlined above, social security institutions need to cultivate both organizational agility and creativity as fundamental capabilities. Several key enablers can facilitate this development. Figure 1 below shows the organizational enablers for developing agility and creativity.

Decentralized decision-making processes

Empowering individuals and teams at various levels with greater autonomy and discretion in decision-making can enhance responsiveness and adaptability (Sharp, 2021). Studies suggest that bureaucratic autonomy can positively impact public-sector performance. Mid-level managers play a crucial role in balancing flexibility and accountability to foster space for adaptation.

Comprehensive stakeholder engagement

Actively involving beneficiaries, employees, policy makers and other relevant stakeholders in the design and delivery of social security programmes can provide valuable insights and foster a shared understanding of needs and priorities (Holbeche, 2018). This collaborative approach can lead to more relevant and responsive policies and services.

Adaptive leadership models

Leadership plays a crucial role in guiding organizations through change and fostering a culture of agility and creativity (Beer and Nohria, 2000). Leaders need to create a clear vision, empower employees, and be willing to experiment and learn from both successes and failures. Understanding and addressing different perceptions and cultures during change implementation is essential.

Flexible organizational structures

It has been long known that moving away from rigid hierarchical structures towards more adaptable and networked models can enhance communication, collaboration, and the flow of information (Amabile and Pratt, 2016). This can involve creating cross-functional teams, project-based structures, and matrix organizations that can be easily reconfigured to address emerging needs. The

Fostering dynamism and creativity for increasing organizational resilience

Figure 1. Organizational enablers for developing agility and creativity for improved response and resilience in social security organizations Social Security Organizational Engagement Stakeholder Resilience External Support for Implementations Technological Integration Strategic Decision-Making Decentralized Creativity capability for crisis and Improved response unforeseen events Dynamism Engendering Creativity Organizational Agility Climate for Innovation Organizational Adaptive Leadership Organization

Source: Authors' elaboration.

Fostering dynamism and creativity for increasing organizational resilience

absence of unnecessary layers of hierarchy and bureaucracy is highly conducive for fostering innovation.

Strategic technological integration

Leveraging information and communication technologies (ICTs) strategically can significantly enhance both efficiency and adaptability. While ICTs can be used to reduce bureaucratic burden, they can also support bureaucratic coordination and functional simplification within an e-government framework. Digital platforms can improve service delivery, enhance data analysis for informed decision-making, and facilitate communication with stakeholders. It must be cautioned however that ICTs cannot alone deliver agility or increased resilience.

Foster an organizational climate for innovation

Creating an environment that encourages, nurtures, and rewards creativity is essential for generating the novel ideas needed for adaptation and improvement. This includes providing idea support, autonomy, freedom, constructive feedback, and recognition for creative efforts. An innovative climate has a significant and positive impact on innovative work behaviour, which in turn mediates the relationship between the operational climate and organizational performance (Shanker et al. 2017).

Developing organizational agility

Building organizational agility requires a focus on agility drivers (e.g. dynamic customer demands, increasing environmental changes), agility enablers (the toolkit for achieving agility, such as technology and Human Resources practices), and the development of core agility capabilities (the ability to respond quickly and effectively) across various agility dimensions (e.g. supply chain, workforce, business processes, strategy, information systems, and facilities). Management plays a crucial role in monitoring and decision-making within an agile organization. Organizational agility is a learned dynamic capability that enhances business performance in volatile environments (Walter, 2021).

Promoting creativity

Fostering creativity involves understanding the individual and organizational components that drive it. Intrinsic motivation, influenced by a sense of progress and meaningful work, plays a significant role in the creative process.

Organizations can support creativity by providing the necessary resources, skills and motivation, and by creating a work environment that encourages exploration and experimentation (Amabile and Pratt, 2016).

External injection – Using independent support

There is evidence that bringing in independent resources (internal or external consultants) to "ignite", facilitate and catalyse creativity has value: "consultants are both change agents ..., but also change champions ahead, during and after the ongoing change project" (Sturdy, Wright and Wylie, 2015). Views that are external to the organization are particularly important as they must adapt their strategies and operations swiftly.

Practical strategies for building dynamic and resilient governance

Based on the preceding analysis, several practical strategies can be implemented by leaders and policy makers in social security institutions, including ISSA member organizations, to build more dynamic and resilient governance.

- Implement phased approaches to decentralization: Gradually empower lower-level units and individuals with greater decision-making authority, accompanied by clear accountability frameworks and training to support effective delegation.
- Establish robust stakeholder engagement mechanisms: Create formal and informal channels for regular dialogue and feedback with beneficiaries, employees, and other key stakeholders to inform policy development and service design.
- Invest in leadership development programmes: Focus on cultivating adaptive leadership skills, including vision setting, empowerment, fostering experimentation, and managing change effectively.
- Pilot flexible organizational structures: Experiment with cross-functional teams and project-based initiatives to address specific challenges, evaluating their effectiveness and scalability.
- Prioritize strategic investments in digital transformation: Develop a clear roadmap for integrating technology to enhance service delivery, data analytics, and internal communication, ensuring user-centric design and accessibility.
- Develop initiatives to foster an innovation culture: Implement programmes that encourage idea generation, provide resources for experimentation, recognize creative contributions, and promote a learning environment where failures are seen as opportunities for growth.

- Embed agility principles into organizational practices: Adopt iterative approaches to policy development and service delivery, focusing on rapid feedback loops and continuous improvement. Establish mechanisms for monitoring environmental changes and quickly adapting strategies and operations.
- Develop key performance indicators (KPIs) for adaptability and dynamism: Implement metrics to track the institution's ability to respond to change, the level of innovation, and stakeholder satisfaction, using these to inform ongoing improvements.
- Embrace change management frameworks: Utilize established change management methodologies to guide the transition towards more dynamic and resilient structures, addressing potential resistance and ensuring effective communication.

Conclusion

This article has explored the critical importance of organizational dynamism – encompassing creativity, agility, and resilience – for social security institutions operating in an increasingly complex global environment. It has highlighted the inherent challenges posed by bureaucratic rigidities and the imperative for these vital public-sector organizations to develop the capabilities needed to adapt effectively to evolving community needs and unforeseen disruptions.

The analysis has identified several key mechanisms for fostering creativity and agility, including decentralized decision-making, comprehensive stakeholder engagement, adaptive leadership, flexible organizational structures, strategic technological integration, cultivating an innovative climate, and embedding agility principles. By strategically implementing these mechanisms, social security institutions can enhance their ability to generate novel solutions, respond swiftly to changing circumstances, and ultimately build greater resilience.

This research contributes to the field by providing a conceptual framework for understanding and promoting organizational dynamism within the specific context of social security institutions, extending beyond traditional discussions focused primarily on private-sector agility. It shifts the conversation on governance structures by emphasizing the need for adaptability and proactive institutional frameworks underpinned by creativity and agility.

The limitations of this study, primarily its reliance on a limited set of literature excerpts, suggest several directions for future research. Deeper empirical testing of the proposed conceptual model in diverse social security settings is needed to validate its applicability and identify context-specific nuances. Cross-sectoral comparisons with other public service organizations could provide further insights into best practices for fostering dynamism. Longitudinal studies examining the long-term impact of implementing agility and creativity initiatives

Ultimately, by prioritizing creativity, agility, and resilience, social security institutions can evolve into more dynamic and adaptive entities, capable of effectively navigating increasingly complex and unpredictable global landscapes and fulfilling their crucial mission of serving evolving community needs.

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Appendix A.1. Functions in social security organizations

Governance, finance, and administrative functions form the foundational infrastructure of organizational management, encompassing several critical responsibilities. These functions establish strategic direction through comprehensive strategic planning and decisive decision-making processes, while efficiently managing and overseeing internal human and material resources. They are responsible for reviewing and establishing the foundations and keeping track of performance metrics and monitoring of the organization. They also establish and facilitate effective communication frameworks throughout the organization and provide the structural support necessary for organizational stability and sustainable growth.

Business owner functions serve as the core of an organization, defining and establishing solutions to essential business needs to meet the mandate established by the governance functions and value creation. They are owners of data of the organization and establish and oversee processes and procedures that ensure consistency, quality, and efficiency and define services, service level needs and requirements, translating strategic objectives into actionable deliverables that meet stakeholder expectations. They actively identify and establish strategic partnerships and continually improve services, benefits, and processes, sometimes fostering innovation to meet demands and reach organizational goals.

Operations and ICT functions form the technological and procedural backbone of organizations, operating and managing critical day-to-day processes, solutions, as well as infrastructure that enable business continuity and operational excellence. They establish, procure, and manage essential daily interactions with stakeholders and vendors that support organizational objectives. These departments diligently supervise and report on processes, infrastructure, and general operations on a day-to-day basis, highlighting deviations from established procedures and addressing grievances promptly to maintain operational integrity. These functions include providing a reliable technological foundation and efficient workflows necessary for organizations to function effectively.

Customer service, service delivery, and communication functions represent the face of social protection organizations, delivering services and benefits to members and beneficiaries with efficiency and responsiveness. They provide guidance and support to clients navigating complex social protection systems, ensuring accessibility and understanding of clients' needs and available resources to satisfy these. These functions are particularly crucial, encompassing a range of client-facing services including registration and enrolment, case management, benefit and service delivery, and grievance handling. They support and sometimes establish multiple service access channels to reach vulnerable populations through clear communication strategies, translating complex policy information into accessible formats, conducting regular stakeholder engagement, and collecting beneficiary feedback continuously for service improvement. Through their client-centred approach and responsive service delivery models, these functions help social protection, which is usually the first line of defence against crisis.

Control and audit functions serve as the organization's essential guardians of integrity and compliance, ensuring that processes and procedures consistently meet required standards and controls. They design and implement comprehensive internal control frameworks that carry out evaluations of organizational and programme performance, financial accuracy, and operational effectiveness, safeguarding resources while detecting and preventing fraud, waste, and abuse. These functions conduct systematic risk assessments and regular compliance reviews to identify vulnerabilities and ensure adherence to regulatory requirements and organizational policies. Through oversight and commitment to transparency, control and audit functions ultimately strengthen organizational governance, enhance programme outcomes, and ensure the responsible stewardship of resources in service of vulnerable populations.

Exploring the resilience of social insurance systems in the light of endogenous welfare austerity: Insights from Sweden

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Abstract This article seeks to problematize and develop the concept of resilience in social security systems by focusing on more endogenous processes - specifically, endogenous welfare austerity. Existing literature on both resilience and welfare austerity has predominantly focused on external factors or formal institutions as the primary sources to change. However, Sweden offers a compelling case that challenges this assumption. Over an extended number of years, reaching its peak at the end of the last decade, the Swedish Social Insurance System (SSIS) has become increasingly restrictive, despite the absence of corresponding changes in the law or through reforms. Rather than exogenous pressures, we argue that the roots of welfare austerity in Sweden lie within an informal institution: the SSIS knowledge regime. Drawing on Michael Walzer's "sphere-approach" from 1983, the article highlights the character of the knowledge regime – plural or authoritative - as a useful theoretical framework for understanding endogenous austerity. We contend that the SSIS knowledge regime, composed of distinct spheres, each governed by its own norms and logics, has in recent years been annexed by the welfare bureaucracy. We identify two forms of bureaucratic annexation: the supplanting and incorporating of other spheres of knowledge. The article demonstrates that, if social security systems are to be able to respond resiliently to external fragile situations and extreme events, it is crucial to develop a

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Keywords social security administration, resilience, cash sickness benefit, residual work capacity, social insurance, Sweden

Introduction

In recent decades, social policy and public administration research has focused extensively on the phenomenon of welfare state retrenchment. Pierson (1996) and Blyth (2013), for example, have argued that the era of welfare state expansion had been replaced by a period of austerity, although welfare states have exhibited a marked resistance to significant rollbacks. Over time, academic attention has shifted from explaining the persistence of the welfare state to investigating the conditions and mechanisms through which retrenchment has nonetheless been implemented.

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However, both the literature on resilience and the success of welfare austerity have predominantly concentrated on external or formal institutions as sources of austerity or threats to resilience (see, for example, Blank, 2020; Hagelund and Bryngelson, 2013; Mahoney and Thelen, 2010). The focus has largely been on the 2008 financial crisis, the introduction of new laws, or major welfare reforms – approaches grounded in top-down, hierarchical perspectives that locate the explanation for change within the actions of governments (see, for example, Caleiras and Carmo, 2024; Collie, Sheehan and Lane, 2022; Williams, 2021). In contrast, we argue that austerity and weak resilience do not depend solely on external factors – such as legislative change or financial crises – but also on *endogenous* factors, that is, internal processes within the welfare bureaucracy and the institutions themselves.

In this article, we draw on the definition of welfare austerity as actions aimed at imposing stricter eligibility criteria and placing greater expectations on citizens to (re)enter paid employment (Grover and Soldatic, 2013). Analysing welfare austerity in this way shifts the focus towards the mandates and operations of the social welfare bureaucracy (Järkestig Berggren, Melin Emilsson and Bergman, 2019). In practice, therefore, resilience should not only be understood as the ability to withstand external shocks and to rebuild, but also as dependent on the internal dynamics among actors and knowledge fields within the system. This argument implies that, in this article, resilience is defined as the political

and legal stability of welfare systems. By this, we mean that our primary focus will be on resilience as understood through the normative lens of the legal-bureaucratic model, grounded in the hierarchical decision-making structure of representative democracy (Rothstein, 2010). Under this model, the State is considered legitimate, as citizens can anticipate the outcomes of disputes with the State through the legal framework. Thus, the attainment of politically and legally enshrined social security systems is dependent on the possibility for citizens to predict the actions of the state and also to hold decision-makers democratically accountable. However, if too many – or overly abrupt – changes are made to the legal framework, the State risks losing its legitimacy, as citizens can no longer predict the actions of the State. Thus, our approach situates the resilience of social security systems not only within their social and political contexts, but also in relation to the legal-bureaucratic and administrative context, and the broader democratic system.

According to the legal bureaucratic model, the bureaucracy is primarily tasked with implementing political goals and programmes. However, based on their knowledge and expertise, the bureaucracy may also possess insight into problems and may take the initiative to propose new policies by bringing such matters to the political level (Jacobsson, Pierre and Sundström, 2015, p. 30). It is therefore legitimate for the bureaucracy to learn from its prior engagement within a policy area and, to some extent and at certain times, hold the privilege of problem definition. However, it is significantly more questionable whether the bureaucracy - by virtue of its position, central role, and knowledge advantage should define the desired direction and the political and societal goals of the system it is tasked with administering, and whether it should subsequently act to realize those goals (see, for example, Fukuyama, 2014; Lundquist, 1998; Rothstein, 2005). Such conduct, whereby the bureaucracy pursues its own course and becomes the master rather than the servant of the people, has long been problematized within classical bureaucratic theory. Max Weber, for instance, argued that there is a risk that bureaucracy might gain control over politics and the policy it is supposed to serve within its organization (Bergström, 2020). Also, the term "the black hole of democracy," coined by Bo Rothstein (2010), refers to the problematic situation in which crucial decisions concerning citizens' welfare are made by bureaucrats within public administration - where accountability can be difficult to enforce. Independent public agencies with civil servants who act according to the legal bureaucratic model are therefore fundamentally different from civil servants that define the interests of the State and steer the design of institutions (cf. Andersson, 2005). Therefore, the latter dynamic may contribute to an erosion of the responsibility of elected politicians and creates a condition in which the voice of the citizen effectively is lost in bureaucracy. This stands in contrast to the legal- bureaucratic model, whose normative foundation is one of

resilience built on democracy, legitimacy and trust – qualities which are determined not only by the substance of welfare reforms but also by the process through which such changes are enacted.

Based on this definition of resilience, it appears that the Swedish Social Insurance System (SSIS) has faced considerable challenges over an extended number of years, especially in the last decade. In these last recent years, the SSIS has undergone substantial transformation and has exhibited signs of weak resilience (Börjesson, 2018; Altermark, 2021; Altermark and Plesner, 2022; Altermark and Plesner, 2025). Previous research has documented a shift in the sickness insurance system - from one that was inclusive and generous to one increasingly characterized by restriction and mistrust (Ståhl, 2024). Scholars have also identified a marked tightening of eligibility criteria for sickness benefits in Sweden (Enqvist and Mannelqvist, 2020; SOU, 2020, p. 6). According to government statistics, the rejection rate for sickness benefit applications (sjukpenning) rose from 13 per cent to 40 per cent in 2018 alone (ISF, 2018a). A similar pattern – yet during a longer period – can be observed in activity compensation (aktivitetsersättning), which provides support to young people with permanently reduced work capacity (ISF, 2020a). The proportion of rejected applications for activity compensation fluctuated over an 8-year period, and in 2017–2019 the rejection rate then rose sharply (ISF, 2020a).

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What is particularly noteworthy in the Swedish case is that these changes occurred without any amendments to the Social Insurance Code (Socialförsäkringsbalken), and that the demographic composition of applicants has not changed to an extent that would explain the dramatic increase in rejections (ISF, 2020a). The most recent retrenchment-oriented legislative change to the SSIS occurred in 2008, when the centre-right government introduced the so-called rehabilitation chain, which involved the assessment of work capacity and limited the duration of sickness benefits to 364 days. Since then, no amendments have been made to the Social Insurance Act (Hagelund and Bryngelson, 2013; Altermark, 2021; Börjesson, 2022). The marked increase in rejections in sickness benefits and activity compensation after 2016 might initially be attributed to a sharp rise in the number of applications. However, while the monitoring of social insurance claims and the prevention of fraud are important elements of good governance, it is noteworthy that the increased rate of rejected claims in Sweden occurred without a corresponding rise in claims. In 2011, approximately 15,000 applications for activity compensation were submitted. The number then increased steadily, reaching a peak of nearly 20,000 in 2016. Thereafter, it declined slightly, falling to just under 18,000 by 2019 (ISF, 2020a). The decrease in applications after 2016 indicates that the subsequent rise in rejection rates in 2018–2019 cannot be explained by a sudden surge in the volume of benefit applications.

within welfare services both in Sweden and other Scandinavian countries (Bakken and van der Wel, 2023, Karlsson et al., 2021; Shutzberg, 2021), we consider the borders between different knowledge claims. For example, Dewanckel et al. (2024) examined how frontline social welfare actors struggle to incrementally transform and change the rules of the local institutional setting in shaping new power relations. With respect to the SSIS, Börjesson and Enqvist (2021) and Karlsson et al. (2021) have documented overt expressions of suspicion and mistrust between stakeholders, particularly between the most important actors within the wider SSIS, the Swedish Social Insurance Agency (Försäkringskassan - SSIA) and medical domains, involving a mutual questioning of each other's competence. The SSIA is one of the largest state agencies in Sweden and constitutes a central institution in the Swedish welfare state, particularly in the implementation of the SSIS. Specifically, SSIA case managers are responsible for assessing and determining people's eligibility for sickness benefits. However, in Sweden, eligibility for social insurance benefits requires a medical certificate issued by a physician within the health care system. Consequently, the bureaucratic knowledge inherent in the SSIS is closely linked to - and in certain respects overlaps with - that of medical expertise (Shutzberg, 2021).

The power dynamics within the welfare sector more broadly – and within the SSIS specifically – can be characterized as a struggle over authoritative knowledge. Accordingly, we will contribute to the literature on resilience of the welfare state by foregrounding the epistemic dimensions of institutional resilience. We argue that the Swedish case can be used to explore how welfare austerity can arise from endogenous pressure and may have its sources in an informal institution. Instead of focusing on exogenous pressures for change, we explore whether the stricter application of the SSIS can, in part, be attributed to the character of its knowledge regime.

The argument: Endogenous processes as threats to resilience

The aim of this article is twofold. First, we argue for a broader understanding of austerity as an ideational and normative phenomenon, beyond its conventional framing as a material or fiscal process. Accordingly, our point of departure is that austerity may not only be a pragmatic or structural phenomenon but can also emerge as political and organizational (normative) practice. By examining the Swedish case - where welfare austerity emerges not through legislative reform or policy directives but through more restrictive bureaucratic enforcement - we offer a theoretical account of what we term rapid and endogenously austere processes. What we find particularly productive about this approach is that it enables a clearer understanding of how austerity practices are closely linked to the dominant forms of knowledge within the institution. Therefore, our second aim is to explore how the character of the knowledge regime shapes such an internally driven process of social security systems. As stated, we argue that resilience should not only be understood as the ability to withstand and recover from external shocks, but also as dependent on the internal dynamics among actors and knowledge fields within the system. To conceptualize this relationship, we introduce the notion of bureaucratic annexation. Drawing on Michael Walzer's theory of "spheres of justice" (Walzer, 1983) and Zygmunt Bauman's concept of bureaucratic violence (Bauman, 1989), we focus on the SSIA's encroachment on medical authority. This theoretical lens informs our concluding discussion on how endogenous welfare austerity takes shape within epistemic institutional frameworks.

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Welfare systems as knowledge regimes

The character of knowledge regimes

With the premise that austerity can manifest as a normative and ideational activity, this article places knowledge at the centre of endogenous austerity, specifically focusing on the dynamics of different forms of knowledge within knowledge regimes. By "knowledge regime", we refer to a set of actors and organizations that produce both normative and cognitive policy ideas, which influence how policy making and institutions are organized and function within a specific policy area (Campbell, 1998). Thus, knowledge regimes "stresses the interactions between ideas and institutions in the production of economic and policy knowledge" (Campbell and Pedersen, 2011, p. 167). For example, Hall (1993) argues that a struggle for authoritative knowledge occurs through a gradual shift

in interpretive frameworks, where existing interpretations of reality are challenged by new knowledge representations that effectively displace previous ones. The struggle concerns which actor or profession can establish a convincing picture of reality, assert authoritative knowledge, and secure a position as a producer of knowledge in a given domain (Hall, 1993, pp. 275–296).

Much of the theory formation and previous research on knowledge regimes and the role of knowledge in public policy has primarily concentrated on how one knowledge regime replaces another (Hall, 1993; Schön and Rein, 1994; Andersson, 2005). A less explored aspect, however, is how a knowledge regime can change from within through a process whereby one actor enhances their authoritative knowledge, annexes new knowledge spheres, and becomes independent of other actors' knowledge. As such, there is a notable gap in the literature regarding the character of knowledge regimes – specifically, how an authoritative knowledge regime influences policy and austerity.

Bureaucratic annexation and resilience: A conceptual link

The balance within different institutions and spheres of society is central to Michael Walzer's (1983) theory of justice, which provides a valuable framework for conceptualizing the role of knowledge regimes in public policy. Walzer's normative theory can therefore assist in understanding the consequences of a non-pluralistic knowledge regime within the domain of social insurance, which in turn affects the dynamics of welfare austerity. This article adopts Walzer's "sphere-approach" in a more heuristic manner, to examine how the dominance of one knowledge sphere within a knowledge regime can constrain the recognition of other knowledge systems.

Walzer's core argument is that no actor should dominate one sphere of the human good (e.g. wealth) simply because they are dominant in another sphere (e.g. education). He advocates for "complex equality", where society consists of interdependent spheres that should not allow dominance in one area to spill over into another. Applied to our analysis, Walzer's concept of multiple spheres serves as a means of empirically examining whether the dominance of one knowledge sphere is due to the actor's power in another sphere, thereby marginalizing other forms of knowledge and their internal normative and regulatory principles. Accordingly, a pluralistic regime, in which bureaucrats, doctors, lawyers, and politicians interact and challenge one another, fosters flexibility and adaptability.

To make this approach applicable to the analysis of knowledge and welfare austerity, we introduce the concept of *bureaucratic annexation* as a source of welfare austerity. While research on bureaucratic austerity has primarily focused on the state-citizen relationship in terms of "bureaucratic violence"

(Bauman, 1989; Norberg, 2022), the role of bureaucratic domination over knowledge production in relation to other stakeholders and public authorities has been far less examined. In the context of welfare violence directed towards authoritative public actors within the process – rather than towards citizens – we argue that *bureaucratic annexation* is a more fitting term. Unlike the hierarchical relationship between bureaucracy and the citizen, the relationship between the bureaucracy and other professions/organizations is more horizontal. Our analysis will elaborate on what constitutes bureaucratic knowledge in the context of social policy, particularly in the application of welfare systems and their regulation, and how annexation operates. Inspired by Bauman's (1989) concept of bureaucratic violence, we propose three tentative mechanisms of bureaucratic annexation, which we will explore within the SSIS:

- The invisibility of other public authorities and professions close to the policy.
- The distancing of other public authorities and professions from the policy.
- The removal of improvisation and spontaneity (Bauman, 1989, p. 22).

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Thus, our concept of bureaucratic annexation explores how welfare state bureaucracies maintain discipline and control over the daily practices of other knowledge spheres. In the following section, we will discuss how to apply this approach to the analysis of bureaucratic annexation within the SSIS and its implications for welfare austerity.

Methods

To explore the relevance of the character of the knowledge regime as a theoretical framework of rapid and endogenous welfare austerity, we applied a case-study research approach (see Yin, 2003). Sweden, renowned as a prime example of the Scandinavian welfare model, characterized by universal sickness insurance and free health care funded by taxes, serves as a useful case for examining the restrictive application of the welfare system. Additionally, Sweden presents an intriguing case for studying endogenous sources of welfare austerity, as it can be described as a deviant case. Specifically, austerity in the social welfare sector occurs without any corresponding changes in laws or major reform programmes initiated by the government, which allows us to explore how austerity policies may arise from more informal sources.

The method employed in this study follows what Gile (2001) terms a *critical reading* of empirical material already used in previous research, but through a new theoretical lens. In the present article, secondary data has been tentatively re-examined from a different perspective – focusing on the bureaucracy as an active agent, rather than a passive recipient of control, we have approached the existing material from the perspective of the annexation of knowledge spheres. Previous research, audit reports from the Swedish Social Insurance Inspectorate

(SSII), and public reports from the SSIA during the period 2014-2020 have described various modes of collaboration between the SSIA and health care services. The analysis includes interviews with case managers and specialists at different SSIA local offices, doctors, and rehabilitation coordinators at various health care facilities in Sweden, conducted by SSII within the audit reports Changing governance by and in the Swedish Social Insurance Agency (ISF, 2018a), The government's target of a sickness benefit rate of 9.0 (ISF, 2018b), Variations in activity compensation (ISF, 2020a), and Preventive sickness benefit (ISF, 2020b). The first two reports focused on the SSIA's implementation of the government's benefit target rate, the third examined the SSIA's management of activity compensation, and the last explored collaboration between the SSIA and health care providers to prevent sick leave. Thus, the interviews conducted in these projects were guided by an interview guide aligned with the focus of this article. The interviews were conducted by SSII, primarily between January-March 2018 and January-February 2020. The interviews were semi-structured, recorded, transcribed, and anonymized. As secondary material, we also drew on previous research on the governance of the SSIS.

To supplement the secondary material, five semi-structured interviews were conducted with insurance specialists at the SSIA, three semi-structured interviews with case managers at the SSIA, five semi-structured interviews with medical insurance advisors, and one semi-structured interview with a manager of medical insurance advisors during the autumn of 2021. Each interview lasted between 45 and 90 minutes. In addition to the interviews, we analysed policy and administrative documents. In total, the textual material comprised six published reports from SSII and SSIA. The data collection of documents took place between October 2021 and May 2022.

In the present analysis, we utilized qualitative interpretive methods, inspired by empirical idea analysis (Lundquist, 1994). Accordingly, to define the knowledge spheres, the purpose of the analysis is to reconstruct the norms and behaviours that are actually in use within the SSIS. Therefore, the analysis of the norms and behaviours of the bureaucracy is inductive but guided by the overarching theoretical lens of knowledge-sphere annexation, which directed our focus towards specific actors and activities within the SSIS. Thus, the analysis focuses on how case managers, specialists, and medical insurance advisors judge, reason, and process the applications, and, to some extent, how the health care system responds.

Mechanism of bureaucratic annexation within the SSIS

In 2015, the Swedish government set a target for the SSIS, stating that "the sickness benefit rate may not exceed 9.0 days per individual per year by 2020" (Ministry of

Social Affairs, 2015). Since then, the SSIS has become more restrictive; eligibility criteria have been tightened (ISF, 2018b). Nevertheless, the Swedish Social Insurance Inspectorate (ISF) concluded in its review of the variations in refusals of activity compensation that signals from the political level were minimal, affected refusals only briefly, and that the SSIA had already commenced rejecting more applications even before any political signals were issued (ISF, 2020a).

When asked about this, an insurance specialist explained: "that decision is made by our legal unit within the agency" and "our own guidelines then govern this" (Insurance Specialist at SSIA, interviewed in November 2021). This implies that the change was initiated internally within the SSIA. Moreover, in the SSIA's agency plan for 2017, it was stated that "the inflow to the SSIS increases sharply within activity compensation and we need to analyse these factors more closely and critically examine our handling of these cases, particularly with regards to new grants" (Försäkringskassan, 2017, pp. 3-4). A case manager also referred to internal documents such as the SSIA's quality follow-up reports, where the legal unit reviews cases of rejections and grants, as an explanation for the increased number of rejections: "I don't feel like there's been that much steering from the government ... it has rather been our internal governance of the agency that has affected increased rejections" (Case Manager quoted in ISF, 2020a, p. 64). These statements demonstrate how the agency itself initiated the increase in rejections of sickness benefits and activity compensation. In our analysis, we have identified two distinct mechanisms through which the SSIA has succeeded in steering the SSIS towards stricter eligibility criteria. We conceptualize these mechanisms as forms of bureaucratic annexation, highlighting how the SSIA has asserted greater discipline and control over the medical knowledge sphere. In the following section, we explore these mechanisms in greater detail.

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Annexation by supplanting medical knowledge with the bureaucratic principle of impartiality

A central task of the SSIA is to produce standardized assessments of applications for sickness benefits and activity compensation. This involves determining how a particular illness is expected to affect a patient's work capacity, rather than evaluating the illness in terms of its overall impact on the patient's health. To carry out this task, SSIA case managers rely on internal support functions such as insurance medical advisers and insurance specialists. They also utilize a Medical Decision Support (MDS) document.

Importantly, the MDS does not merely guide the SSIA's own assessment processes; it also prescribes the expected content of the medical certificate provided by the physician. For example, in 2016, the agency mandated that

If you do not provide sufficient information regarding those criteria, it automatically means that we need to request a supplement or reject the application, even if the question itself is present on the form (Case manager, quoted in ISF, 2020b, p. 64).

In the SSIA's internal quality review report the risk of rejection is emphasized:

Since it is the insured person who bears the burden of proof in a case concerning sickness benefit, they also risk losing both wages and sickness compensation if the physician recommends sick leave without providing the information required to substantiate eligibility according to legislation and legal practice (Försäkringskassan, 2017, p. 5).

Medical reports from doctors that do not conform to the requirements outlined in the MDS are likely to result in the agency rejecting the assessment as invalid. The MDS strongly emphasizes the importance of verifiability (Försäkringskassan, 2016). It prescribes that a doctor's reasoning must be clearly articulated, documented, and preferably validated using "objective" and measurable results:

Legal practice emphasizes that, wherever possible, assessments should be based on objective findings, tests, and observations, and that a doctor's judgement alone is not sufficient grounds for granting sickness benefit (Försäkringskassan, 2016, p. 70).

From the SSIA's perspective, measurement – such as validated assessment scales – serves as a guarantee of what is referred to as impartiality:

For the SSIA to objectively assess the certificate's information, it must be clear which data derives from the patient and which the doctor can personally verify (Försäkringskassan, 2016, p. 70).

An insurance specialist elaborates:

First, you have to check whether the doctor observed anything during the examination. I usually print out the medical certificates and cross out everything that was clearly reported by the patient (Insurance specialist at SSIA, interviewed in October 2021).

These documents and quotes reveal that statements unsupported by measurable tests or other empirical evidence are considered inadequate (Försäkringskassan, 2016). However, interviewed doctors highlighted the importance of

understanding a patient's overall situation to produce an accurate medical report. They also emphasized that clinical experience is vital to such understanding. One doctor described the tension between tacit medical knowledge and the administrative demand for impartiality:

It's an incredibly difficult task ... imagine, you see a patient for perhaps 20 minutes. Then you must assess their ability to work in their specific job. That requires experience, and also a relationship with the patient. If the patient says, "No, I really can't manage – I'm exhausted after work and just go home to bed", then I have to trust that (Doctor, quoted in Eriksson et al., 2014, p. 75).

This quote illustrates how medical expertise involves a holistic understanding of the patient's life circumstances. Such assessments often depend on a long-term relationship, which allows for more nuanced judgement regarding appropriate treatments. Yet, the SSIA discredits this kind of contextualized knowledge, demanding instead quantifiable data. Rather than structuring doctors' clinical expertise, the MDS renders much of that knowledge obsolete. Doctors must adjust their reporting to conform to the MDS; otherwise, their assessments risk rejection. Their expert knowledge is no longer deemed an implicit guarantee of validity. Instead, decisions must be grounded in measurable outcomes (e.g. a bicycle or stair test) or clearly articulate the specific occupational consequences of a medically defined condition. This administrative simplification of complex medical issues is reinforced in the quote below:

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If the doctor understands the medical context – what must actually be described and conveyed to the insurance system – then the doctor retains some power. But if the doctor provides incomplete or unsystematic information that lacks insurance medical precision, then the balance shifts. In that case, we have decision support and other sources of knowledge to rely on to contradict the doctor's recommendation (Case manager at SSIA, interviewed in October 2021).

Thus, both the MDS and the prescribed structure for medical reports restrict the aspects of their expertise that doctors can convey. If these constraints are not followed, patients are unlikely to receive compensation. The SSIA's principle of impartiality is therefore positioned in opposition to doctors' contextual, experience-based reasoning. While administrators demand measurable results, the medical profession emphasizes responsiveness to context. As one rehabilitation coordinator notes:

We need better collaboration and consensus on what is meant by "evidence-based rehabilitation". Currently, it feels like the Social Insurance Agency owns the concept – without any dialogue with the medical sector. It's like David versus Goliath; we don't stand a chance (Rehabilitation coordinator, interviewed 2021).

The SSIA insists that impartiality should be the guiding principle – even for medical professionals. This bureaucratic norm legitimizes administrative decision-making and forces the medical field to conform. The result is a supplanting of medical knowledge with administrative logic, making collaboration more difficult and increasing the likelihood of rejected applications. Case managers find it difficult to interpret reports rooted in contextual responsiveness and professional experience.

Interviews with health care professionals also reveal that doctors, rather than defending their own professional expertise and operating within their own sphere of knowledge, are increasingly adapting to the bureaucratic sphere of knowledge. In the context of preventive sickness benefits, for instance, doctors are adopting bureaucratic logic instead of basing their assessments on a more holistic understanding of the patient and their experience-based knowledge. Some doctors attempt to "circumvent the system" by, for example, increasing the degree of sick leave instead of recommending preventive measures. In this way, resistance to stricter assessments is enacted within the logic of the bureaucracy, rather than through a defence of medical autonomy. A rehabilitation coordinator explains how the health care system sometimes avoids applying for preventive sickness benefit:

I've used a few alternative methods to sidestep the issue with preventive sickness benefit. For those on part-time sick leave, when they enrol in a course, we either increase the sick leave percentage slightly or try to redistribute the hours ... But this means we've avoided using preventive sickness benefit (Rehabilitation coordinator, quoted in ISF, 2020b).

Annexation by incorporating medical knowledge into the bureaucratic structure

In the empirical material, we also identified another form of annexation: the incorporation of medical knowledge into the bureaucratic structure. This is evident in the employment of local doctors specializing in insurance medicine by the SSIA, as well as in trainee programmes and education in insurance medicine provided to case managers. In order to reinforce the insurance-based nature of the SSIS, the field of insurance medicine has become increasingly central to the SSIA's operations. One manager of medical insurance advisors at the SSIA highlighted the importance of such knowledge within the agency and offered two examples of how it is being institutionalized:

All our new employees must attend lectures on specific diagnoses and receive training in insurance medicine. We focus on psychiatry and exhaustion, which are particularly challenging and quite common ... We also have plans to invest in a

major centralized basic medical training programme for all our employees (Manager of medical insurance advisors, interviewed May 2022).

Another example is the employment of medical insurance advisors – doctors working within the SSIA. According to internal guidance, case managers are expected to seek support from these specialists when making decisions:

In most cases, the case manager can interpret the medical documents independently, but some conditions are so complex that in-depth medical knowledge is required to make sound and lawful decisions. That is why we employ medical and dental insurance advisors (Manager of medical insurance advisors, interviewed May 2022).

In the interviews, MIAs state that they play an important role in shaping judgments and reasoning within the medical profession:

The problem is that the medical professionals outside SSIA believe that they have a greater decision-making mandate than they actually do. I often raise this issue with case managers, reminding them that we are the ones who decide. It really irritates me when I hear statements like that, and I have also brought this up in internal communications with the health care system (Interview MIA 5, 2023).

Accordingly, several MIA's describe their expertise more of a counterweight to the medical profession rather than to the case workers at SSIA. They perceive their role as primarily arguing for a medical insurance perceptive in opposition to the views of doctors within medical health care system:

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The doctors think they know a lot about legal matters, but in reality, their knowledge is quite limited. I usually emphasize that the doctors' statement must be correctly aligned with the Social Insurance Agency's focus – the right to compensation ... Otherwise they have to revise them or, in the worst case, refuse them (Interview MIA 5, 2023).

These activities – effectively incorporating medical expertise into bureaucratic structures – have become institutionalized within the agency. For instance, interviews with case managers reveal that the SSIA evaluates the appropriateness of certain diagnoses and seeks to prevent people with particular diagnoses from receiving sickness benefits. This is done through internal training. One case manager described a training session led by a medical insurance advisor:

In this lecture, the medical insurance advisor said that Sweden has a diagnostic code that doesn't exist in any other country – fatigue syndrome. We then discussed why that is, and how we should counter that diagnosis, how we could get doctors to change it, reduce sick leave duration, and so on (Case manager at SSIA, interviewed October 2021).

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The statement below illustrates how the SSIA is developing its own internalized medical logic:

These internal training sessions at the SSIA turn into a kind of mass hysteria – that all diagnoses are wrong and that we must be vigilant about them. It creates a particular atmosphere ... One of my colleagues even said, "I think almost every medical assessment from doctors is a misdiagnosis" (Case manager at SSIA, interviewed October 2021).

This internalized understanding is also reflected in SSIA decisions. The following quote from the agency's reconsideration unit demonstrates how bureaucratic interpretations of medical diagnoses lead to stricter assessments:

According to the doctor's certificate, you are advised to take sick leave due to the diagnosis ... fatigue syndrome ... There are claims of reduced muscle mass, but no observational findings support this. The attending physician conducted a visual inspection, but there is no data on your historical muscle mass (Quoted in Altermark, 2021, p. 29).

This quote illustrates how the agency simplifies and reduces the complexity of medical assessments by demanding specific types of information to determine a person's work capacity.

Another example of how the integration of medical knowledge into the bureaucratic structure leads to stricter eligibility criteria is the SSIA's stance on social circumstances. A case manager explains:

They [SSIA] want us – case managers – to consider the fact that a person has a difficult social situation when making our judgment. That it should be harder for such individuals to receive sickness benefits for a given diagnosis because their social situation affects them, and it shouldn't (Case manager at SSIA, interviewed October 2021).

The agency has also introduced internal tools to calculate the risk of long-term sick leave, which were implemented in 2018. These are used to categorize cases and shape administrative responses:

After an initial assessment, cases are divided into three groups: K1, K2, and K3. K1 means a short, straightforward case; K2 is somewhat longer but does not require coordination with other actors; K3 means the case is expected to be long-term, needing coordination ... Officially, it's about helping the sick person recover. But the focus is actually on reducing the number of K3s (Case manager at SSIA, interviewed October 2021).

Discussion

The analysis identified two modes of annexation through which bureaucratic authority becomes dominant; the marginalization of rival expert domains through the supplanting of other public authorities and professions knowledge close to the policy; and the reinterpretation of their contributions through a bureaucratic lens through the incorporating of public authorities and professional knowledge close to the policy. The first form of annexation involves supplanting another knowledge sphere; specifically, how, through its judgment of applications, the bureaucracy introduces its own norm of impartiality and supplants medical knowledge. A central aspect of the bureaucratic sphere within the SSIS is that officials must remain impartial and neutral in their decisions and actions. This notion of impartiality dictates that no irrelevant factors or interests should influence the decisions of officials – or doctors. If such factors are perceived, the application is rejected. In this context, both public servants and doctors are required to be "blind" to the identity of the people concerned. Therefore, the supplanting of other knowledge spheres can be seen as a process that places confidence in the administrative and bureaucratic norms and principles to address the complexities surrounding work capability and sickness leave. In addition to impartiality, the analysis has highlighted a key behaviour within the bureaucratic sphere of the SSIS: the tendency to simplify and reduce the complexity of the system to a few measurable components in order to achieve control. This represents a form of administrative ordering of complex medical issues.

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The second element of annexation involves incorporating knowledge not typically associated with the bureaucracy into the bureaucratic knowledge sphere. Unlike the supplanting of knowledge, this incorporation creates a degree of independence and distance between the spheres, even in instances where their respective forms of knowledge should complement one another. Through various work processes and formal activities, there is space for judgments and reasoning regarding case handling. In this way, the agency effectively generates its own form of medical knowledge. As a result, the more restrictive nature of the SSIS is

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partly attributable to the transfer of medical expertise from the medical profession to the SSIA. In contrast to the bureaucracy, our analysis shows that health care is based on highly specialized knowledge and a strong professional tradition, as previous research has also indicated (Bruhn, Ekström and Thunman, 2021; Shutzberg, 2021). Theoretical research on expert knowledge has emphasized that expertise involves the ability to make judgments based on experience, often referred to as "tacit knowledge" or "holistic knowledge" (Collins, 2010; Collins and Evans, 2002; Coopmans and Button, 2014). Doctors' knowledge includes an overall, holistic understanding of a patient's living conditions – what might be described as more situated expert knowledge. This implies that the processes underpinning individual reasoning and actions are more about interpretation than calculation (Eriksson et al., 2014). Thus, the normative principles of the medical profession – rooted in proven experience and contextual responsiveness – have been annexed by the bureaucratic knowledge sphere, which is primarily built on the norm of impartiality (Table 1).

The two forms of annexation identified here illustrate two distinct ways in which an authoritative knowledge regime can dominate over a pluralistic one. Therefore, the stated tentative mechanisms of bureaucratic annexation inspired by Bauman's concept of bureaucratic violence, can be developed as follows:

- The invisibility of other public authorities and professions related to the policy, achieved through the supplanting of their knowledge.
- The distancing of other public authorities and professions from the policy, through the incorporation of their knowledge into the bureaucracy.
- The removal of improvisation, spontaneity, and alternative versions or veto possibilities.

By supplanting and incorporating specific knowledge into the authoritative knowledge sphere, the bureaucracy not only eliminates improvisation and spontaneity in certain parts of the process but also removes resistance and alternative interpretations of the SSIS – key veto possibilities. This development limits the adaptive capacity of the social insurance system since it restricts its

Table 1. Normative principles and behaviour at work within the bureaucratic versus the (medical) professional knowledge sphere in the SSIA

	Bureaucratic sphere	The (medical) profession sphere			
The core substantive (normative) principle	Impartiality (and objectivity)	Proven experience			
The core behaviour (the acting)	Simplify and reduce complexity	Responsiveness to context			

Source: Authors' elaboration.

The institutional outcome is a system that is procedurally consistent but substantively inflexible. The observed internal bureaucratic shift in control over medical decisions that influence eligibility for social health insurance, which has supplanted the previous medical basis of decision making, is a factor that may weaken the ability of part of the social insurance systems to fully and necessarily protect and support the recovery and return to work of insured workers, thus undermining the possibility for these workers' to demonstrate their own resilience in the face of a health problem.

Conclusions

Building on, yet departing from, Walzer's normative theory, this article seeks to integrate a pluralistic conception of society into the analytical framework of institutional change. In the spirit of Walzer, we critically examine the implications of non-pluralistic communities – here, knowledge regimes within the Swedish welfare state – and explore the conditions under which such regimes may become constrained or closed. The concept of *bureaucratic annexation* has been introduced to capture the process in the system where a border phenomenon between medicine and law, or between medicine and the bureaucracy exist. As argued, in this process, bureaucratic knowledge increasingly displaces other forms of expertise, particularly that of medical practitioners. This process contributes to a narrowing of interpretive flexibility in the assessment of eligibility criteria, thereby reinforcing institutional rigidity. As different knowledge spheres – each with its own norms and epistemologies – become subordinated to an authoritative bureaucratic regime, pluralism is undermined, and alternative forms of judgement and discretion are weakened.

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Thus, our findings suggest that enhancing the resilience of the welfare state requires not only preparedness for external shocks, but also vigilance toward internal processes that threaten institutional flexibility, democratic accountability, and legal accountability. As such, the weakness of resilience in the Swedish case lies not only in the substance of the changes, but in how and where these changes have occurred – within the welfare bureaucracy. Our analysis has shown how shifts in internal knowledge regimes can generate pressures for austerity from within the welfare state itself. This can be understood as a form of *weak resilience* of the legal-bureaucratic model – previously discussed – which rests on the premise that the relationship between the State and citizen is governed by homogeneous and enduring laws and regulations. When welfare change occurs

through extra-parliamentary means, as in the Swedish case where the abrupt changes made lie in the nature of the enforcement of the law, but not in the law itself, resilience may be even weaker. Public trust may erode when it becomes difficult for citizens to hold decision-makers democratically accountable, as such changes cannot be reversed or criticized through electoral mechanisms. Such changes also risk undermining legal accountability, as enforcement practices shift independently of formal legal amendment. Legal rights may remain intact on paper (in the law), even as their implementation is progressively weakened in practice.

The article has demonstrated how austerity may emerge as an endogenous phenomenon – rooted in the reconfiguration of knowledge hierarchies within the state apparatus. Swedish welfare austerity has emerged on the bureaucratic level and through a battle of knowledge, where the bureaucratic sphere of knowledge seems to be the winner. Therefore, other countries with a similar design of their welfare systems, where a comprehensive social security system overlaps with medical health care, may potentially evolve in the same manner. An important insight from the Swedish case is that resilience may be enhanced when a pluralism of knowledge and actors is present in and around institutions, as this diversity can serve as a natural counterweight to endogenous - and, at times, illegitimate - forms of institutional change. However, the convergence of medical and bureaucratic knowledge does not inevitably lead in that direction. As Shutzberg (2021) argues: "The existence of a formal-rational bureaucratic apparatus, which examines and verifies sickness certificates, is ideally an integral part of ensuring an equal and predictable access to resources offered by the welfare state for all subjects". Consequently, the bureaucracy can be a guarantee of resilience. Ensuring the coexistence of multiple spheres of knowledge within welfare institutions is therefore critical in maintaining their legitimacy, effectiveness, and capacity for adaptation.

The distinction between pluralistic and authoritative knowledge regimes may thus serve as a productive conceptual lens for analysing other institutions or welfare systems across different national contexts. In systems where multiple knowledge actors intersect within an institutional setting, it is essential to protect and preserve the autonomy of each actor. These actors operate according to distinct normative and regulative logics, which must be recognized and preserved within the broader knowledge regime. Failing to do so risks the emergence of an overly bureaucratized regime in which problems and solutions are framed exclusively in administrative terms – particularly when the bureaucracy becomes the dominant epistemic authority. Such a shift diminishes epistemic pluralism and, in the worst case, may render the regime increasingly authoritarian, as a single knowledge form comes to define both interpretation and enforcement. Instead of a focus on path dependency and the lock-in effects of welfare state

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Supporting coordinated approaches across health and social protection systems to enhance resilience

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Abstract The channels through which shocks and stressors affect individual's health and socioeconomic vulnerability are often similar or closely intertwined. Similarly, the effectiveness of the respective responses of social protection and health systems to shocks and stressors are highly interdependent or mutually reinforcing. The effectiveness of a social protection system response in supporting income security and ensuring continuous access to health and other essential services is itself strongly dependent on the ability of the health system to continue delivering quality services. In turn, the effectiveness of public health measures during crises are bolstered by social protection responses that support income security and access to essential services with an impact on nutrition, housing, and other social determinants of health. Yet, such responses are too often implemented in siloes and policies to strengthen those systems are too often competing. In the face of ongoing megatrends that increasingly drive shocks and stressors and enhance vulnerabilities, the article addresses the question of how health and social protection systems can better coordinate to strengthen the resilience of populations.

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Introduction

Health and social protection systems, despite their complementary roles, frequently operate in silos, which limits their combined effectiveness, particularly during shocks and disasters. This lack of coordination hinders comprehensive responses to crises, leaving gaps in support for affected populations. During events such as pandemics or natural disasters, the absence of integrated planning means health interventions may not be adequately supported by social protection mechanisms to cushion the economic impact on affected individuals, households and communities. Conversely, social protection measures might be implemented without sufficient consideration for the impact of income insecurity or limited access to care on the health and well-being of populations affected by shocks.

However, the intrinsic linkages between health, inequality, and socioeconomic vulnerability are evident (Marmot, 2001). The interplay is undeniable: poor health can lead to catastrophic out-of-pocket expenses and loss of income, pushing households into poverty, while poverty is a major determinant of poor health outcomes and increased vulnerability to shocks. Thus, good health is foundational for economic security and human development, while robust social protection is crucial for maintaining health, both contributing to the resilience of populations to shocks and stressors.

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But how can social protection and health policies be better coordinated to more effectively strengthen the resilience of populations in the face of ongoing megatrends that increasingly drive shocks and stressors or enhance vulnerabilities? What are the entry-points and opportunities for linkages between the two systems? How can we foster a joint agenda for systems' strengthening within the prevention, preparedness and response plans of countries? This article aims to highlight the different opportunities for coordination between social protection and health systems to support the resilience of populations to shocks and stressors in a mutually reinforcing manner. In so doing, their respective efforts can also, indirectly, strengthen the capacity of each system to effectively respond and cope with the heightened needs of the population in the face of these megatrends.

The remainder of the article is organized as follows. First, definitions and a framing of the interactions between health and socioeconomic vulnerability – and social protection and health systems – will be provided, highlighting how these interactions play out in the context of shocks and stressors. This will be

followed by a review of the manner in which climate change, public health emergencies and forced displacement affect population health and socioeconomic vulnerability, and how greater coordination between social protection and health actors and systems can strengthen the resilience of the affected populations to those megatrends. Cross-cutting priorities are then discussed before concluding.

Background and definitions

Health and socioeconomic vulnerability are fundamentally intertwined both at the individual and population levels. On the one hand, poverty and socioeconomic vulnerability are known to influence the health status of individuals and populations. Indeed, health and well-being are affected not only by medical factors, but also by a vast array of non-medical factors that are influenced by poverty and vulnerability, including housing, food security, education, occupation, social cohesion, discrimination, and many others (Marmot, 2001). These are known as the social determinants of health (SDH) (ILO, 2024d; WHO, 2025a).

On the other hand, ill health can have significantly negative impacts on the socioeconomic status of households. First, the costs of health care – whether the direct medical costs or costs to access care, including transportation and opportunity costs – are known to have potentially impoverishing impacts, with over 1.3 million individuals globally having fallen below the relative poverty line as a result of such costs in 2019 (WHO and World Bank, 2023). Ill health can concomitantly result in reductions to income and earnings where the health event negatively affects the income-generating capacity of the individual or household (O'Donnell, 2024). These impacts may have far-reaching implications not only for the affected individual, but also for the entire household who may rely on negative coping strategies including, for example, reliance on child labour or engagement in transactional sex, which themselves may affect health.

These relationships call for strong collaboration or integration between the objectives and delivery mechanisms of health systems on the one hand, and social protection systems on the other. In this article, "social protection" is defined as a set of policies and programmes designed to reduce and prevent poverty, vulnerability and social exclusion throughout the life cycle (ILO, 2024d). The term encompasses, at a minimum, access to health care without hardship and income security throughout the life cycle. Social protection consists of a variety of policy instruments, including social insurance and social assistance (ILO, 2019a). A social protection system is defined as "the totality of social security or social protection schemes and programmes in a given country" including the policy, legislative, financing, and institutional environment; the

design of the individual schemes; and their operation and administration (ILO, 2024d).

Social protection includes both income security and access to health care without financial hardship wherein the direct linkage with the health care system is clear – although not exclusive. This article adopts the World Health Organization's (WHO) definition of a health system, which consists of all the organizations, institutions, resources and people whose primary purpose is to improve health (WHO, 2010), which include preventive, promotive, curative and rehabilitative interventions "through a combination of public health actions and the pyramid of health care facilities that deliver personal health care – by both State and non-State actors".

This article is concerned with the manner in which these systems can coordinate to support the resilience of the population to shocks and stressors in a mutually reinforcing manner. Resilience refers to the capacity of individuals, households, and populations to anticipate, prevent, resist, accommodate, adapt to, and recover from the effects of shocks and chronic stressors, in a timely and efficient manner, while maintaining or improving their well-being, preserving essential functions, and without compromising their long-term development prospects. Resilience is important in the face of both shocks (sudden, acute events) and stressors (chronic, ongoing pressures that erode well-being). Shocks and stressors can push individuals or families into poverty, deepen existing poverty, or make it harder to escape poverty. For the purpose of this article, resilience means the ability to prevent impoverishment, mitigate financial losses, maintain livelihoods, and avoid falling into chronic poverty. Shocks and stressors can also directly cause ill-health (e.g. injuries from a disaster, infectious diseases during an outbreak) or exacerbate existing health conditions. They can also disrupt access to health care, nutritious food, and safe water, further compromising health. Resilience therefore also means maintaining access to essential health services, preventing disease, recovering from illness, and adapting to new health challenges. Importantly, an individual's susceptibility to negative health outcomes resulting from the impacts of shocks and stressors is shaped not only by the level of exposure to the hazard, but also by the vulnerability of the exposed individual, community or population, which is itself highly influenced by "historical, political, cultural, institutional, and natural resource processes that shape people's lives and lifestyles" (UNDRR, 2017).

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This last point illustrates how shocks and stressors intensify the link between health and socioeconomic status, as both are affected through identical or closely intertwined channels. Importantly, these shocks do not typically affect all categories of the population evenly, but often further entrench or exacerbate pre-existing health inequities and socioeconomic inequality.

Supporting coordinated approaches across health and social protection systems to enhance resilience

Strengthening coordination to enhance population resilience to shocks and stressors

More integrated approaches between health and social protection systems are needed, both to holistically address the intertwined health and socioeconomic needs of populations, but also to mitigate the interrelated manner in which shocks and stressors affect them. Such coordination can also strengthen the respective ability of each system to effectively respond to such shocks and continue to deliver essential services. Unsurprisingly then, such coordination is an objective well recognized at global, regional and national levels. This is acknowledged in the international normative framework, with the International Labour Organization (ILO) Social Security (Minimum Standards) Convention of 1952 (No. 102) and the ILO Social Protection Floors Recommendation of 2012 (No. 202) (among others) recognizing that access to essential health care without hardship is an integral part of a social protection system, including floors. In turn, the Political Declaration on Universal Health Coverage of 2023¹ recognizes the "fundamental importance" of social protection in ensuring universal and equitable access to quality health services without financial hardship, and calls for greater coordination and integration between sectors, including through multisectoral and health-in-all policies approaches.² In practice, however, fragmented approaches and competition for resources between sectors continues to be the norm in many contexts.

Against this background, this article advocates for policy makers and practitioners to prioritize integrated approaches between health and social protection that can enhance population resilience to shocks and highlight opportunities for coordination and synergy between social protection and health systems. In particular, the article focuses on the following three megatrends: i) climate change ii) public health emergencies, and iii) forced displacement. These megatrends are increasingly driving shocks and stressors or enhancing vulnerabilities and illustrate the intertwined pathways in which shocks affect health and socioeconomic vulnerability. While the trends are discussed individually to highlight the considerations specific to each shock or stressor, it is essential to highlight that these are often closely interconnected: taking climate change as an example, this may be a driver of displacement while also increasing the risk of the spread of infectious diseases (Romanello et al., 2021; ILO, 2024c; ILO, 2024d).

The article explores the potential coordination that can – and has been – operationalized before, during and after shocks across health and social

As approved by the United Nations General Assembly High-Level Meeting.

See the text of the Declaration of the High-level Meeting on Universal Health Coverage of 2023.

protection systems, and how these have contributed to strengthening population resilience. The article does not represent a systematic or comprehensive review but builds on a range of published literature, including by the ILO,³ on the need and opportunities for better coordination between social protection and health (systems) to enhance population resilience in the face of these megatrends.

Climate change

The impact of the concentration of greenhouse gases in the atmosphere, driven by human activity, on our climate system has wide ranging implications, not only for health, but also for poverty and vulnerability. This is increasing the frequency and intensity of adverse weather events (whether floods, droughts, heatwaves, tsunamis, cyclones and wildfires) and driving rising global temperatures (Masson-Delmotte et al., 2021; Birkmann et al., 2022).

Impacts on health and socioeconomic vulnerability. Climate events have direct impacts on human health, including by exacerbating the spread (and changing the distribution) of waterborne, vector-borne and infectious diseases, and through impacts on undernutrition, dehydration, and increasing risks of injuries and strokes (Romanello et al., 2021; Louis et al., 2021). Climate change is also a growing risk factor in relation to non-communicable diseases, including cardiovascular diseases and respiratory diseases, and is likely to increase the incidence and prevalence of disability due to both disease and injuries (WHO, 2022a; Lewis and Ballard, 2011). Moreover, climate change has direct and indirect effects on socioeconomic vulnerability: extreme weather events such as floods and droughts directly harm people's livelihoods and productive assets, particularly though not exclusively in agriculture. In turn, 70 per cent of workers are estimated to be at risk of climate-related health hazards (ILO, 2024a). Without just transitions, climate change also undermines the quantity and quality of available livelihood opportunities by negatively impacting the infrastructure and livelihoods upon which many workers and businesses rely (ILO, 2018).

The effects of climate change on health and socioeconomic vulnerability are thus closely intertwined. In turn, rising global temperatures and the increase in frequency and intensity of negative climate events will put increasing pressure on social protection and health systems by multiplying the need for – and utilization of – their services and benefits. The ability of both social protection systems and health systems to effectively respond are already causes for concern across the globe.

3. These include, in particular ILO (2024c); ILO, 2025; ILO (2021).

Opportunities for coordinated action to enhance resilience. The need for more coordinated and integrated efforts to respond to the impacts of climate change is widely acknowledged and has been highlighted on numerous occasions, including during the United Nations Climate Change Conference, hosted in Dubai in 2023 (UNFCCC, 2023). Not least, coordination and integrated approaches can enable more efficient use of resources by strengthening synergies across sectors, which are particularly important in resource-constrained contexts. However, to cushion or mitigate the negative impacts of the changing climate, what forms can this coordination across social protection and health systems take in practice?

Coordination can contribute to population resilience in several ways. First, improved coordination can contribute towards mediating the impacts of climate change on health and socioeconomic vulnerability and, thereby, the changes in need for social protection benefits and health care services resulting from the impacts of climate change. Here, primacy should be placed on joint efforts and investments in measures that aim to prevent or limit the impacts of climate shocks and stressors and promote the adoption of healthier, more resilient behaviours. For example, in the state of Oregon, United States, Medicaid⁴ funds have been used to purchase and distribute air conditioners, air purifiers and power banks to vulnerable populations – including those with respiratory diseases. The objective of this initiative is to prevent the harmful effects of climate events (including extreme heat and wildfire smoke) on vulnerable individuals and households by providing support to ensure clean air and healthy temperatures, while also ensuring households can continue to operate medical devices during power outages (Young, 2024). In the same vein, greater coordination is also required between occupational health services, health systems and social protection systems to better protect workers from exposure to the climate-related hazards, ensuring holistic approaches (ILO, 2024e).

Second, coordination can support both systems to adapt and respond to the emerging and evolving needs that will or have already resulted from the impacts of climate change, thus ensuring continued access to quality services for affected populations. This requires health systems to invest in those services that will likely increasingly be required, whilst also protecting individuals from their associated costs. Adapting the benefit packages of social health protection schemes, including to ensure coverage of emergency care, rehabilitation and diagnosis and treatment of chronic diseases, is paramount (ILO, 2024c). For

^{4.} Medicaid is a joint federal and state programme in the United States that provides health coverage to individuals and families with low incomes, including children, pregnant women, parents, seniors, and people with disabilities. Its primary role is to ensure access to necessary health care services without financial hardship, thereby protecting vulnerable populations from catastrophic health expenditures that could otherwise deepen poverty.

example, the national health insurance scheme in the Philippines managed by Philhealth covers heat strokes and heat exhaustion (Cabalza and Vullanueva, 2022), while also covering climate-sensitive diseases⁵ such as dengue and leptospirosis. Efforts to expand social health protection schemes' benefit packages should also be closely aligned with initiatives to extend the coverage of sickness, employment injury and disability benefits that ensure income security for affected households.

Third, coordinated action between social protection and health systems can also aim to promote the *continued delivery of benefits and services* and ensure effective access for affected populations, a core aspect of resilience. For example, in the response to Typhoon Yagi in Viet Nam, Viet Nam Social Security (VSS)⁶ committed to supporting the delivery of health services whilst also promoting access to services for populations living in affected areas. The VSS assigned staff on duty at health care facilities within affected areas to facilitate patient access and to provide support with administrative procedures. At the same time, the VSS aimed to support the uninterrupted provision of health care services by providing up-front payments to contracted health facilities with a view to enabling these to purchase necessary medication and supplies and avoid shortages and disruptions (VSS, 2024). Thus, the VSS worked in close coordination with the health facilities in affected areas to ensure smooth access to and the delivery of health care services.

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Finally, social protection and health systems may consider how to coordinate to *reduce the contribution of both systems to climate change*, by reducing the emission of greenhouse gases, improving energy and resource efficiency, and reducing waste. For example, in several contexts including France and Germany, social health protection schemes aim to foster ecological transitions within the health system through their contractual relations with health facilities (ISSA, 2024).

Public health emergencies

The frequency and severity of epidemics and pandemics are increasing due to a complex interplay of human-driven factors. Key causes include growing urbanization and population density that create ideal conditions for disease spread, while environmental degradation, deforestation, and increased human-animal contact are leading to more frequent "spillover" events where novel pathogens cross over from animals to humans. Inequality and poverty also create the conditions for the transmission of infectious diseases and drive

^{5.} These are diseases whose transmission and spread are influenced by climate factors such as temperature, precipitation and humidity.

^{6.} The VSS implements contributory social protection schemes, including the health insurance fund.

differential levels of exposures, susceptibility, disease severity, and consequences after the disease has developed among different population groups (Quinn and Kumar, 2014).

Impacts on health and socioeconomic vulnerability. Epidemics and pandemics obviously inflict immense health burdens, causing widespread illness, disability, and death while overwhelming health care systems. At the same time, people affected by infectious diseases are at higher risk of socioeconomic vulnerability, discrimination and social exclusion: indeed, they face both a potential loss or reduction in earnings, as well as heightened expenses resulting from direct and indirect costs of accessing necessary care (ILO, 2020a). This often pushes vulnerable households deeper into poverty, exacerbates existing inequalities, and sets back progress on sustainable development goals. This is clearly reflected in health emergency preparedness and response strategies that emphasize the importance of ensuring equity in access and outcomes and highlights the need for public health as well as social protection measures, and thus greater coordination across sectors (WHO, 2025b).

Opportunities for coordinated action to enhance resilience. Coordination between health and social protection systems can contribute to the resilience of populations in several ways.

First, coordination between social protection and health systems can reduce the *susceptibility of individuals, communities or populations* to diseases by addressing some of the social determinants of health, as has been widely recognized (Commission on Social Determinants of Health, 2008). For example, poor nutritional status and limited access to clean water and sanitation (and more broadly decent housing) are factors that increase individuals' exposure or susceptibility to infectious diseases, and social protection can contribute to improving both.

Second, social protection schemes can contribute towards mediating or reducing the potential *onward spread* of infectious diseases by promoting early diagnosis and adherence to treatments or public health and social measures, most notably if they are able to address any financial barriers to accessing these. For example, social health protection schemes can cover the costs of diagnostic services and treatments for infectious diseases as well as non-medical costs of access (including for transportation and nutrition). Such schemes can be specifically designed for persons living with infectious diseases (disease-specific schemes) or can be inclusive of them by including specific eligibility criteria

(disease-sensitive schemes). Examples of the latter include the Disability Grant in South Africa, which is inclusive of people living with HIV⁷ (World Bank and ILO, 2016), or the National Orphan Care Programme in Botswana which is inclusive of children living with HIV (ILO, 2021). The role played by social protection in promoting adherence to public health and social measures implemented during the COVID-19 crisis and thus preventing the onward spread of the disease are also widely recognized (WHO, 2024a; ILO, 2020b; Gentilini et al., 2022).

Third, social protection schemes that guarantee income security can contribute to mitigating any reduction or loss of earnings or income due to disease (whether linked to incapacity to work or to time lost while seeking care), thus thwarting the potentially impoverishing impacts thereof (ILO, 2021).

Fourth, during epidemics and pandemics, affected populations' effective access to necessary health services is heavily dependent on the safety and well-being of the health workforce, the vital role of whom any response relies. Social protection and occupational health services play a crucial role here. Indeed, during crises, health systems must have the capacity to rapidly reorganize by mobilizing heath workers and do so while maintaining the provision of essential services (ILO, 2020c). The COVID-19 pandemic provided a stark reminder⁸ of the importance of ensuring safe and healthy working environments for health workers, as many frontline workers did not benefit from health and safety measures and/or were not (adequately) covered by social protection (ILO, 2020c). Upholding decent wages and access to social protection are therefore essential to ensure the retention of qualified health workers and to avoid staff shortages that might hinder the response (ILO, 2020c).

Finally, social health protection schemes can also support the health system response by enhancing the availability and accessibility of covered services, including through temporary measures to expand the network of service providers. For example, during the COVID-19 crisis, response measures were taken in Spain to integrate private health facilities⁹ in the networks of the national health system by mobilizing their resources and infrastructure, thus improving and expanding access to health services for affected populations (ILO, 2020c).

Forced displacement

Conflicts, persecution and climate change are increasingly forcing individuals and families to leave their homes: an estimated 114 million people were forcibly

7. Where this causes activity limitations.

- 8. See WHO data on Health and Care Worker Deaths during COVID-19.
- 9. Not usually integrated into the network of the social health protection scheme.

displaced by mid-2023, an increase of 19 million people compared to the previous year, the largest ever annual increase recorded by the United Nations High Commissioner for Refugees (UNHCR) on forced displacement (UNHCR, 2023).

Impacts on health and socioeconomic vulnerability. A multiplicity of pathways exist through which forced displacement affects health and socioeconomic vulnerability. Displaced populations often experience traumatic events such as human rights violations, natural disasters, and violence, which can severely impact their mental and physical health even before displacement (WHO, 2022b). During displacement, forcibly displaced persons face increased risks of epidemics due to factors such as overcrowding, malnutrition, and poor sanitation (Eugene, McCarthy and Brennan, 2015). In host countries, substandard living conditions, including overcrowded camps and informal settlements with limited access to clean water and sanitation heighten the risk of communicable diseases, while also presenting barriers to health care access (WHO, 2022b). Female forcibly displaced persons are particularly vulnerable to sexual and gender-based violence (WHO, 2022b; Eugene, McCarthy and Brennan, 2015).

Displacement also exacerbates poverty and vulnerability through loss of livelihoods and restricted income-generating activities in host countries, compounded by legal and effective barriers to social protection (ILO, ISSA and ITCILO, 2021). These effects are interconnected; for instance, leading causes of mortality among internally displaced populations – diarrhoea, malaria, and respiratory diseases – are linked to living conditions, limited livelihoods, and malnutrition (Cantor et al., 2021).

At the same time, the ability of social protection and health systems to respond effectively can be undermined by the drivers or scale of displacement. Many forcibly displaced populations are hosted in areas with "limited domestic capacity to support them" (Spiegel, Chanis and Trujillo, 2018, p. 3). Despite some reforms, legal, political, and financial factors often exclude forcibly displaced persons from national social protection systems (ILO, ISSA and ITCILO, 2021). Consequently, in many fragile contexts, their health and basic needs are met by non-state/humanitarian actors using parallel systems, funded by international donors. However, such approaches have constraints, ¹⁰ highlighting the

10. These include the fact that, at a global level, the scale of humanitarian need continuously outpaces available official development assistance for health, cash and voucher assistance; the inefficiencies and duplications emerging from the implementation of parallel mechanisms; the negative impacts on social cohesion between forcibly displaced persons and host community members resulting from differences in the quality or level of services and benefits offered between national systems and humanitarian programmes; and the fact that such approaches do not promote wider social and economic inclusion of forcibly displaced persons, a growing priority in view of the increasingly protracted nature of many displacement situations.

importance of strengthening the resilience of social protection and health systems to effectively respond to needs and reduce their reliance on international humanitarian action over time.

Opportunities for coordinated action to enhance resilience. Clear opportunities exist for coordination across social protection (or cash and voucher assistance) and health systems to strengthen the resilience of forcibly displaced populations. At a policy level, it is essential for efforts by humanitarian and development actors to advocate for the inclusion of forcibly displaced persons in health systems and national social health protection schemes. Inclusion in such schemes is usually considered more politically acceptable than inclusion in other public policy areas or for social protection benefits, as it is aligned with national public health objectives. From the perspective of social protection, experience thus shows that social health protection is an entry-point of choice for inclusion, which can further be used to mainstream inclusion in national social protection strategies and longer-term benefits (ILO, 2025).

Already in many contexts, humanitarian and development partners work hand in hand, adopting twin-track approaches that aim at providing direct support to forcibly displaced persons to meet their health and other basic needs, whilst strengthening national health and social protection systems to increase their capacities, their resilience, and their inclusiveness (ILO, 2025). In Ghana for example, the UNHCR has worked with the ILO to successfully advocate for and facilitate the inclusion of refugees in the National Health Insurance Scheme (NHIS). In parallel, the UNHCR invested in health facilities within refugee camps to meet quality standards, which enabled them to hand the facilities over to national service providers registered with the NHIS (UNHCR, 2015). In turn, the Government of Rwanda committed to the inclusion of refugees in the national social health protection scheme, with the technical support of the ILO and UNHCR. The partners conducted a technical feasibility study which highlighted the close link between legal protection measures for refugees, such as access to identification documents in the host country, and administrative barriers to access to social protection and health care. Following the study, joint efforts resulted in the inclusion of refugees in the scheme in September 2019 (ILO, 2019b).

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In other contexts, responses to displacement situations have also adopted integrated approaches across social protection and health. From the humanitarian perspective, this might also include close coordination with national systems. In Jordan, for example, the UNHCR provides cash transfers to

^{11.} See, for example, ILO Employment and Decent Work for Peace and Resilience Recommendation, 2017 (No. 205).

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vulnerable pregnant refugee women to cover the costs of delivery in national facilities, thus ensuring effective access without financial hardship. In assessing eligibility to the scheme, the UNHCR uses medical report data from the Ministry of Health or Médecins Sans Frontières (UNHCR, 2017). In Türkiye, Syrian refugees registered with the Turkish authorities are included in the General Health Insurance on an equal footing with citizens. Here, the Ministry of Health has established Migrant Health Centres in 29 provinces, where Syrian doctors provide primary health care services to Syrians under temporary protection. This measure has alleviated pressures placed on public hospitals and increased access to health care by reducing language barriers and increasing human resource capacity (ILO, 2024b). Both these efforts highlight the opportunities for integrated responses to promote access to – and effective utilization of – health care services without financial hardship.

Priorities for coordinated action to enhance population resilience

Based on the examples highlighted above, clear priorities for coordination across health and social protection systems emerge.

At the outset, pre-existing inequalities, vulnerability and health inequities result in variable susceptibility to the above shocks and stressors, whose impacts are not felt equally across population groups. As highlighted, socioeconomic status and health outcomes are intrinsically intertwined. Gender is also a key determining factor, with women often facing compounding vulnerabilities that call for gender-sensitive approaches. In order to strengthen population resilience to shocks and stressors, it is essential for these inequities to be recognized and systematically addressed in a coordinated and holistic manner across social protection and health systems and policies.

Achieving this objective will, however, heavily depend on the ability of social protection and health systems to achieve universal coverage. Indeed, persistent gaps in achieving universal social protection (USP) coverage and universal health coverage (UHC) drive – and are driven by – these inequities and vulnerabilities. Here, it is essential to understand that the success in achieving USP will depend heavily on the success of achieving UHC and vice versa. This underlines why USP and UHC coverage extension efforts must be closely coordinated.

Considerations around achieving universal coverage and strengthening the resilience of populations to shocks and stressors is also highly contingent on the availability of adequate and timely resources. Here, it is essential to mobilize resources in a sustainable and equitable way. This means mobilizing resources in a manner that follows the principles of solidarity, collective financing and fiscal justice, taking into account the socioeconomic context as well as fiscal space (WHO, 2024a). Yet, all too often, the financing needs of health and social

protection systems are considered as competing priorities at country and global levels, rather than as the complementary investments that they truly are. This calls for a joint agenda for resource mobilization that is based on a common advocacy strategy across health and social protection. Priority should also be given to identifying innovative, progressive and sustainable sources of funding, ideally those that can help in meeting multiple concomitant objectives to support resilience.¹²

It is also essential for health and social protection systems to jointly engage with entities in charge of crisis preparedness and response to be able to holistically address the multi-faceted impacts of crises on populations. Access to quality and timely data is essential in such efforts, and here too efforts to strengthen (public health) surveillance could benefit from coordination with social protection schemes that monitor and collect data on some of the social determinants of health (USP2030, 2023).

Strengthening population resilience to shocks and stressors also centrally requires a reflection of how each of these shocks and stressors will affect poverty and vulnerability, as well as how they change the burden of disease globally and within countries. This would ensure that the design and availability of health services and social protection benefits are better suited to respond to those changes and, therefore, ensure effective access thereto for affected populations. As stated above, different types of shocks and stressors lead to different types of needs, each of which requires tailored responses. The objectives of USP and UHC are also very important here, in terms of highlighting the priority for universal access to a comprehensive set of adequate benefits and quality services. In the context of shocks and stressors, particular emphasis should be placed on:

- Investments in preventive interventions and health promotion, which is a shared policy responsibility that stretches beyond the health sector alone. These investments are central to strengthening the resilience of the population but are currently insufficient. Opportunities to coordinate or co-finance such interventions and activities exist, recognizing that adopting more preventive approaches leads to mutually reinforcing gains across social protection and health (ILO, 2013).
- Giving priority to health and social protection systems' strengthening and enhancing their inclusiveness ahead of a crisis. Countries that are best able to respond but also to effectively coordinate their social protection and health systems are those where there are robust systems in the first place and which have established collaboration channels with the understanding that investing in both health and social protection yields synergistic results.

^{12.} For example, levies on CO₂ emissions by enterprises and private individuals in Switzerland are earmarked to subsidize contributions to mandatory health insurance, representing an innovative financing mechanism for social health protection while incentivizing emissions reductions.

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• Enhancing the health and well-being of the health and care workforce. This is the foundation of any effective response to shocks and of the continued delivery of quality services. Working conditions in the health and care sector and adequate access to social protection for these workers is central to ensuring a healthy and safe workforce and worker retention.

Opportunities to synergize at the operational level also exist to strengthen the resilience of social protection and health systems in a coordinated manner. These exist across the spectrum of administrative functions and delivery mechanisms – whether in relation to information and surveillance, monitoring, referrals between systems and awareness raising efforts, among others. More research to systematically map these opportunities and identify the benefits and challenges to coordination at this level would be beneficial.

Conclusion

The growing frequency and severity of global shocks underscore the importance of prioritizing efforts to enhance the resilience of populations. This demands a concerted and sustained effort to bridge the divides between social protection and health systems. Indeed, resilience cannot be achieved through isolated interventions, but through the deliberate and integrated strengthening of both social protection and health systems. The examples presented in this article illustrate that enhancing resilience demands a paradigm shift towards genuine policy coherence between health and social protection, anchored in principles of equity and universality. This requires political will, cross-sectoral collaboration, and robust public financing mechanisms at all levels. By investing strategically in these interconnected pillars, we lay the groundwork for societies to become better equipped to navigate an uncertain future, ensuring that "no one is left behind" when the next crisis inevitably strikes. Ultimately, strengthening the linkages between social protection and health systems is not a policy option, but an urgent imperative for building resilient societies in an increasingly volatile world. By fostering truly integrated approaches, we can better move towards a proactive framework that safeguards human well-being, minimizes the socioeconomic fallout of future shocks, and accelerates progress towards equitable and sustainable development for all.

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Building resilient social protection: Lessons from Türkiye's earthquake response

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Abstract This article assesses the functioning and disaster response capacity of the Turkish social security system in the aftermath of the Kahramanmaraş-centred earthquake that struck southeastern Türkiye on 6 February 2023, affecting 11 provinces. Türkiye's social security infrastructure, which was restructured after the 1999 Marmara earthquake, has developed an important response capability with multidimensional instruments such as short-time working allowance, unemployment insurance, survivors' and disability pensions, and access to health services and social assistance. Moreover, social security expenditures have increased, procedures for social security beneficiaries and employers have been simplified and conditions for access to social security benefits have been eased. Administrative and micro datasets from institutions such as the Social Security Institution (Sosyal Güvenlik Kurumu – SGK), the Turkish Employment Agency (İSKUR) and TurkStat reveal the effectiveness inclusiveness of the social protection system at the regional and sectoral level. The findings show that institutional digital infrastructure enables a more rapid response, but that some population segments are excluded from the system due to informal employment. In the light of past experiences, the article provides recommendations on how a disaster-resilient social security system can be built.

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Introduction

Natural disasters such as earthquakes, floods, hurricanes and the like cannot be predicted in advance. Given that such disasters may not affect every person during their lifetime, they are different from social risks such as occupational accidents, occupational diseases, illness, unemployment, disability and old age. Nevertheless, natural disasters may create social risks in terms of their consequences and their effects on employment and livelihoods may lead to permanent job and income losses (ILO, 2015, pp. 1–3).¹

In response to this, social security systems also act as "automatic stabilizers" (ILO, 2024, p. 28; World Bank, 2021, p. 4), as a mechanism to support household expenditures as well as additional expenditure caused, for example, by an earthquake. The responsiveness of both contributory and non-contributory social security programmes to the challenges posed by earthquakes and similar natural disasters strengthens their function as a cushion against the negative effects of shocks. However, it is not sufficient for social security institutions to only increase expenditures after natural disasters such as earthquakes. It is also important to target support in a fast and accurate manner on issues such as shelter, health, nutrition as well as income loss. To this end, also necessary is the effective use of social security institutions' information and communication technology (ICT) and human resources infrastructure, as well as effective coordination and co-operation among institutions, and a reduction in bureaucracy to enable access to support and allowances. Together, these features should increase the efficiency of the response of the social security system.

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In this context, the concept of resilience has emerged as a central framework in understanding how social security systems respond to shocks. Resilience is not merely about resisting disruptions, but encompasses the capacities to absorb their

- 1. For example, the injury or death of breadwinners as a consequence of an earthquake leads to loss of income for those living in the household. The closure of workplaces causes unemployment, and the destruction of houses causes people to become homeless. In the immediate aftermath of an earthquake, significant public health problems arise in terms of shelter, illness and access to safe water and food.
- 2. Much has been written about this with regard to the COVID-19 pandemic, wherein pre-established and comprehensive social protection programmes were better able to respond rapidly to provide this automatic stabilizing role (ILO, 2024, p. 67). As such, strong social protection systems offer effective response capacity not only in ordinary periods but also in times of sudden shocks and disasters.

effects, adapt to new realities, and transform in ways that reduce future vulnerability.

According to Bowen et al. (2020), at the household level, resilience refers to the capacity to anticipate, respond to, and adjust after a shock in ways that prevent poverty or the deepening of existing vulnerability. Drawing on Béné et al. (2012, p. 21), resilience can be analytically structured around three interrelated dimensions: absorptive, adaptive, and transformative capacities. Absorptive capacity refers to the strategies that individuals and/or households use to buffer or mitigate the impacts of shocks on their livelihoods and access to basic needs. Together, these three capacities constitute the core components of resilience and offer a conceptual framework for understanding what it means to "strengthen resilience" in a practical policy context. This framework enables a more systematic assessment of how social protection systems respond to and evolve through crises such as natural disasters.

In the context of social security, these capacities support both immediate shock responses and long-term reforms that enhance institutional stability and inclusiveness. When applied to social security, a resilient system therefore demands and combines robust and proactive governance, robust digital and ICT infrastructure, effective risk assessment and management, coordinated action across social insurance, social assistance, social services, and disaster management agencies and, when necessary, the rapid deployment of new programmes. Beyond emergency financial assistance, systems should be designed as comprehensive disaster risk management mechanisms with coordinated action in policy design, absorption, adaptation and transformation (see, for example, ISSA, 2022, pp–6-54).

Due to its geological characteristics, Türkiye is a country with high earthquake risk. The Gölcük earthquake on 17 August 1999 killed more than 17,000 people. The worst recent natural disasters in Türkiye in terms of scope, impact and human suffering were the Kahramanmaraş and Hatay earthquakes of 2023. Around 16 per cent of the national population lived in the 11 provinces affected by the earthquakes.

This article discusses how the labour market in Türkiye was affected by the Kahramanmaraş-centred earthquake, how the social security system responded to this large-scale disaster, which instruments worked and to what extent, and concludes with examples of good practices and a discussion of where improvements are needed. To analyse these dynamics more systematically, the article applies the resilience framework developed by Béné et al. (2012) to classify and evaluate Türkiye's social protection responses to the earthquake, highlighting which measures supported immediate coping, which enabled institutional adaptation, and which contributed to longer-term structural change.

Natural disasters directly affect people's livelihoods and cause them to face significant income losses. Farmers affected by floods and droughts, for example, or employers or self-employed people whose workplaces are destroyed after an earthquake are suddenly confronted by income losses and significant increases in expenses. Typically, social security systems are predominantly based on social insurance programmes financed by contributions paid by registered employers and employees in the formal labour market. Considering this reality, it is important to estimate the negative effects of natural disasters on the labour market in order to determine the nature of the response to be provided by the social security system after a natural disaster.

A number of studies on the effects of natural disasters on the labour market show that this subject remains under-researched. Jiménez Martínez, Jiménez Martínez and Romero-Jarén (2020, p. 1485) reported only 118 articles published on this topic in journals scanned in Web of Science and Scopus between 1900 and 2019 - and only four of these relate to Türkiye. Generally, the number of studies on how to respond to the consequences of social risks such as unemployment, illness, death and disability as a result of natural disasters remains very limited.

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Some studies provide some general guidance in support of public intervention. Jiménez Martínez, Jiménez Martínez and Romero-Jarén (2020) inform that following the Bio-Bio earthquake in Chile in 2010 there was short-term disruption to the labour market. However, government reconstruction efforts in the earthquake zone and other efforts were able to mitigate some of the negative effects in the most affected regions. Park and Wang (2017, p. 38) inform that the 2008 earthquake centred on Wenchuan County, Sichuan Province, China, led to damage estimated at approximately the equivalent of 121 billion US dollars. A household survey found that people's welfare suffered, with households confronted by asset and income losses. However, after large government transfers, average per capita income increased by 17.5 per cent in 2008 compared to 2007, and the poverty rate actually decreased from 34 per cent to 19 per cent. One conclusion was that the size of public transfers to and from the earthquake zone can significantly mitigate the effects of the earthquake on the economy and the labour market. More generally, social protection mechanisms that help compensate households and people for income losses caused by disasters (e.g. short-time work, unemployment allowance, social benefits) allow people not only to better cope with the disaster but to develop resilience to shocks. Reform also permits the social security system to become more resilient, to be able to adjust to meet exceptional events.

Türkiye's experience since the 1999 Gölcük earthquake shows that resilience of the social security system as well as the population can be improved through

institutional reform and with benefits and services delivered more effectively. The 1999 earthquake brought with it many problems, particularly housing loss and unemployment. The economy shrank by 5.1 per cent and unemployment increased (World Bank, 2025). However, to compound these issues, there was an absence of unemployment insurance (which was not yet implemented) as well as short-time working allowances, and social assistance was inadequate. Also, the underdeveloped use of digital infrastructure by social security institutions contributed to the social security system's inability to respond adequately to the social risks created by the earthquake.

Positively, since the 1999 earthquake, to support household income, the qualifying conditions for survivors' and disability benefits within the social insurance system have been simplified, and small-scale community benefit work programmes have been set up by the Turkish Employment Agency (İŞKUR) with the support of resources provided by foreign development projects (Karadeniz, 2023).

Following Law No. 4447 of 1999, which provided for the establishment of the Unemployment Insurance scheme,³ Türkiye has since continued its reforms in the field of social security and the system's administration. Since the early 2000s, the IT infrastructure of the social security system has been strengthened through different projects, permitting social insurance allowances and pensions and social assistance payments to be made more rapidly and efficiently. Starting in 2003, an integrated social assistance information system was established, and social assistance expenditures were increased. In 2004, short-time working allowances, which are funded by the unemployment insurance fund, began to be implemented. In 2006, the different social security institutions for workers, self-employed workers and civil servants were consolidated and renamed the Social Security Institution (*Sosyal Güvenlik Kurumu* – SGK).⁴ Implemented in 2008, a general health insurance system (established by Law No. 5510 of 2006) provides access to general health insurance coverage to all.

Methodology and data sources

Both quantitative and qualitative methods were used in this study. While institutional reports and legislation prepared by the Presidency of the Republic

- 3. Unemployment insurance started to pay its first benefits in February 2002.
- 4. Other reforms have sought to improve the institutional capacities at the national level to respond to natural disasters in the wake of the 1999 Marmara Earthquake. The Natural Catastrophe Insurance Institution (TCIP) was established in 2000 to carry out the activities of acquisition, implementation and management of Compulsory Earthquake Insurance. A Disaster and Emergency Management Presidency (AFAD) was established in 2009 by merging three institutions in order to overcome the challenges caused by the absence of institutional coordination.

Strategy and Budget, the Disaster and Emergency Management Presidency (AFAD), the Turkish Employment Agency (İŞKUR), and the Social Security Institution (SSI), among others, were examined qualitatively; the following data sources were used in quantitative analyses:⁵

- Social Security Institution monthly data (old-age, survivorship, disability pensions, number of active insured and workplaces).
- İŞKUR short-time working, cash wage support, unemployment allowance application and beneficiary records.
- Turkish Statistical Institute Household Labour Force Survey (HLFS) and Income and Living Conditions Survey (ILCS) micro data.

The provinces of Kahramanmaraş, Hatay, Adıyaman and Malatya, which were affected by the earthquake and suffered high loss of life and property, were classified as Group 1 (heavily damaged), while the provinces of Adana Diyarbakır Elazığ, Gaziantep, Kilis Osmaniye and Şanlıurfa were classified as Group 2 (other earthquake provinces). In this study, the impact of the earthquake on the labour force is analysed by different methods. Next, social security benefits provided to households and individuals through the contributory and non-contributory social security system are analysed. As stated, it is not sufficient for social security institutions only to provide social security benefits according to the relevant legislation after the disaster. The rapid and efficient delivery of services and benefits to beneficiaries is as important as the scope of the benefits. To this end, practices that will expand the effective scope of the social security system – such as simplifying administrative procedures and simplifying and easing the qualifying conditions for benefit eligibility – are also necessary.

Findings

Employment losses and changes in social insurance coverage

The impact of the earthquake on the labour market can be measured in different ways. One means is through administrative records. However, records such as variations in the numbers of insured persons and workplaces covered by social security institutions only present figures for the losses in formal employment (Table 1). By definition, unregistered workers are not included in these figures. Thus, analyses using different robust estimates are needed to measure the loss of employment and the effectiveness of the social security system's response to natural disasters. Household labour force survey analyses may not yield reliable

5. These online SGK, İŞKUR, TurkStat, AFAD and Natural Disaster Insurance Institution (DASK) sources are in Turkish only, and certain exclude public access. For more information concerning data sources and data used in the Tables and Figures in this article, please contact the author.

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Table 1. Estimated number of employees affected by the disaster in earthquake provinces

					Number of Employees	Number of	
	Total Population	Average Household Size	Number of Households	Number of Employees	per Household	Demolished Buildings	Number of Employees
TR62- Adana, Mersin	4,084,459	4	1,021,115	1,370,638	1.342296	2,952	3,962
TR63- Hatay, Kahramanmaras, Osmaniye	3,338,329	4	8,345,823	957,213	1.146937	330,692	379,282
TRB1- Malatya, Elazig, Bingöl, Tunceli	1,731,888	4	432,972	586,560	1.354730	81,675	110,647
TRC1- Gaziantep, Adıyaman, Kilis	2,852,650	5	570,530	871,079	1.526789	87,925	134,242
TRC2- Şanlıurfa, Diyarbakır	3,889,878	7	555,696.9	853,596	1.536082	14,765	22,680
	15,897,204	4	3,414,896	4,639,086			650,816

Sources: Author's estimates based on data from the web pages of relevant public institutions and organizations.

The International Labour Office (ILO) suggests in "Guidelines for post disaster needs assessments" that the number of destroyed buildings can provide data to help determine to what extent employment has decreased as a result of a natural disaster (ILO, 2015, p. 15). The number of destroyed dwellings can infer that a certain number of workplaces were also destroyed, with a likely number of people losing their jobs (ILO, 2015, p. 17). Small family workplaces and enterprises, including shops, small manufacturers and workshops, especially those located under apartment buildings, may be those most affected by an earthquake.⁶ The number of people employed in demolished buildings can be calculated using the average household size and the number of employees from the Household Labour Force Survey micro data set.

However, this approach also has some limitations. The first constraint is that the average number of employees in all households is taken into account regardless of sector and employment status. The second limitation is the assumption that employees are equally distributed to all households and that there are employees in all houses in all demolished buildings.

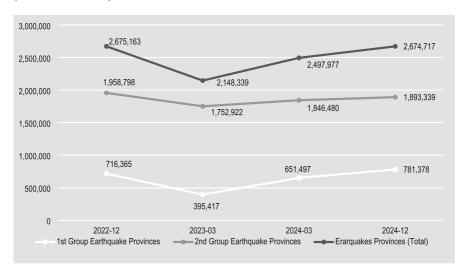
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According to Social Security Institution statistics, there was a decrease of approximately 527,000 in the total number of insured workers in March 2023 due to the earthquake (Figure 1). Immediately after the earthquake (as of March 2023), the number of employees insured in Group 1 provinces (heavily damaged) decreased by 44.8 per cent. However, by the end of 2024, this number started to increase again and exceeded the 2022 level. Employment in temporary workplaces increases by 168 per cent, highlighting the role of temporary public employment in response to the crisis. It can be suggested that this growth in employment was driven by workers employed in debris removal and construction in the region (Table 2).

The figures calculated on the basis of the first method (based on destroyed building) and the second method (based on administrative records of the Social Security Institution) are consistent. The ILO (2023) estimated that around 220,000 workplaces were damaged by the earthquake with a decrease in activity correspond to the working hours of 657,147 full-time equivalent workers.

6. The ILO (2015) propose a formula to measure the estimated loss of home-based employment (ILO, 2015). This formula may be valid for those who work in small or family businesses whose workplace is close to home: The estimated number of employed persons whose home-based incomes or jobs are affected is calculated as: Employment loss = Estimated number of households (from the housing sector) that lost their dwellings as a result of the disaster × Estimated number of employed persons per household.

Figure 1. Number of registered workers in earthquake regions by month (2022/12–2024/12)



Source: Developed by the author based on data from the web pages of relevant public institutions and organizations.

Table 2. Number of permanent and temporary workplaces and insured workers in the earthquake region, 2022–2024

Indicator	2022 Dec	2023 Mar	2024 Mar	2024 Dec
SSI, Number of permanent workplaces	221,016	160,656	198,472	216,887
SSI, Number of compulsory insured persons in permanent workplaces	1,829,539	1,430,251	1,616,875	1,720,686
SSI, Number of temporary workplaces	23,860	15,855	22,042	29,137
SSI, Number of compulsory insured in temporary workplaces	348,109	287,649	481,163	513,680
SSI, Number of public workplaces	7,427	6,794	6,359	6,683
SSI, Number of compulsory insured in public workplaces	417,674	393,001	424,612	378,705

Source: Developed by the author based on data from the web pages of relevant public institutions and organizations.

Household Labour Force Surveys also provide a measure of the impact of the earthquake on the labour market to some extent. However, since these surveys cover the entire year, they do not reflect monthly changes. For example, within the framework of the debris removal and reconstruction works that started

Table 3. Employment and unemployment rate by earthquake region, (%) (2022–2024)

		Employment rate			Unemployment rate		
	Provinces	2022	2023	2024	2022	2023	2024
Group 1 Earthquake provinces	Hatay	43.1	38	44.3	14.4	15.6	12
	Kahramanmaras	41.8	39	44.4	15	14.6	11.8
	Malatya	45.9	43.9	48.8	7.2	6.4	5.6
	Adiyaman	42.9	39.4	43.8	17.2	12.2	11.1
Group 2 Earthquake provinces	Adana	44.1	43.7	46.6	15.3	14	11.4
	Diyarbakir	35.1	35.9	39.5	13.5	11.9	10.5
	Elazig	41.4	43.3	43	8.3	7.9	5.5
	Gaziantep	44.9	44.4	45.2	8.5	9.6	10.4
	Kilis	45	44.6	46.3	8.9	10.7	12.5
	Osmaniye	41.2	39.4	43.6	14.2	16.7	11
	Sanliurfa	40	41	42.3	9.7	9.9	8

Source: Developed by the author based on data from the web pages of relevant public institutions and organizations.

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immediately after the 6 February 2023 earthquake, employment started to increase a few months after the earthquake. Household Labour Force Surveys may be periodically weak in showing the impact of natural disasters. Nonetheless, they can provide broader information on the labour market since they also cover informal employment. According to Household Labour Force Surveys, the earthquake caused employment rates in Group 1 provinces (heavily damaged) to decrease by 2 to 5 points (Table 3).

Early retirement and survivors' benefits from the social insurance system

Early retirement. With the Law Act No. 7438,⁷ which entered into force on 6 March 2023, the age requirement for insured persons who were employed before the first pension reform (8 September 1999) was abolished nationwide. Although it seems problematic in terms of the financial sustainability of the public pension programme, this practice has significantly compensated the income losses of households, especially in the earthquake region. Due to the introduction of unemployment insurance in Türkiye only in 1999, early retirement was often

^{7.} The Law Act No. 7438 is known as the "Regulation for those who were not able to retire due to age".

perceived as a substitute for unemployment insurance (Iṣɪklı, 1999). The effective coverage of unemployment insurance is quite narrow due to the strict eligibility conditions for access (Kumaş and Karadeniz, 2017). Moreover, it is commonplace for employers who lay off workers to report that the workers have resigned voluntarily. This is done to avoid paying severance pay. It is estimated that only 20 per cent of unemployed workers receive unemployment benefits (Görmezöz, 2018). Therefore, those who retire early, say in their mid-40s, may see the old-age pension as a form of income replacement to be used while they are unemployed. Between March 2023 and March 2024, the number of people receiving the old-age pension in areas affected by the earthquake increased by 49,916 in Group 1 provinces (heavily damaged) and 129,351 in Group 2 provinces (other earthquake provinces), totalling 179,267 people.

Survivors' pension. Survivors' pensions are another possible arrangement used to compensate for household income losses in the earthquake region. According to Law No. 5510 of 2006 on Social Security and General Health Insurance, for survivors to receive benefits deceased workers must have been insured for a minimum of 5 years and paid 900 days of contributions; self-employed and civil servants must have contributed for a minimum of 1,800 days. After the 1999 earthquake, the conditions to qualify for the survivors' pension were eased. In the 2023 Kahramanmaraş-centred earthquake, however, the conditions to qualify for the survivors' pension were not eased. One of the reasons for this may be that the age condition to qualify for the old-age pension was abolished for those who were employed before 1999 and the people in the households affected by the earthquake were already entitled to the old-age pension without an age requirement. Regardless, in the period between March 2023 and March 2024, the number of survivors' pension beneficiaries increased by 3,868 in Group 1 provinces; and 11,226 in Group 2 provinces, totalling 15,094 persons due to the death of insured family members who satisfied the eligibility conditions.

Short-time working and unemployment insurance allowances, cash wage subsidies and active labour market programmes

Short-time working allowance payments were made to workplaces that ceased to operate or whose production decreased significantly due to the earthquake. Employers were able to claim a certain portion of the wages of workers who could not work due to the earthquake from the Turkish Employment Agency (İŞKUR) unemployment insurance fund. In this process, the number of days of paid contributions required to receive the short-time working allowance was reduced and application conditions were simplified (discussed below).

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According to the Labour Law No. 4857 (Art. 24/III), the employer is obliged to pay the wage for the first seven days of unemployment in the event that production stops in the workplace due to a compelling reason. As an emergency response, short-time working allowances were extended to cover the first seven days of the disaster for workplaces affected by the earthquake (Dörtlemez, 2023, p. 19).

Especially during disaster events, it is very difficult to document that a workplace has been severely damaged, workplace production has stopped, and workers cannot work. With regulation 125 of the Presidential Decree No. 125, the short-time working allowance is paid by İŞKUR in line with an employer's declaration without waiting for the completion of the determination of eligibility to be made by labour inspectors for the workplaces located in the provinces/ districts (Dörtlemez, 2023, pp. 19–20).

For those workers whose employment contract was terminated due to the closure of the workplace as a consequence of the effects of the earthquake and who did not qualify for an unemployment allowance within the scope of the same Law, and for workers who did not qualify for short-time working allowance, cash wage support similar to the short-time working allowance was introduced. Cash wage support is also financed from the unemployment insurance fund.

To deliver benefits, due to structural damage to the Provincial Directorates of Labour and Employment in the earthquake zones, the work of these bodies was carried out by Provincial Directorates that were not in the earthquake zone. Enabled by effective coordination between the Social Security Institution and IŞKUR and facilitated by strong IT infrastructure, payments were made to beneficiaries without delay.

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Unemployment allowances were an important source of support in the same period. The increase in the number of applicants for unemployment allowance in Adıyaman, Hatay, Kahramanmaraş and Malatya, the four provinces most affected by the earthquake, was greater than the Türkiye average in 2023. In the earthquake region (Group 1 and Group 2) the number of claims was greater than the Türkiye average in 2024 (Table 4). Comparing the pre-earthquake period with the year after the earthquake, unemployment allowance applications decreased by 8 per cent in Türkiye as a whole, while they increased by

^{8.} The monthly short-time working allowance is 60 per cent of the insured's average daily gross earnings calculated on the basis of the last 12 months' contributory earnings, and the amount of the allowance cannot exceed 150 per cent of the minimum wage. The duration of the allowance is the duration of the short-time working period and cannot exceed 3 months (see Short-time working allowance on the İŞKUR public website).

^{9.} The determination of eligibility is determined by the Ministry of Labour and Social Security within the framework of the regulation and/or the workplaces that document that they are destroyed, to be destroyed immediately, or heavily or moderately damaged due to the earthquake (Dörtlemez, 2023, pp. 19–20).

Table 4.	Number	and 1	rate (9	%) of	unemployed	people	applying	and	eligible	for
Unemplo							11,		C	-

Group	Application	Deserving	Eligibility rate (%)	Period
Group 1	67,241	29,115	43.3	2023 Jan
Group 1	92,132	31,365	34	2023 Dec
Group 1	70,139	25,014	35.7	2024 Dec
Group 2	163,440	73,109	44.7	2023 Jan
Group 2	138,238	54,345	39.3	2023 Dec
Group 2	139,430	61,904	44.4	2024 Dec
Group 3	3,185,019	1,522,788	47.8	2023 Jan
Group 3	2,737,380	1,261,010	46.1	2023 Dec
Group 3	2,776,429	1,353,572	48.8	2024 Dec

Source: Compiled by the author based on data from the web pages of relevant public institutions and organizations.

63 per cent in Hatay, 38 per cent in Adıyaman, and 24 per cent in Kahramanmaraş and Malatya. 10

Of note, the ratio of those who are entitled to unemployment allowance compared to those who applied for unemployment allowance in the earthquake region is lower than the Türkiye average. One reason for this may be the difficulty of satisfying the number of days of paid contributions required to qualify for the unemployment allowance. Another reason may be that the employees of the heavily damaged workplaces that were destroyed were not entitled to the allowance due to the inability of the employers to carry out the exit procedures. 11

Other arrangements made in 2024 were changes to eligibility conditions for vocational training courses and on-the-job training programmes in earthquake-affected provinces. Some flexibility has been provided for the active labour market programmes implemented by İŞKUR in the earthquake zone. According to Law No. 4447, the wages and insurance contributions of trainees and participants participating in vocational training courses and on-the-job training programmes organized by employers are covered by the Unemployment Insurance Fund. Employers must retain in employment at least 70 per cent of trainees participating in vocational training courses and on-the-job training

^{10.} Labour market data sourced from İŞKUR (not publically available).

^{11.} In order for an employee to qualify for unemployment allowances, the employer must notify the termination of the employment contract to the Social Security Institution, as required by the related social security regulations; this notification forms the basis for the eligibility assessment under Law No. 4447 on Unemployment Insurance.

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programmes for a period that is twice the duration of the course and programme. These employer commitments have been reduced from 70 per cent to 30 per cent for Group 1 earthquake provinces, with the arrangement made in the regulation, and the duration of the employment period has been reduced (from twice) to coincide only with the duration of the course and programme. For example, while seven out of ten trainees participating in a 90-day on-the-job training programme in non-earthquake provinces must be employed by the employer for at least 180 days, in Group 1 earthquake provinces, it is sufficient for the employer to employ three employees for 90 days in order to fulfil its commitment to İŞKUR. In Group 2 earthquake provinces, it is 40 per cent of the trainees/participants. The employment period is 1.5 times the course and programme duration.

With these measures, it is aimed to accelerate the economic and social recovery of the region. Between 2023–2024, a total of 32,920 people in 11 provinces benefited from these programmes, with an expenditure of 1.7 billion Turkish lira (TRY) (SBB, 2025, pp. 46–47).

Contribution deferrals

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It is estimated that small and medium-sized enterprises were particularly affected by the earthquake. In the Group 1 provinces most affected by the earthquake (Kahramanmaraş, Hatay, Adıyaman, Malatya), the social insurance contribution collection rate for employees decreased from 87 per cent as of December 2022 to 44 per cent in 2023. For self-employed workers, the collection rate declined from 58 per cent to 26 per cent in the same period (Alıç, 2024). However, no financial penalties (paid with interest) for the late payment of contributions were applied. Further, no contribution deductions were made by employers on the workers' cash support up to TRY 50,000, paid by employers to the insured in the provinces affected by the earthquake (Alıç, 2024). The deadline for the submission by employers of contribution records to the Social Security Institution was extended to 31 July 2025. The contribution arrears of small and medium-sized enterprises, employers and self-employed workers in the earthquake region were postponed until June 2025 or December 2025, depending on the nature of the arrears (SBB, 2025, p. 48).

12. Employers who meet the criteria determined by the Ministry of Treasury and Finance in Group 1 Provinces (taxpayers whose cumulative price constituting the provision of deliveries and services included in the last term value added tax declaration to be submitted for the 2022 calendar year is less than TRY 2.5 million) (See SBB, 2025, p. 48).

The AFAD provided TRY 10,000 in cash support per household and also provided TRY 15,000 relocation assistance to families leaving the earthquake-hit cities, TRY 5,000 in monthly rent assistance to tenants, and TRY 12,000 in monthly assistance to homeowners for a maximum period of 12 months. Survivors' benefits, paid as lump-sum social assistance, were paid to the relatives of the deceased. Those whose homes were destroyed in the earthquake were first provided with tents for shelter and then accommodated in prefabricated houses. The construction of permanent housing for households whose houses and workplaces were destroyed in the earthquake continues through the Housing Development Administration (TOKI).

During the post-earthquake period, a large part of the social assistance has been provided by the AFAD and the expenditure necessary for the provision of prefabricated housing and permanent housing has been provided from the general budget. To provide additional resources for the general budget, an additional motor vehicle tax was levied in 2023.

In a disaster context, the scrutiny that normally accompanies the award and provision of social assistance may have to be relaxed. In Türkiye, a number of flexible practices were adopted to avoid disruption in the delivery of social assistance in the earthquake zone. For example, social assistance beneficiaries in the disaster area were exempted from having to provide proof of their permanent address, the contribution arrears of self-employed workers were not taken into account while in receipt of social assistance, and certain entitlements of the family support programme were continued where otherwise they may have been suspended (SBB, 2025, p. 49).

The number of people benefiting from regular social assistance in the earthquake region increased by 220,000 compared to the pre-earthquake period and reached 1,997,597 in 2023. In addition, approximately TRY 3.4 billion was transferred from the general budget to social assistance and solidarity foundations. As part of the immediate social assistance measures following the 2023 earthquakes, the Turkish government and affiliated agencies implemented "social markets, providing essential goods free of charge to disaster victims

through both fixed locations and mobile units. This initiative helped address urgent consumption needs, prevent distress sales of household assets, and contributed to absorptive resilience capacity by sustaining basic livelihoods. In the earthquake region, approximately 300 social markets and mobile social markets provided services to meet the urgent needs of disaster victims" (SBB, 2025, p. 49).

Housing

Shelter remains one of the most critical social needs in the aftermath of large-scale disasters. In the 2023 earthquake response, Türkiye initially deployed tent cities, which were subsequently replaced by over 214,000 container units accommodating approximately 650,000 individuals (SBB, 2025, p. 19). In parallel, the Natural Disaster Insurance Institution (DASK) paid TRY 39.2 billion in compensation across 506,657 claims in 28 earthquake zones (SBB, 2025, p. 20). Although DASK is a legally mandatory insurance scheme for residential buildings in urban areas, only 1.1 million of an estimated 5.4 million dwellings affected region were actually insured, reflecting widespread non-compliance and enforcement gaps. As a result, insurance coverage amounted to just 8 per cent of the projected TRY 964 billion reconstruction cost (Özüdoğru, 2023, p. 21). With such limited risk pooling, the financial burden of rebuilding has largely fallen on the general budget. Public institutions - including the Ministry of Environment, Urbanisation and Climate Change, AFAD, and TOKİ – have led the construction of 391,245 permanent disaster-resilient homes, of which 201,431 have been completed, along with 42,000 new commercial units (SBB, 2025, p. 23).

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Health services

Within the scope of general health insurance, the Social Security Institution decided not to charge co-payments for medical examinations, medicines and medical supplies. This was done to prevent the inequitable treatment of patients when visiting health service providers and when procuring medicines and/or continuously used health care products and medical supplies. Further, regulations that could hinder access to health services have been relaxed (SGK, 2023). According to the Social Insurance and General Health Insurance Law No. 5510, self-employed workers and general health insurance holders who pay their own contributions cannot benefit from health services if they have contribution arrears (except for natural disasters and emergencies). However, it has been ensured that the said groups with contribution arrears after the earthquake will benefit from health services without interruption until 31 December 2025, regardless of arrears

(SBB, 2025, p. 47). These practices have expanded the effective scope of health services and ensured that all disaster victims benefit from access to necessary care under General Health Insurance coverage.

Social security and digital infrastructure

The short-time working allowance and cash wage subsidies were distributed rapidly due to the ITC capacities of İŞKUR and the Social Security Institution (e.g. e-Government integration, online application forms). Moreover, the Disaster Management and Decision Support System (AYDES) is an integrated geographical information system developed by AFAD that can carry out disaster management in a holistic manner in a digital environment. The system supports effective execution of disaster-related processes before, during and after natural disasters. With AYDES, damage assessment integration and instant data flow regarding destruction, deaths, and requests for social support, logistics and resource dispatch management were provided immediately after the earthquake. In the aftermath of the disaster, the follow-up of the processes of social assistance given to households, management of shelter areas, debris removal, among others, were undertaken rapidly. AYDES' data-based analyses are integrated with the e-governance systems of the Social Security Institution, Social Assistance and Solidarity Foundations, Population and Citizenship Affairs and many other public institutions.

For the immediate granting of social assistance, the Integrated Social Assistance Information System used by the Social Assistance and Solidarity Foundations performs income tests required with the data it receives from different public institutions and organizations (ESCAP, 2024).

Discussion: The 2023 earthquakes and the resilience of the social security system

Türkiye's social security response to the 2023 earthquakes can be classified according to the resilience framework of Béné et al. (2012): absorptive (coping) measures, such as cash transfers and short-time working allowances; adaptive measures, such as the simplification of eligibility conditions and administrative procedures; and transformative measures, including the establishment of a disaster fund¹³ and

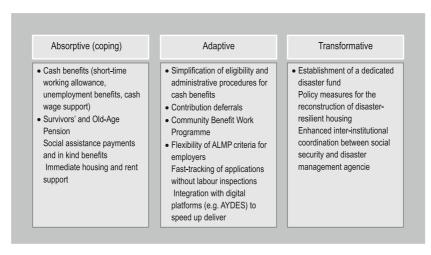
Following the 2023 Kahramanmaraş-centred earthquake, the enactment of Law No. 7441, 21 March 2023, which provides for the establishment of the Disaster Reconstruction Fund (Afet Yeniden *İmar Fonu*), reflects a transformative policy commitment to strengthen disaster risk financing in Türkiye. Although the Fund remains in its institutional set-up phase, it represents a forward-looking initiative aimed at securing dedicated and sustainable resources for post-disaster reconstruction and resilience-building efforts (See online source: Official Gazette, No. 32139, 21 March 2023).

The social protection measures taken after the earthquakes in Türkiye are summarized in Table 5. It is estimated that, as of 2023, the combined cost of short-time work allowances, cash wage support, survivors' pensions, community benefit work programmes, and unemployment allowances corresponds to approximately 0.5 per mille (‰) of GDP. In the 2023–2024 period, public expenditures to compensate for the losses and damage caused by earthquakes and for reducing disaster risks totalled approximately the equivalent of 75 billion US dollars at end-2024 prices (SBB, 2025). The most important item of these expenditures is infrastructure and housing projects. It is estimated that earthquake-related expenditures correspond to 3 per cent of GDP in 2023 and in 2024.

Of further importance, the easing of bureaucratic procedures in the immediate aftermath of the earthquakes – to facilitate access for employers, insured persons, and social insurance and social assistance beneficiaries to social security services – has greatly expanded effective social security and health coverage.

Specifically, following the loss of 650,000 jobs in the earthquake zone, 435,000 people have received support from the unemployment insurance fund, while the Social Security Institution has provided early pensions and survivors' pensions to around 197,000 people (Table 6). Across the earthquake zone, the trajectory of the regions' poverty rates offer an indication of the effectiveness of

Figure 2. Classification of Turkish social security measures for the 2023 earthquake using the resilience framework of Béné et al. (2012)



Source: Author's elaboration using national reports and Béné et al. (2012).

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Social protection measure	Policy summary	Funding source
Short-work allowance	Application procedures have been simplified for employers.	Unemployment Insurance Fund
Cash wage support	Support was provided to people who could not qualify for other unemployment benefits.	Unemployment Insurance Fund
Community benefit programmes (TYP)	TYP programmes were initiated for debris removal and reconstruction works.	Unemployment Insurance Fund
On-the-job training and vocational training courses	Employers' post-programme employment obligations were reduced.	Unemployment Insurance Fund
Old-age and survivors' pensions	The applications were prioritised and the eligibility periods were extended.	SSI and General Budget
Easing of contribution conditions for employers and tradesmen	Contribution payment and notification periods are postponed.	Social Security Institution (SSI)
Social assistance	Benefit and eligibility conditions have been relaxed.	General Budget
In-kind aid	With social market applications, disaster victims were provided with quick access to basic needs.	General Budget
Rent and removal assistance	Rent support and moving expenses were met for disaster victims.	General Budget
Temporary and permanent housing construction	Container cities were established and permanent residences were built.	General Budget, TCIP, Donation Campaign
Cash assistance to households	TRY 10,000 was paid to the damaged households and TRY 100,000 to the relatives of the deceased.	General Budget, Donation Campaign
Health service facilities	Disaster victims were provided with over-the-counter medicines, exemption from co-payment and bureaucratic flexibility in health procedures.	SSI

Source: Compiled by the author from the web pages of relevant public institutions and organizations.

these social security expenditures. In income and living conditions surveys, the poverty rate of each year is calculated by taking into account the income of the previous year, i.e. the poverty rate in 2024 considers 2023 incomes. In almost all earthquake provinces (except Gaziantep, Adıyaman, Kilis – TR C1), it is observed that poverty showed a small decrease compared to the previous year. It can be said that the income, allowances, pensions and social support provided to households (with and without contributory coverage) from the social security system prevented the increase in poverty to a great extent following the earthquake (Table 7). One of the key components reflecting the absorptive capacity of the social protection system in the aftermath of the earthquakes was the implementation of short-time working allowance and cash wage support.

Table 6. Social transfers to the earthquake region by İŞKUR and the SSI, no. of people, amount (TRY), (2023)

Institution	Social transfer	Number of people	Estimated annual amount (2023)
İŞKUR	Unemployment allowance *	96,707	386,828,000
	Short-work allowance	117,108	990,094,487
	Community benefit work programme	139,974	14,008,597,920
	Cash wage support	82,000	700,000,000
	Total	435.789	16,085,520,407
SSI	Survivors' benefits ** after earthquake	15,094	566,025,000
	Old-age pension after the earthquake***	179,267	13,445,025,000
SSI Total		194,361	14,011,050,000

Notes: *Number of unemployment benefit applications and amount paid are estimated. **When calculating the Survivors' benefits, those who received a pension for the first 10 months for 2023 were calculated receiving over 50 per cent of the minimum pension. ***Minimum old-age pension is taken into consideration.

Source: Compiled by the author based on data from the web pages of relevant public institutions and organizations.

Table 7. Poverty rates in the earthquake region (2014–2024), (%)

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	Adana, Mersin-TR62	Gaziantep, Adıyaman, Kilis-TRC1	Hatay, Kahramanmaraş, Osmaniye-TR63	Malatya, Elazığ, Bingöl, Tunceli-TRB1	Şanlıurfa, Diyarbakır-TRC2
2014	21	14	18	19	17
2015	17	14	19	18	22
2016	22	14	19	19	18
2017	20	12	19	17	15
2018	20	14	17	13	18
2019	20	12	20	16	17
2020	20	14	14	16	13
2021	22	13	19	10	17
2022	21	8	20	12	13
2023	18	8		19	14
2024	18	10	20	18	13

Note: The poverty rate of each region is considered as the proportion of people below 60 per cent of the median income of each region.

Source: Compiled by the author based on data from the web pages of relevant public institutions and organizations.

	General informal employment rate		Informal employment rate in non-agro sector		
Status at work	Türkiye	Earthquake region	Türkiye	Earthquake region	
Employer	13	16	11	12	
Own account	57	60	47	53	
Unpaid family labourer	85	90	65	73	
Paid and salaried	10	17	9	15	
Casual	84	93	77	85	
General	28	36	17	24	

Source: Compiled by the author based on data from the web pages of relevant public institutions and organizations.

According to the field survey conducted by İŞKUR in September–October 2023, 66.1 per cent of enterprises reported that they maintained their employment levels even after these supports ended. This finding indicates that the provided measures helped prevent further employment losses and contributed significantly to the recovery of workplaces in the region.¹⁴

The 2023 earthquakes in Türkiye posed a significant threat to household resilience, particularly for low-income groups facing the loss of homes, businesses and employment. Early assessments anticipated sharp increases in poverty and inequality due to widespread asset destruction and limited access to financial compensation (Özüdoğru, 2023). Yet, poverty levels in the region have not risen as severely as expected, indicating that Türkiye's social security system has played a critical role in strengthening the resilience of affected households, at least in the short term. Rapidly delivered cash benefits, early retirement allowances, and social assistance programmes helped mitigate the immediate income shocks and supported household consumption in the aftermath of the disaster. These mechanisms functioned as effective coping tools by stabilizing income and preventing deeper destitution. However, important gaps remain in the system's capacity to protect all vulnerable populations. With an informal employment rate of 36 per cent in the earthquake region - well above the national average - many workers remained outside the reach of contributory programmes (Table 8). This includes small-scale tradesmen, casual agricultural labourers, and unpaid spouses of self-employed workers who are excluded under the eligibility rules of Law No. 5510 (Karadeniz, 2011). These limitations illustrate the need to further extend both legal and effective coverage to ensure that the protective functions of the social security system are equitably distributed and truly universal in times of crisis.

14. Data sourced from İŞKUR (not publically available).

In contrast, the non-contributory social assistance system has responded rapidly, but it is fragile in terms of financial sustainability. Although institutional capacities in Türkiye are highly developed, it is observed that the normative framework does not sufficiently include the need to respond systematically to disaster risk.

The transformative capacity of Türkiye's social security and urban policy framework following the 2023 Kahramanmaras-centred earthquake is reflected not only in the reconstruction of affected areas but also in proactive measures targeting disaster risk reduction in high-risk cities. A notable example is the Yarısı Bizden (Half of Us) campaign, introduced exclusively for İstanbul in response to heightened public awareness of seismic vulnerability. This initiative represents a shift towards pre-disaster structural resilience by incentivizing the voluntary renewal of risky housing stock. Under the scheme, the government provides homeowners with a comprehensive support package of TRY 875,000 in grants, TRY 875,000 in interest-free loans, and TRY 125,000 in relocation assistance - amounting to TRY 1,875,000 per residential unit. For additional units owned by the same beneficiary, a loan of up to TRY 1,750,000 is available. Loan repayments are deferred until two years after obtaining the construction permit and are structured over a 10-year term, with no interest applied in the first year. In large-scale collective urban renewal projects (e.g. housing estates), construction is undertaken by public developers such as TOKİ and the Emlak Konut Real Estate Investment Trust, with the grant amount deducted from total costs and the remainder offered on favourable long-term conditions. Although the campaign does not apply directly in the earthquake-affected provinces, it demonstrates a transformative, forward-looking approach to reducing disaster risk through voluntary, state-supported urban regeneration.¹⁵

Conclusion and policy lessons

Natural disasters are not traditionally classified as direct social risks within the framework of conventional social security systems. However, their consequences

15. For more information, see Questions and Answers on Half of Us.

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often fall squarely within the scope of social security intervention. In particular, earthquakes affect not only physical infrastructure but also employment, household income, housing, access to food, and essential health services. In such contexts, the capacity of social security systems to enhance household resilience becomes critically important. At the same time, in order to fulfil this function effectively, the social security system itself must demonstrate institutional and financial resilience. The 2023 Kahramanmaraş-centered earthquakes in Türkiye offer important lessons in this regard, as the social security system provided a coordinated and comprehensive response during and after the crisis.

Resilience framework findings

The earthquake experience of the Turkish social security system shows that traditional social security programmes should be designed not only as social protection mechanisms, but also as integral components of disaster and crisis management. Cash benefits played a key role not merely in compensating for income losses, but also in protecting household consumption, preventing distress migration, and sustaining links with the labour market. In this way, cash transfers contributed significantly to strengthening the long-term resilience of affected populations and helped to prevent a deepening of poverty in the disaster-stricken areas. From the perspective of resilience capacities (Béné et al., 2012), the coping function of the social security system was largely fulfilled, while adaptive capacity was enhanced through the simplification of benefit eligibility conditions and administrative processes, enabling rapid delivery of support to those affected. The transformative dimension was reflected in forward-looking measures, such as the establishment of a dedicated disaster fund, the acceleration of urban transformation projects, and the launch of campaigns such as Yarısı Bizden (Half on Us) to encourage the reconstruction of at-risk housing stock. Housing, while not always formally integrated into social security systems, constitutes a fundamental pillar of social protection. In Türkiye, housing reconstruction and resilience have largely been financed through household savings combined with state support. However, such state support is predominantly funded through indirect taxes, which - being regressive rather than progressive - may exacerbate income inequality and limit the equitable distribution of the financial burden of disaster recovery.

Financial sustainability and coverage challenges

The capacity of social security systems to protect households against the severe shocks of natural disasters is closely linked to their own institutional and

Empirical studies confirm that Türkiye's tax structure – particularly its reliance on indirect taxes - has a limited redistributive effect and may even exacerbate inequality. Yılmaz, Özyer and Özyer (2019)consumption-based taxation in Türkiye tends to be regressive, imposing a heavier relative burden on low-income households. In the context of disaster recovery, this reliance on indirect taxation implies that the poorest segments of society disproportionately bear the cost of reconstruction, further underscoring the need for progressive and equitable financing mechanisms. These could be financed through progressive taxes on wealth or land value rather than consumption taxes, which may disproportionately impact low-income households. Strengthening resilience requires not only sustainable financing but also the broadening of legal and effective coverage. Informal workers remain excluded from most social insurance benefits, limiting the reach of social security as an effective buffer against disaster-related income shocks. Expanding formal employment is therefore critical to enhance the shock-absorbing function of social security systems in future crises. Furthermore, the impact of social security transfers on household and individual resilience cannot be fully assessed due to data limitations. The collection of post-disaster data through surveys such as the Income and Living Conditions Survey faces significant challenges, particularly due to internal displacement and migration. This calls for innovative approaches to combining administrative records with targeted surveys to better understand and support household resilience.

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Policy lessons for other countries

Türkiye's integrated and rapid social security and disaster management response offers valuable policy lessons for other countries confronting rising disaster risks. Social security systems must be designed as proactive pillars of disaster risk management, simultaneously strengthening the resilience of affected individuals and households, and ensuring their own capacity to withstand and respond to future crises. To achieve this, it is essential to reinforce digital infrastructures, improve coordination with disaster management agencies, develop equitable and

With robust governance, inclusive coverage, and innovative data systems that can effectively capture the impact of shocks even amid internal migration, social security systems can fulfil their role as automatic stabilisers and key agents of resilience in the face of future natural disasters. Türkiye's experience shows that resilience requires not only immediate responses but also structural reforms that can serve as a model for countries seeking to build disaster-ready social protection systems. As demonstrated in Türkiye's earthquake response, social security systems can act quickly in crisis situations. However, long-term resilience requires not only efficient responses but also structural preparedness. As the ILO (2024, p. 26) clearly states, "disaster response is an ancillary, not a primary function of social protection". Building resilient systems thus requires prioritizing ex ante mechanisms that reduce vulnerability before shocks occur.

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Social protection and the climate crisis: The case of Brazil's emergency responses to the 2024 Rio Grande do Sul floods

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Abstract The 2024 floods in the state of Rio Grande do Sul. Brazil, prompted the largest and most rapid response to an extreme weather event in the country's history. Brazil is a compelling case for analysing shock-responsive and climate-adaptive social protection because of its high level of decentralization and significant maturity of its social protection system. Brazil is also highly susceptible to climate risks, and as climate change intensifies, bringing more frequent and severe weather events, strengthening the resilience of social protection systems becomes increasingly vital. This case study examines the Brazilian government's emergency responses, with a particular focus on the federal and state interventions, drawing from an analysis of the official literature and key informant interviews. The analysis shows how significant levels of emergency support were mobilized by federal and state governments, and the system features that enabled a quick response, such as the use of technology for mapping affected areas and the use of existing government databases. Nonetheless, actors faced challenges in terms of coordination between different levels of governance and in terms of emergency preparedness. This study provides some reflections

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on the obstacles encountered by federal and state actors and points to areas for further improvement at the system level.

Keywords social protection, resilience, climate change, disasters, flood, Brazil

Introduction

The floods that impacted Brazil's southernmost state, Rio Grande do Sul, in May 2024 are considered one of country's largest climate-related disasters (MIDR, 2024b), being of an unprecedented scale that surpassed the flooding events previously experienced by several of the state's municipalities in 2023. The variability in rainfall that led to this extreme weather event was associated with the El Niño Southern Oscillation (ENSO) combined with a series of factors that led to an unusually high level of precipitation over an extensive area of the state (Marengo et al., 2024). Over 90 per cent of municipalities in the state were impacted, 183 people died, over 800 were injured (Defesa Civil RS, 2024) and at the peak of the flooding over 600,000 people were displaced or living in shelters (Rio Grande do Sul State Government, 2024a) (Figure 1).

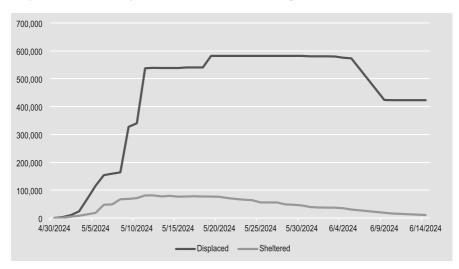
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This extreme weather event prompted the largest and most rapid disaster response in the country's history (MIDR, 2024b). Families that were displaced by the floods in Rio Grande do Sul in 2024 could access multiple responses delivered by the federal, state and municipal-level governments. This article focuses on the federal government's *Auxílio Reconstrução* (AR) and the state government's updated *Programa Volta Por Cima* (PVPC), the latter being a programme previously initiated in response to the 2023 floods that had affected a smaller group of municipalities. As emergency support measures delivered as cash transfers by the governments and leveraging some mechanisms of regular social protection – such as recipient databases, human resources and payment channels – these programmes represent important examples of shock-responsive and adaptive social protection (Beazley et al., 2024; Costella et al., 2023; O'Brien et al., 2018).

Brazil is vulnerable to the effects of climate change (World Bank, 2021), so it is crucial to ensure better emergency preparedness through its social protection system. The scale of the 2024 flooding events and of the responses, combined with the significant challenges faced, warrants a detailed analysis that can support efforts to improve social protection system-level resilience building. In the context of this article, resilience is thus understood as a system's capacity to "resist, absorb,

Social protection and the climate crisis: Brazil's response to the 2024 floods

Figure 1. Numbers of people displaced and numbers of people living in shelters due to the floods in the state of Rio Grande do Sul, Brazil (April to June 2024)



Note: The report from 14 June 2024 is the most recent to contain both data on those displaced and sheltered. Source: Author's elaboration based on data from the Rio Grande do Sul State Government (2024a).

accommodate, adapt to, transform and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions through risk management" (UN, 2017, p. 22).

At the system level, the recurrence of floods had already motivated the institutionalization of the PVPC at the state level, and policy learning through implementing this programme since 2023 was quick and enabled a faster response by the state in 2024. The 2024 disaster also led to significant changes in federal-level social assistance emergency processes. For instance, it prompted the creation of *Força de Proteção do SUAS* (FORSUAS), a national rapid-response team within the social assistance system (SUAS) to provide immediate aid in emergencies and disasters across the country, prioritizing vulnerable populations (MDS, 2025a). The creation of a Permanent Committee for Responses through Social Protection in Calamities and Emergencies (*Comitê Permanente para Respostas de Proteção Social em Calamidades e Emergências*), launched by the Ministry of Social Development (MDS) in 2025, also follows from these events, and is now responsible for monitoring MDS's specific goals related to the national climate plan (*Plano Clima*)¹ and to the national civil defence plan (MDS, 2025b).

1. More information on Brazil's national climate plan (in Portuguese) is available here.

By employing a case study approach based on a desk review and interviews with key informants involved with the responses, this study seeks to contribute towards the documentation of these important emergency response efforts. The analysis also provides reflections on the key challenges encountered by federal and state actors and areas for further improvement at the system level.

The study proceeds as follows. First, an outline of the framework of analysis and the methodology is presented, then the case study is introduced with an overview of the financing and normative frameworks of the federal and state-level responses. A reflection follows on the existing coordination and preparedness mechanisms and the process of identifying the affected areas; succeeded by a presentation of the design of the interventions; and more information on the enrolment and delivery processes. Implementation capacity challenges are then highlighted and existing monitoring and evaluation efforts and gaps discussed. The article concludes by offering the main lessons from the case and highlight points for further reflection.

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Framework of analysis and methodology

Social protection systems' role in dealing with covariate shocks is increasingly recognized worldwide, especially after the COVID-19 pandemic prompted an unprecedented scale-up of these policies (Barca, 2020; Gentilini et al., 2020; O'Brien et al., 2018). The framework of analysis of this case study is based on the body of work on shock-responsive and adaptive social protection (Beazley et al., 2024; Costella et al., 2023; O'Brien et al., 2018), which highlights the set of system-level and programme-level features that enable scalability and better emergency responses as well as contribute towards climate adaptation.

More specifically, this literature points to the need for readily available financing, pre-existing emergency protocols, intersectoral coordination structures, updated and complete recipient databases that can be drawn from (and simplified intake mechanisms where new information is needed), accessible

payment systems, among other system and programme features which enable a more effective response to a large-scale shock (Beazley et al., 2024; O'Brien et al., 2018). Emerging work is also being undertaken to highlight how social protection can also be leveraged to address the negative social impacts of climate change, including increased poverty levels due to extreme weather events (Costella et al., 2023).

Based on these prior studies, the guiding research questions for this case study are the following:

- How aligned were the federal and state-level responses to the 2024 floods with existing recommendations on shock-responsive and climate-adaptive social protection?
- What were the main challenges and lessons identified by key stakeholders involved with the responses at the state and federal levels?
- What changes to social protection and disaster response protocols has this event prompted in federal and state processes to future disaster responses, which support system-level resilience?

The analysis presented in this case study is based on a desk review and an analysis of the literature focused on official government documents and web pages concerning the interventions at state and federal levels, as well as data analysis of the datasets the government has made available with the total recipient numbers and allocated budget. This review is complemented by interviews with five key informants at municipal, state and federal levels, conducted in February 2025 and April 2025.

The selection of interviewees was based on their active involvement in the design and/or implementation of the emergency response measures. At the state level, interviewees were identified in the State's Department of Economics and Statistics, which was directly in charge of the mapping of affected areas and the PVPC design. At the federal level, an official request for an interview was submitted to the electronic information system used by the Ministry of Integration and Regional Development (MIDR). Interviews were also held with social assistance government representatives at the municipal level and at the MDS. Interviews were semi-structured, containing questions designed to fill gaps identified in the literature review.

Institutional context and financing of the emergency responses

The Brazilian social protection system provides substantial coverage of the population through various programmes and relies on a network of decentralized social assistance services provided by social workers and other professionals (SUAS) as well as several databases at the federal level, including the Unified

Registry (*CadÚnico*) which contains information from over 40 per cent of the national population. Brazil's system has also responded to several stress tests over time, most recently during the COVID-19 pandemic, when rapid emergency support was provided to over 60 per cent of the population (Brollo, Lara Ibarra and Campante Vale, 2024) by leveraging the interoperability between several of the government's databases (Malhotra, Mittal and Assumpção, 2022). Moreover, the Rio Grande do Sul state had already developed its own cash transfer programmes to deal with extreme weather events in 2023, when several municipalities were hit by severe flooding.

When the 2024 floods occurred, all these experiences informed the responses. At the state level, the PVPC was instituted by the State Law 15,977 of 12 July 2023, which enabled the state to offer financial support to affected populations living in poverty in case of extreme weather events. The specific format of different subsequent editions of this programme have been set out by specific executive orders – the 2024 edition of the PVPC was regulated by Decree 57,607 from 10 May 2024. The 2024 edition of the PVPC reached 100,784 families with a total disbursement of BRL 251,96 million (around USD 48,7 million)² from the state government (Rio Grande do Sul State Government, 2024d). Besides the PVPC, which was entirely supported via public funds and targeted to people living in poverty and directly impacted by the floods, an additional programme was created for people who were just above the poverty line as used by the PVPC programme. Pix Solidario was funded through private donations channelled through the state government. Funds were received through the same state government bank account opened in 2023 for the receipt of private donations when the flooding events of that year took place. In total, 36,800 families were reached with donations amounting to BRL 73,658,000 (Rio Grande do Sul State Government, 2024c).

Responding to the scale of the floods in Rio Grande do Sul also required a comprehensive response package from the federal government, and a new emergency programme, the *Auxílio Reconstrução* (AR). The federal package of emergency responses, which went beyond social protection alone, comprised the largest financial allocation, to date, to address climate emergencies. This normative device allowing the Executive to open extraordinary credit lines in the case of calamities was introduced in 2001.³ In practice, over BRL 12 billion (around USD 2.32 billion) were directed to address the floods, funded via extraordinary credits, which equates to almost 16 per cent of the total emergency credits requested by Brazilian presidents since 2001 (Brazilian Senate, 2024).

^{2.} Using a conversion rate of 5.17 Brazilian reais (BRL) per US dollar (USD) applicable in May 2024.

^{3.} Extraordinary credits are opened by the Executive, and this action does not require the identification of specific funding sources at the time of opening. The expenses can be financed through financial surpluses from previous years, excess revenue collection, cancellation or reduction of other expenses, loans and credit operations, or other legally authorized sources.

Social protection and the climate crisis: Brazil's response to the 2024 floods

Table 1. Normative frameworks related to the federal government's emergency responses

2024	Document	Content
11 May	Provisional Decree 1,218	Opens extraordinary credit lines to several government agencies to respond to the floods
15 May	Provisional Decree 1,219	Launches the AR programme
21 May	Ministerial Order 1,774	Ministerial guidelines for implementing the AR programme
23 May	Provisional Decree 1,223	Opens extraordinary credit lines to several government agencies to respond to the floods, including the AR programme
6 June	Provisional Decree 1,228	Institutes the AR programme
7 June	Normative Instruction 4	Instructions for implementing the AR programme
19 June	Provisional Decree 1,235	Provides additional budget to MIDR for increasing the coverage of the AR programme
27 June	Ministerial Order 2,290	Establishes deadline for municipalities to register families for the AR programme (12 July 2024)
12 July	Ministerial Order 2,499	Extends deadline for municipalities to register families for the AR programme (26 July 2024)
6 August	Provisional Decree 1,250	Extends geographical reach of the AR programme to municipalities that had declared state of public calamity or emergency after prior Provisional Decrees

Source: Author's elaboration based on the literature review.

The AR programme was initially designed to reach a total of 240,000 families with a budget of BRL 1.23 billion, but was expanded to reach a total of just over 424,000 families by 18 June 2025 and with an allocation of around BRL 2.16 billion (around USD 418 million) (Presidência da República, 2024; Portal da Transparência, 2025). The normative frameworks associated with the AR programme are outlined in Table 1. The programme's financing and design were determined by several provisional executive-level orders (*Medidas Provisórias*, in Portuguese) issued between 11 May 2024 and 6 August 2024, as there was not a pre-designed emergency response. Discussions were held at the highest levels of government to decide which ministry should implement the response. Though the Ministry of Social Development (MDS) was also initially considered as the entity in charge of social assistance in the country, the implementation responsibility for the AR programme was given to the Ministry of Integration and Regional Development.⁴

4. Personal communication with *Ministério da Integração e do Desenvolvimento Regional* (MIDR), 16 April 2025.

When the 2024 floods occurred, there was no readily available flood risk mapping to draw on, but the state government administration had already significantly improved its capacity to map flood-affected areas with the use of high-resolution satellite images. Robust proactive flood risk mapping at scale in the state was not yet implemented due to high costs, data gaps, and lack of political will. In the 2023 response to flooding that affected several municipalities, the state administration relied on coordinates from the municipal Civil Defence reports, which were often preliminary estimates and sometimes marked emergency shelters rather than actual disaster sites. Additionally, they used addresses from the Unified Registry, but many were incomplete or informal (e.g. "the red house on the corner"), making geolocation difficult. Manually cross-referencing these datasets to determine eligibility for the 2023 PVPC delayed payments by 2-3 months. In 2024, the process was transformed with the use of high-resolution satellite imagery from a private company (Planet Labs Inc.) contracted by the state government before the flooding events of May 2024. These images, with a resolution of 3 metres, allowed the team to identify flooded areas, landslides, and other damage with far greater precision. The team also partnered with external companies, such as Google, which provided their georeferencing services free of charge for cross-referencing addresses from the Unified Registry.⁵

Some limitations were still observed in 2024. These included, for example, restricted download quotas for the satellite images, limiting the government's autonomy in processing data. Cloud cover also presented some challenges that were addressed in collaboration with municipalities, which self-declared affected areas using polygons on Google Earth. Overall, however, this innovative hybrid approach, combining satellite data, municipal input, and automated geolocation, enabled a more rapid and accurate identification of affected areas compared to the 2023 responses' methods.⁶ The resulting mapping of the Directly Affected Areas (*Área Diretamente Atingida* – ADAs) along with socioeconomic data and information about the emergency interventions was made available online.⁷

Coordination between different state actors proved to be challenging in some key respects, such as in the identification of the affected areas. In terms of vertical coordination between federal and state levels, while both initially shared a common methodology for mapping affected areas, their approaches diverged

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^{5.} Personal communication with Departamento de Economia e Estatística (DEE RS), 6 February 2025.

^{6.} Personal communication with DEE RS, 6 February 2025.

^{7.} This article is supplemented by an online Appendix (developed by the author and made available to readers). For the mapping of ADA's produced, see Supporting Information, Figure A.1. For a list of legislative sources, see Table A.1.

due to logistical and technical differences. The federal government's mapping leaned more on hydrological projections and Sentinel satellite imaging (of lower resolution, 10 metres, but provided for free) (INPE and CEMADEN, 2024), without the extra layer of municipal self-declarations. The federal team instead formed a task force to visit affected areas where there was conflicting information being received from the satellite data and the municipalities to refine the borders, which was the case in around 80 municipalities. This process resulted in several updated versions of the federal map and to discrepancies between the mapping outputs by state and federal levels. The last version (3.17) of the federal map contained 173,221 households (out of a total of 595,521) that were not in the state mapping, while the mapping used by the state government had 43,221 households that were not in the federal mapping (out of a total of 465,521). A unified approach would have been ideal for policy coordination, but conflicting timelines and validation standards resulted in separate maps.

Other areas of coordination included efforts to meet the new demand for registration in the Unified Registry and grievance redressal for the AR programme. MDS coordinated with municipalities in a task force to meet the surge in demand for registration in the Unified Registry after the floods. ¹⁰ In terms of horizontal coordination, the MDS also supported the MIDR with the implementation of AR's grievance redressal mechanism (MDS, 2024b).

Design of the emergency responses

The emergency support package provided following the floods comprised the use of both existing social protection programmes as well as the creation of new ones, in a multi-layered response. The state put in place several measures including the new edition of the *Programa Volta Por Cima* (PVPC). Smaller emergency programmes in terms of coverage were also implemented by municipalities, or in partnership between the state and municipal-level governments, to temporarily support displaced populations with housing costs (Porto Alegre Municipal Government, n.d.; Porto Alegre Municipal Government, 2024; Rio Grande do Sul State Government, 2024f). The total package of responses by the federal government comprised both modifications to regular social protection programmes¹¹ and the creation of a new programme, *Auxílio Reconstrução* (AR), to support families directly impacted by the floods.

- 8. Personal communication with DEE RS, 6 February 2025; and with MIDR, 16 April 2025.
- 9. Personal communication with MIDR, 29 May 2025.
- 10. Personal communication with MDS, 14 April 2025.
- 11. This article is supplemented by an Appendix (developed by the author and made available to readers). For the modifications to regular social protection programmes, see Supporting Information, A.1. Table A1.

	Level	Financing	Eligibility criteria	Benefit level	Coverage
AR	Federal	Federal government	Displaced families identified via the federal flooding mapping and municipal registration	BRL 5,100 (USD 987) lump sum	424,709 families (as of June 2025)
PVPC	State	State government	Displaced families earning a per capita monthly income of up to BRL 218 (USD 42) identified via the state flooding mapping and data from the Unified Registry	BRL 2,500 (USD 484) lump sum	100,784 families
Pix Solidario	State	Private donations channelled by the State government	Displaced families earning a total monthly income of up to 3 minimum wages (BRL 4,236/USD 819) and a per capita income of up to 1 minimum wage (BRL 1,412/USD 273) identified via the state flooding mapping and data from the Unified Registry	BRL 2,000 (USD 387) lump sum	36,800 families

Notes: Currency conversion rate from May 2024 of BRL 5.17 per USD. AR stands for the federal *Auxilio Reconstrução*, and PVPC for the state-level *Programa Volta por Cima*.

Source: Author's elaboration based on the literature review.

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The design of the emergency interventions by the state and federal governments is detailed in Table 2.

The benefit level setting process at federal and state levels was not guided by a post-disaster needs assessment. The one-off emergency support provided was generous compared to monthly benefit levels of existing social protection programmes such as social pensions (which provide a minimum wage per month); however, we currently lack a comprehensive benefit adequacy evaluation. Given the urgency of the situation and the scale of the floods, response efforts prioritized simplicity in their design, offering uniform benefit levels without adjustments for household size or other characteristics.

The PVPC, which already existed, had a simpler benefit structure in 2024 than it did in its 2023 edition, which was not based on an assessment of needs. In 2023, two tiers of benefit levels were established: BRL 2,500 for displaced families (those who had lost their homes) and BRL 700 for those with property damage but who had not been displaced. In 2024, BRL 2,500 (around 96 per cent of the average monthly nominal household income per capita of the state's resident population in 2024, and around 1.8 times the value of the minimum monthly wage in 2024) was paid to all those who were displaced. On this occasion, the scale of the flooding made the identification of those affected but not displaced

impractical. Benefit levels were primarily shaped by budget constraints and estimated coverage numbers. 12

Though no documented evidence detailing the rationale behind the benefit level setting process of the AR was identified, in interviews it was highlighted that the level of BRL 5,100 (almost twice the average monthly nominal household income per capita of the state's resident population in 2024, and around 3.6 times the national minimum monthly wage in 2024) (according to data from IBGE, 2025) was set following a calculation of the estimated cost of replacing household appliances damaged or lost in the floods.¹³ The objective of helping families replace lost goods is also expressed in the programme's FAQ page (MIDR, 2024a).

The AR and PVPC programmes used different selection criteria for providing benefits. First, the specific mapping of the affected areas differed slightly between the federal and state governments to identify those households that were to be considered directly affected by the floods, as detailed in the previous section. Second, while the federal AR was provided to all families classified as being displaced due to the flooding, the state-level PVPC had additional poverty criteria assessed, based on data from the Unified Registry (Table 2). Families just above the poverty threshold set by PVPC were eligible for the *Pix Solidario*, which relied on private donations. Families in receipt of state-level benefits could only receive one of these benefits (either the PVPC or the *Pix Solidario*). Receipt of the AR was independent from other programmes. In all cases, each programme paid one benefit per household.

Regular social protection programmes were also adapted via design tweaks and horizontal expansion (Table 3). As a consequence of the floods, 67,598 additional families were also included in *Bolsa Família* (MIDS, 2024f). Labour market interventions also encompassed the federal government's *Auxílio Trabalhador e Trabalhadora*, which provided a minimum wage for two months in exchange for companies' commitment to maintaining the jobs of 102,200 workers for 4 months, at a cost of BRL 285 million (Brazilian Government, 2024).

Enrolment and delivery processes

The PVPC was available to families registered in the Unified Registry who were identified to be living in the mapped affected areas at the time of the floods, even if registration occurred after the disaster. Families that were automatically identified to be living in affected areas and meeting eligibility criteria did not require additional registration in the programme. Those that met the criteria but were not automatically identified could register via their municipal social

- 12. Personal communication with DEE RS, 7 February 2025.
- 13. Personal communication with MIDR, 16 April 2025.

Table 3. Modifications to regular social protection programmes

Area	Programmes	Emergency measures
Social assistance	Bolsa Familia	 Anticipating monthly payments from 17 May and first payment day in June in all municipalities of the state (619,741 families, BRL 417 million). Suspending conditionality monitoring and enrolment review processes. Allowing exceptions to documentation requirements for enrolment and payment to address situations of lost documentation.
	Social pensions	 Anticipating May and June payments of the social pensions - Beneficio de Prestação Continuada (BPC) and Renda Mensal Vitalicia (RMV) - to first payment date in municipalities where public calamity was declared (95,109 recipients in May, BRL 134 million).
Social insurance	FGTS	"Saque Calamidade" (special withdrawal due to the calamity): 1,05 million workers in 446 municipalities – BRL 3,45 billion.
	Unemployment insurance	Payment of two additional instalments: 139.633 recipients - BRL 497,8 million.

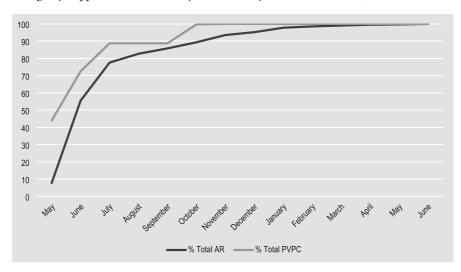
Notes: FGTS stands for "Fundo de Garantia do Tempo de Serviço", the Severance Indemnity Fund for Employees. Source: Author's elaboration based on Brazilian Government (2024) and MDS (2024a, 2024b, 2024c, 2024d).

assistance services. Payments were made via the cards used for social programmes in the state (*Cartão Cidadão*), which were issued automatically and issued by the state bank (*Banrisul*) for those people that did not yet have one (Rio Grande do Sul State Government, 2024b). A rapid initial response was enabled by the technology used to map affected areas in 2024 combined with the availability of data on recipients addresses and bank accounts from the Unified Registry (Rio Grande do Sul State Government, 2024b). ¹⁴ The PVPC paid the first families on 17 May 2024 and reached over 40,000 families, almost half of the total disbursement, by the end of that month. The last residual batch of the programme was paid in November 2024 (Rio Grande do Sul State Government, 2024e).

AR enrolment required municipalities to send the data of the families living within the affected areas to the federal government. Data sent by municipalities was cross-referenced with existing federal government databases to validate the families' addresses. The bank *Caixa Econômica Federal* (the same banking service provider for *Bolsa Família*), was responsible for the payments, which would be made directly to the recipients accounts in the bank or to an automatically opened savings account for those without an account at *Caixa* (MIDR, n.d.; MIDR, 2024a). The AR began to receive information from municipalities on 22 May 2024 and confirming the information that was received on 27 May 2024; from then on, this procedure was conducted twice per week (MIDR, 2024a).

14. Also, from a personal communication with DEE RS, 7 February 2025.

Figure 2. Timeline of the federal and state-level responses: percentage of total emergency support disbursement by month (May 2024 to June 2025)



Notes: AR stands for the federal Auxilio Reconstrução, and PVPC for the state-level Programa Volta por Cima. Sources: Author's elaboration based on monthly disbursement data for AR (Portal da Transparência, 2025) and PVPC (Rio Grande do Sul State Government, 2024b, 2024e).

Most of the payments were completed in 2024, with the remaining payments in 2025 being addressed to people who used the existing grievance redressal mechanism or judicial means to obtain the benefit with their claims analysed on a case-by-case basis. ¹⁵

Consistent with the literature on shock-responsive social protection (O'Brien et al., 2018), we see that the prior existence of the PVPC and the fact that it piggybacked on existing data systems enabled a more rapid response when compared to AR's steeper disbursement curve (see Figure 2), as it was designed from scratch and required new data collection efforts. Still, it is important to note that the AR programme was around 4 times larger than the PVPC in terms of coverage and 8.5 times larger in terms of total budget. By June 2024, both programmes had disbursed more than half of their budgets.

A critical issue was managing the needs of displaced and homeless populations, which presented significant challenges to frontline workers at the shelters. The MDS issued brief guidance notes on specific measures in assisting indigenous peoples, such as with regard to specific organizations and social movements from which help could be sought for collaboration and technical support (MDS, 2024e). Specific guidelines were also issued for assisting displaced

15. Personal communication with MIDR, 16 April 2025.

children, such as the setting up of special shelters, procedures to be followed on family reunification, and coordination with legal and judicial services (MDS, 2024h). Displaced people arrived at improvised shelters, mainly in the metropolitan region of Porto Alegre, without a centralized tracking system. A Google Forms was developed to collect their data and later a unified digital registry with the support of volunteers to log affected families and streamline aid distribution. Challenges included fragmented leadership, unclear roles among municipal agencies, and resistance from some shelters in using the proposed system. Privacy and reunification issues arose, particularly for vulnerable groups such as domestic violence survivors whose shelter locations could be compromised. Attempts to create a secure reunification system via the city's citizen service channel faced hesitancy from leadership. The need for standardized, privacy-focused tools in future emergency responses to protect marginalized groups while addressing urgency was therefore emphasized in interviews conducted for this study.¹⁶

Implementation capacities

Prior experience with responding to large-scale emergencies and existing guidelines provided a basis to draw upon when it came to responding to the 2024 floods. The public administration's experience in addressing the impacts of covariate shocks through social assistance and modifying service delivery during emergencies, such as during the COVID-19 pandemic and the 2023 floods, were highlighted as significant starting points for how the 2024 responses were conceived at federal and state levels. For instance, the MDS guidelines on social assistance during calamities provided a useful framework for roles and services for frontline social assistance workers. During the COVID-19 pandemic, the state administration also developed expertise in handling large datasets, such as the Unified Registry, which became crucial for targeting assistance when it came to the 2023 and 2024 editions of the PVPC. The MDS also issued specific guidelines for safeguarding SUAS workers' physical and mental health during the emergency responses, including on workplace safety, access to training and recommendations for coordination between teams (MDS, 2024g).

Nonetheless, the responses were severely challenged by several factors, including certain relating to infrastructure, as several of the public administration's offices were flooded, requiring government officers to work from home with

^{16.} Personal communication with Porto Alegre Municipal Government, Fundação de Assistência Social e Cidadania (FASC-POA), 7 February 2025.

^{17.} Personal communication with DEE RS, 7 February 2025; and with MIDR, 16 April 2025.

^{18.} Personal communication with FASC-POA, 7 February 2025.

^{19.} Personal communication with DEE RS, 7 February 2025.

Significant stresses were placed on data systems, ranging from the lack of a standardized data collection form for people in shelters to the surge in demand for registration in the Unified Registry (required for the assistance provided through the PVPC). Around 200 volunteers were involved in developing a digital platform (*Abrigos RS*) to manage shelter registrations. However, volunteer engagement was not sustained over time and their request for funding to continue the platform development did not fit with existing municipal government procurement rules. ²¹ A task force of Unified Registry interviewers, including personnel from other states, was organized by the MDS to support municipalities in updating the Unified Registry, as many struggled to cope with the demand. The MDS also provided resources such as training, allowances, internet kits, and laptops to ensure effective registration and data collection. Interviewees emphasized the importance of institutionalizing such rapid-response task forces for future emergencies. ²²

Monitoring, evaluation and learning

At the state level, institutional learning clearly played a role in the more rapid response by the PVPC when comparing the 2023 and 2024 editions. The use of satellite imaging and georeferencing were key to improved results between these rounds of the programme. An audit of the 2024 edition of the PVPC revealed minor inclusion errors, largely due to enrolment being based on existing datasets.²³

The AR was a new programme and the MIDR had no prior experience of implementing emergency support at this scale. Given that the AR required new data collection for registration, the federal government cross-referenced the data across existing datasets before authorizing payments. Reportedly, almost half of the requests submitted were suspected of irregularities due to the household location being outside the affected zone, or due to duplication, so they did not

^{20.} Personal communication with DEE RS, 6 February 2025; DEE RS, 7 February 2025; and with FASC-POA, 7 February 2025.

^{21.} Personal communication with FASC-POA, 7 February 2025.

^{22.} Personal communication with MDS, 14 April 2025.

^{23.} Personal communication with DEE RS, 7 February 2025.

have the benefit approved until further checks were conducted (Jornal Nacional, 2024). The main issue seems to have been errors in the enrolment process due to the high demand and urgency in the process. By April 2025, a residual portion of people who believed they had been wrongly excluded from the programme were still pursuing the benefit through the courts.²⁴

The challenges presented by the 2024 floods have led to internal reflection by the MDS, which has commissioned a consultancy to better understand which types of information can be integrated into the Unified Registry to assess climate risk vulnerability. The high demand for registration via the Unified Registry brought on by the PVPC programme has also led to the MDS considering the potential use of simplified registration forms in the event of similar sudden-onset disasters in future.²⁵

In terms of the impact of the interventions, to date, no study has been identified on the effectiveness or adequacy of the responses. This is a key gap that should be further explored in future research, as the interventions implemented in Rio Grande do Sul set a substantial precedent in terms of disaster response in the country and beyond, with important potential learning for other countries facing similar shocks.

In terms of operational learning, many guidelines and tutorial classes were produced by the MDS during the crisis and made available online.²⁶ The challenges presented during the response also prompted the creation of FORSUAS, *Força de Proteção do SUAS*, a national rapid-response team within the social assistance system (SUAS) to provide immediate aid in emergencies and disasters across the country, prioritizing vulnerable populations (MDS, 2025a).

There is also some evidence of better disaster coordination structures emerging partly because of this experience. A Permanent Committee for Responses through Social Protection in Calamities and Emergencies (*Comitê Permanente para Respostas de Proteção Social em Calamidades e Emergências*) was also launched by the MDS in 2025, which brings together the MDS with the Minister's Office, the Executive Secretariat, the national secretariats of Social Assistance, Food and Nutritional Security, Income and Citizenship, Socioeconomic Inclusion, Care and Family Policies, as well as sub-secretariats and advisory services such as Social Communication (ASCOM) and the General Ombudsman's Office. The goal is to ensure coordination between public policies, including social protection, during emergencies as well as to provide continuous technical support to local public administrators. The Committee will also be in charge of

^{24.} Personal communication with MIDR, 16 April 2025.

^{25.} Personal communication with MDS, 14 April 2025.

^{26.} For more information, see the Government of Brazil website concerning *Operação Rio Grande do Sul* (in Portuguese).

monitoring the MDS's specific goals related to the national climate plan (*Plano Clima*) and to the national civil defence plan (MDS, 2025b). These are all welcome developments in terms of strengthening shock-responsive and climate adaptive social protection as they create intersectoral bridges between social protection and disaster risk reduction and climate adaptation.

When it comes to improving the way climate disaster exposure data is integrated with policy making at the state level, the recurrence of flooding events has prompted the state government to map recurrent disaster zones to identify high-risk areas, such as those experiencing multiple extreme weather events between 2023 and 2024. This type of mapping should support longer-term and more climate adaptive public policies (more preventive rather than reactive), as the recurrence intervals between extreme events are shortening due to climate change.²⁷

Analyses such as the identification of recurrent disaster zones could support planning in the social protection sector as well as future disaster responses. Considering the recurrence of this type of shock in the state, the social protection system should consider incorporating anticipatory actions which are considered more cost-effective than responses delivered in the aftermath of disasters (Bharadwaj, Mitchell and Karthikeyan, 2023).

Conclusions

The case of the responses to the Rio Grande do Sul floods of 2024 demonstrated the capacity of federal and state governments in mobilizing and rapidly delivering social protection to populations affected by a sudden-onset covariate shock. It has set an important precedent in terms of social protection coverage, benefit levels and rapid operationalization, which should be further analysed for improved future coordinated responses involving social protection to large-scale extreme weather events, which are to be expected as the country is vulnerable to the impacts of climate change.

This study also contributes to the growing literature on shock-responsive and climate adaptive social protection (Beazley et al., 2024; Costella et al., 2023; O'Brien et al., 2018). This analysis fills a gap in the existing documentation about this case by providing an overview of the federal-level and state-level responses and an assessment of the process of emergency response based on the international evidence on shock-responsive and climate-adaptive social protection. The multi-layered emergency assistance that was delivered provides lessons and points for reflection to other countries in terms of the common

27. Personal communication with DEE RS, 6 February 2025.

First, it is noteworthy how rapidly the state government was able to learn from the initial edition of the PVPC and then able to mobilize even more rapid support in 2024. The use of satellite imaging technology was crucial for the targeting process in the case of the 2024 floods, and having had the prior commercial contract already established between the state and the private enterprise providing the images enabled a speedier response. Where new data collection or validation is required from municipalities, errors are to be expected due to capacity constraints. Continuous municipal capacity strengthening with training focused on emergency response efforts are thus needed, with support from the state and federal governments.

Though PVPC's scope was more limited than the federal support (as is to be expected), it has proven to be a resilient emergency support measure deployed in multiple flooding events between 2023 and 2024. The first edition of the programme experienced significant challenges in terms of the timeliness of payments, which was overcome in the 2024 edition by the incorporation of new technologies in the mapping of affected areas. This rapid learning has thus built significant institutional knowledge on more effective disaster responses. As the programme is based on a state law, it can be expected to remain in place despite future administrative changes. Therefore, the case of Rio Grande do Sul provides a useful blueprint for reflection on what is needed in terms of institutional capacity, funding and normative frameworks and can support further assessments of other states' and, indeed, other countries' disaster preparedness. The case of the 2024 floods should also be further reflected on in terms of addressing existing vertical coordination gaps and between states and the federal government.

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Institutionalizing specific emergency protocols, structures and human resource teams for rapid-response task forces for future emergencies is still needed. Specific training on emergency protocols, safeguarding issues in data management and clear guidance on roles and responsibilities is particularly crucial for frontline workers dealing with displaced populations. One key gap highlighted in interviews was the issue of ensuring appropriate and safe data collection efforts on displaced populations and those aimed at family reunification. Another point that could improve future emergency responses would be the creation of official reserve lists of public servants or contractors that can be deployed as surge capacity to respond quickly to disasters as well as pre-designed emergency programmes and institutional coordination arrangements. For instance, it is still unclear whether the MIDR would be the institution to lead the next large-scale emergency response, although this can be expected considering its experience with and responsibility for the AR. It would be beneficial to clarify roles and institutionalize inter-ministerial emergency coordination structures, so that key

decisions on disaster response, including the design of potential emergency support through social protection mechanisms, can be made ahead of shocks, improving the timeliness of assistance delivery. Ideally, given the recurrence of this type of shock in the state, the social protection system should also consider ways of better integrating anticipatory action measures which are considered more cost-effective than support provided in response to disasters.

Ensuring a sustainable implementation capacity during emergencies also requires specific attention to workers' physical and mental health, appropriate compensation and limits to overtime as well as recognition from leadership on the efforts made by all those involved. As different administrative structures are involved in the design and implementation, each requires their own rules to be made effective. This point is crucial to ensure system resilience, particularly as the state and federal social protection systems have faced recurring large-scale shocks in recent years, from the COVID pandemic to the recurring floods.

Finally, the main gap in learning identified from this case is the lack of evaluations of the interventions that were implemented in Rio Grande do Sul. More pressing areas for further analysis include gaining a clearer understanding of the cost-efficiency of different flooding mapping methodologies that were used, and how scalable they are, as well as on how to operationalize a better integration of climate vulnerability data into the existing social protection data infrastructure. Studying the effectiveness of the different emergency interventions would also help to better inform the design of future responses.

In conclusion, the case presented in this article provides an important example of how social protection systems can be leveraged in response to rapid-onset climate shocks, which can be expected to become more frequent worldwide due to climate change. This study points to the importance of leveraging technology to quickly identify impacted areas. In line with the international literature on the topic, it also shows how existing social protection recipient databases such as the Unified Registry can aid in emergency payment timeliness. Nonetheless, this can also generate significant extra demand for registration, overwhelming local implementation capacity. To support and enable system-level resilience, coordination across different government levels, the institutionalization of emergency protocols, better support to workers involved in disaster response and embedding learning and evaluation remain as areas for further improvement.

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Supporting information

Additional supporting information may be found online in the Supporting Information section at the end of the article.

Do public works programmes foster climate resilience? Conceptual framework and review of empirical evidence

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Abstract Public works programmes (PWPs) are pervasively used to tackle poverty and unemployment, and to build infrastructure and skills in low- and middle-income countries. While their impacts on poverty, food security and labour outcomes have been widely documented, there is little research focusing on the role of PWPs in supporting household climate resilience in the global context of a deepening climate crisis. To fill this gap, we propose a conceptual framework that links the different components of PWPs – wages, infrastructure, and skills development – to household capacity to cope with, and adapt to, climate-related shocks. We use this framework

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to guide our review of empirical experimental and quasi-experimental evidence on the multiple short-term and long-term effects of PWPs on resilience to weather shocks, such as floods, droughts and cyclones. Such evidence mostly draws from a few programmes in India, Ethiopia and Malawi. Overall, we find that, through the wage component, PWPs can be effective in enhancing household resilience through increasing savings and productive investments. However, these benefits usually only materialize in the case of regular, long-term programmes, as opposed to ad-hoc/temporal PWPs. PWPs' infrastructure component can play a crucial role in supporting households' long-term capacity to adapt to shocks, especially in the case of "climate-smart" infrastructure, with positive externalities beyond direct programme beneficiaries to communities. There is a key evidence gap investigating the effects of PWPs through the infrastructure component on both beneficiaries and other community members, as well as on the role of on-the-job training and its capacity to strengthen resilience in combination with the infrastructure component. Evidence from different socioeconomic contexts is also scarce. Another key gap relates to the identification of the main mechanisms through which these relationships operate. Filling these gaps will support policy makers taking decisions about when to implement PWPs (especially in comparison with other social protection interventions), and how to design them to tackle vulnerability to climate change.

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Keywords social protection, resilience, labour intensive employment, climate change, economic and social development, international

Introduction

Climate change causes, among other things, an increase in the incidence and severity of extreme weather events, such as floods, droughts, wildfires or heatwaves (IPCC, 2018). Households in low- and middle-income countries (LMICs) are especially affected by these weather shocks due to their high reliance on the agricultural sector as a key source of income and to their limited access to

credit and insurance markets (Dercon and Christiaensen, 2011). Climate-related hazards resulted in an annual loss of 23 million working-life years between 2000 and 2015, especially among vulnerable groups, amplifying existing social and economic inequalities (ILO, 2018). Identifying strategies that promote households' resilience to weather shocks, both by enhancing their ability to *cope* with shocks once they materialize as well as their ability to *adapt* to future shocks, is, therefore, a key global challenge and policy priority.¹

Public works programmes (PWPs) – also known as labour-intensive employment, workfare, or cash-/food/input-for-work programmes – are among the most common forms of social protection globally, with over 90 countries implementing them (World Bank, 2018). Given their pervasiveness, they can play a crucial role in mitigating the impacts of weather-related shocks (Bowen et al., 2020; Costella et al., 2023). PWPs are government-led or donor-led initiatives, which offer temporary employment opportunities to people usually living in poor or vulnerable areas (Subbarao et al., 2013). PWP beneficiaries usually engage in labour-intensive activities related to the construction or maintenance of community infrastructures or to the provision of other public services. In exchange for their work, beneficiaries receive compensation either in cash or in kind (often food).

In the shorter run, PWPs can support households in withstanding and recovering in the face of shocks by offering income support. They can also promote longer-term resilience, including after PWPs end, through asset and infrastructure creation, as well as skills development. Increasingly, PWPs are used to create climate-smart community assets or provide climate-smart services (e.g. afforestation, land rehabilitation, river walls, etc.). This way, they can support climate resilience more directly compared with other social protection schemes, such as unconditional cash or food transfers (Beierl, 2021; Godfrey-Wood and Flower, 2018; Beazley et al., 2016). It is noteworthy that the world's two largest PWPs – India's Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) and Ethiopia's Productive Safety Net Program (PSNP) – were initiated as a public response to two large drought shocks (Bagga et al., 2023).

Despite this potential, PWPs have not yet been fully exploited as a major policy leverage to mitigate and adapt to climate change (Costella et al., 2023). This is partly due to lack of evidence synthesis. Studies reviewing the impacts of PWPs (Gehrke and Hartwig, 2018; Sakketa and von Braun, 2019; Beierl, 2021; Bagga et al., 2023) did not have a specific focus on climate resilience.

Our goal is to contribute to this literature by, first, proposing a diagrammatic conceptual framework, which links the different components of PWPs to households' different (resilience) *capacities* to deal with current and future

1. We present a comprehensive definition of resilience in the next section.

We identify three main evidence gaps. First, there is very limited causal evidence about the effectiveness of the infrastructure component of these programmes. Understanding the impact of this component is crucial for policy makers when deciding between PWPs and less costly social assistance programmes, such as cash transfers. Second, despite being widely used globally, existing experimental and quasi-experimental studies are limited to a few rural settings (India, Ethiopia and, to a lesser extent, Malawi). We do not have much information on their average and distributional effectiveness in the face of climate shocks for Central and Latin America, the Middle East, and East Asia, or other settings in sub-Saharan Africa or South Asia. Also, evidence from urban or peri-urban areas, and humanitarian settings is very limited. Finally, our understanding of the mechanisms and programme design features through which PWPs can support resilience-building in different contexts remains relatively limited.

Conceptual framework: Public works programmes and climate resilience

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We define climate resilience as the capacity of a social system to cope effectively with a hazardous event, responding in a way that preserves its basic function, identity and structure, while maintaining the capacity to adapt. Several scholars define resilience as a two-pronged concept encompassing the capacity to cope with, and adapt to shocks (Bowen et al., 2020; Beazley et al., 2016; Bahadur et al., 2015). This concept includes at least two key aspects: a) the *capacity to cope*, which refers to the ability to withstand and recover from a climate-related shock; b) the *capacity to adapt*, which refers to the ability to adjust to potential damage, take advantage of opportunities and cope with consequences, and entails reducing long-term exposure to risks as well as learning to adjust after a shock to reduce vulnerability to the same shock in the future.²

In line with the existing literature (e.g. Beierl, 2021), we suggest that PWPs may contribute to fostering climate resilience through three key components: wages; infrastructure development/service provision; and skills development. Of course, the relationship between PWPs and climate resilience is complex and highly contextual, varying according to the setting in which the programme is implemented and programme design features. Nevertheless, it is possible to develop a general (although non-exhaustive) conceptual framework, which

^{2.} Others add a third component – a transformative capacity (Béné et al., 2015; Sengupta and Costella, 2023).

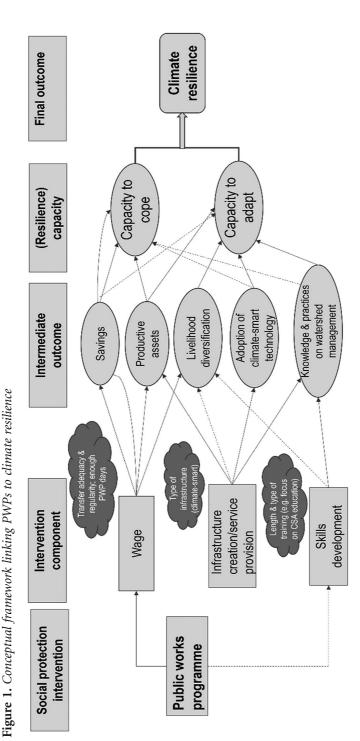
illustrates the main pathways/intermediate outcomes through which PWPs can contribute to building resilience at different scales (individual, household, and community). Such intermediate outcomes are proxies for the two resilience capacities, and how they relate to the ultimate outcome, i.e. climate resilience. While it is not always easy to associate a specific indicator to one or the other resilience "capacity" and while, in the literature, there is no full consensus, we do identify some proxy measures. In turn, this can guide identifying the key indicators to be used to measure programme effectiveness (see Figure 1).

We argue that PWPs may contribute to fostering climate resilience through three key components: wages; infrastructure development/service provision; and skills development. This framework also presents the intermediate outcomes that these three intervention components may produce, which are proxies for the two resilience capacities, and how they relate to climate resilience. While it is not always easy to associate a specific indicator to one or the other resilience "capacity" and while, in the literature, there is no full consensus, we do identify some proxy measures. An increase in savings is considered primarily a proxy for coping (or absorptive) capacity (Bowen et al., 2020; Béné, Frankenberger and Nelson, 2015; Beazley et al., 2016); the same applies to a reduction in the use of extreme coping strategies – including selling productive assets (Bowen et al., 2020; Béné, Frankenberger and Nelson, 2015; Beazley et al., 2016; Sengupta and Costella, 2023). Indicators of adaptive capacity, instead, are livelihood diversification (Sengupta and Costella, 2023; Bowen et al., 2020; Beazley et al., 2016; Béné, Frankenberger and Nelson, 2015); adoption of climate-smart technology (Sengupta and Costella, 2023; Bowen et al., 2020; Béné, Frankenberger and Nelson, 2015); and long-term investments in productive assets (Bowen et al., 2020; Beazley et al., 2016; Béné, Frankenberger and Nelson, 2015).

The first intervention component of PWPs involves the provision of a wage,³ which enhances the coping capacity by improving access to food and/or avoiding detrimental consumption smoothing strategies (Hadley et al., 2023), enabling savings, preventing distress selling, and/or investing in productive assets (Dercon and Christiaensen, 2011; Hidrobo et al., 2018). Regarding the enhancement of adaptive capacity, wage payments may allow investments in productive assets and technology (e.g. drought-resistant crops), which helps to diversify livelihoods and increase the ability to adjust to climate change (Barrett et al., 2021). In addition, wages may enhance adaptive capacity by influencing saving habits, although this effect may be limited, as PWPs typically provide low remuneration (hence, this channel is indicated in Figure 1 by a dashed line).

3. The term "wage" here also includes in-kind (especially in-food) remuneration for public works engagement.

Do public works programmes foster climate resilience?



Notes: a) Clouds indicate the key design and implementation features of the specific PWP components. They influence the relationship between the specific intervention component and intermediate outcomes; b) Filled arrows indicate assumed strong relationships, while dashed lines indicate weaker relationships. Source: Authors' conceptualization.

The extent to which wages affect these intermediate outcomes depends on several factors: the size of the transfer (whether it is sufficient to induce change or meet consumption needs); the regularity and reliability of payments, the frequency of disbursement; and whether the number of working days is sufficient to generate a significant impact (McCord, 2022). Additionally, the timing of employment should align with seasonal variations in food security and labour market demand. For example, if access to PWPs is consistently reliable, participants may reduce precautionary savings and invest in more productive assets, thereby strengthening their adaptive capacity. In addition to these prerequisites, improving adaptive capacity also requires wage levels that are high enough to encourage investment in productive inputs, capital, and/or livelihood diversification.⁴ This highlights that – like any other social protection tool – effective programme design and implementation are critical.

The second intervention component involves infrastructure creation and/or service provision. The provision of public goods is a key feature of PWPs, distinguishing them from cash transfers. Through this provision, PWPs can strengthen household resilience to climate shocks. Subbarao et al. (2012) categorize goods and services created by PWPs into two types: infrastructure (e.g. road reconstruction after weather shocks or afforestation) and land management (e.g. soil conservation projects). While both types of PWPs may mitigate the effects of shocks and increase resilience, it is likely that PWPs focusing specifically on climate-smart infrastructure, such as afforestation and land rehabilitation, may yield larger impacts on climate resilience than other types of infrastructure and service provision (Bagga et al., 2023). Over the last years, an increasing number of countries, such as Ethiopia, Haiti, India, Indonesia, Madagascar, Malawi, Pakistan and Rwanda, have focused on the provision of these services through PWPs with the specific objective of reducing vulnerability to different weather shocks, as well as some consequences of unsustainable land use, such as soil erosion and degradation (Subbarao et al., 2012; Adam, 2015; Godfrey-Wood and Flower, 2018).

One intermediate outcome of the infrastructure creation and service provision component of PWPs is the adoption of climate-smart technologies. Climate-smart agriculture (CSA) practices, such as conservation agriculture, agricultural diversification, and improved seed use, have been widely promoted in many African countries. However, their success has often been limited due to high costs (Amadu, McNamara and Miller, 2020). Hence, PWPs may actively increase the adoption of CSA practices by easing household budget constraints. This, in turn, may enhance agricultural productivity and climate resilience (Scognamillo and

^{4.} At the same time, wages should usually be below market wages, and in general not too high: otherwise, people in the middle class may also be incentivized to participate, although PWPs are meant to reach the poor.

Sitko, 2021). For example, the adoption of drought-resistant crop varieties can make farming more resilient to water scarcity, allowing farmers to maintain, or even increase, crop yields during drought periods. Additionally, adopting climate-smart approaches can improve sustainable resource use and productivity. For example, drought-resistant crops often require less water and fewer inputs such as pesticides and fertilizers, promoting more sustainable agricultural practices and reducing environmental degradation, ultimately improving their long-term resilience.

Just like wages, the impact of interventions is highly dependent on the relevance, quality and functionality of the infrastructure and services created. It is crucial that these infrastructures are tailored to local needs and that they are provided with adequate technical inputs during design, implementation and maintenance. Governance and community ownership of these infrastructures is also key (Burchi and Sakketa, 2025).

The third component of PWPs is skills development. Indeed, PWPs interventions are often combined with on-the-job training or broader training initiatives. Training activities on CSA practices, disaster preparedness, livelihoods diversification, and extension services are often promoted to equip household with specific skills that enhance their adaptive capacity. Such human capital-building interventions can have long-term effects on labour market outcomes, including wages, employability, labour participation, and productivity. Compared to cash transfers, PWPs offer the distinct advantage of fostering on-the-job skill development, which can contribute to sustained economic resilience. However, given that many of the activities undertaken in PWPs are generally low-skill and short-term, it is hard to evaluate the degree to which the quality of skill acquisition and transferability occurs in practice (Gehrke and Hartwig, 2018). Several factors determine whether skills development interventions for PWPs would enhance capacities to cope or adapt. These include: 1) the alignment of the training with the local context and resilience; 2) the availability of resources to enable beneficiaries to apply the acquired skills; 3) the demand for these skills; and 4) labour market conditions, among others (McCord et al., 2016; Bertrand et al., 2017; Solórzano and Cárdenes, 2019; Beierl, 2021).

Effects on the community

The three intervention components can affect not only the resilience of the beneficiaries but also that of entire communities. For instance, the injection of considerable amounts of cash (or food) through PWPs into targeted communities may lead to several general equilibrium effects on local wages, prices and overall economic activities such as trade, production and income diversification (Loewe and Zintl, 2023). This is often referred to in the literature

as spillover effects (Gazeaud, Mvukiyehe and Sterck, 2019). For instance, the competition induced by a PWP with private-sector jobs may push local wages up, as has been documented in the case of the MGNREGA in India (Imbert and Papp, 2015; Muralidharan, Niehaus and Sukhtankar, 2018; Zimmermann, 2020) and Ethiopia's Urban PNSP (Franklin et al., 2024). Such increases in equilibrium private-sector wages can lead to substantial decreases in poverty, as well as to large aggregate welfare gains in relation to the gains received solely by programme participants. However, such an increase in wages may also affect local prices, with potential detrimental effects on food and non-food consumption. Based on the evidence from cash transfers in Mexico, local effects on prices may also depend on the type of transfer (e.g. food versus cash) and the degree of market-connectedness of the communities involved (Cunha, De Giorgi and Jayachandran, 2018). Theoretically, increases in wages may also reduce the local demand for labour among non-participants in the private sector (Bagga et al., 2023).

Moreover, by providing access to public infrastructures, such as roads, water systems and dams, PWPs make users less vulnerable to climate shocks: these infrastructures are, by design, planned to benefit the entire community (and therefore cannot be defined as *spillover* effects). These effects of PWPs on non-beneficiaries are even more evident in the case of the creation of climate-smart infrastructures, as the entire community can make use of them. Finally, programme participants can share their skills and knowledge as well as resources with other community members (non-beneficiaries), further contributing to community resilience (Angelucci and De Giorgi, 2009).

Methodology

First, we looked for empirical studies that examined the direct impact of PWPs on resilience, without specifying whether this materialized through enhancing the coping or the adaptive capacity. This meant selecting those studies that examined whether PWPs had buffered the negative effects of climate shocks (such as floods, droughts or earthquakes) on key outcomes such as poverty, consumption, productivity and food security. Then, we looked at empirical studies of the impacts of PWPs on *proxy indicators of capacity to cope* under *normal* conditions (i. e. not in relation to shocks). As discussed, these included savings, the use of extreme coping strategies, and the ownership of productive assets. Finally, in a similar way, we reviewed the studies that focused on PWPs' effects on *proxy indicators of adaptive capacity*, such as the adoption of modern technologies, knowledge and practices related to climate-smart agriculture, diversification of income-generating activities, and diversification of livelihoods in general, as well as investment and long-run or medium-run effects on savings. At the same time, though it was not always easy to do so, we distinguished the above impacts

according to the specific component – wage, infrastructure or skills – that had most likely triggered them. Thus, in the next section we review the evidence. In the first instance this was done according to effects driven/associated with each programme component, and then according to outcome type. To assess effects through the infrastructure component, we focused only on climate-smart infrastructure and roads. This does not mean that other types of infrastructure, such as health facilities, cannot have an impact on climate resilience. However, the causal chain is longer, and the potential effects may materialize only in the long term.

We searched for the relevant literature in major bibliographical databases, including Google Scholar and the International Initiative for Impact Evaluation (3ie). Our primary focus was on the effects of PWPs, and therefore, we included "public works programs", "cash for work", "food for work", and "workfare programs" as key search terms. As we focused on the linkages between PWPs

Table 1. Summary of the PWPs reviewed for this study

Country	Programme	Period
Comoros	Social Safety Net Project (SSNP)	2016–2018
Côte d'Ivoire	Emergency Youth Employment and Skills Development Project (PEJEDEC-THIMO)	2013–2014
Djibouti	Urban Workfare Programme	2014–2015
Democratic Republic of Congo	Eastern Recovery project (STEP) programme	2016–2018
Egypt	The Emergency Labor Intensive Investment Project (ELIIP)	2015–2017
Ethiopia	Productive Safety Net Programme (PSNP)	2005-present
India	Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)	2007-present
Laos	Road Maintenance Groups Program (RMG)	2018–2020
Malawi	Malawi Social Action Fund (MASAF)	1990-present
Mozambique	Productive Social Action Programme (PASP)	2012-present
Nepal	Karnali Employment Programme (KEP)	2006-present
Rwanda	Vision 2020 Umurenge Programme (VUP)	2008-present
Sierra Leone	Youth Employment Social Support Project/Cash for Work (YESP/CfW)	2012–2015
Somalia	Cash for Work (CfW)	2011-ended
Tunisia	Community Works and Local Participation (CWLP) pilot	2015
Uganda	Northern Uganda Social Action Fund (NUSAF-3)	2015–2020
Yemen	Labor Intensive Works Program (LIWP)	2005-present

Source: Authors' elaboration.

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Table 1 provides a description of the programmes considered. Only a few were long-term, regular programmes (such as the India's MGNREGA and Ethiopia's PSNP), while the majority were ad-hoc or temporary.

Empirical evidence

The wage component of PWPs

Effects on core outcomes (food insecurity, poverty, labour productivity) under shocks. Several studies have investigated the capacity of PWPs to buffer the negative effects of weather shocks on household poverty, food insecurity and other outcomes such as productivity and labour supply. In detail, we started our review using long-term PWPs that provided predictable employment, such as the ones in India and Ethiopia, because we hypothesize that the resilience role of wage support is more prominent in stable, predictable programmes. Both Ethiopia's PSNP and India's MGNREGA provide a substantial number of workdays per year (72 and 100, respectively) and employment opportunity for several years. One important difference between the two programmes is that while MGNREGA guarantees employment to anyone who makes a demand (self-targeting), PSNP reaches only households that are formally targeted, and therefore benefits always the same household until re-targeting takes place.

Knippenberg and Hoddinott (2019), Dasgupta and Robinson (2021), and Scognamillo, Mastrorillo and Ignaciuk (2024) have examined the influence of Ethiopia's PSNP on food security and vulnerability to drought. All three studies found that PSNP participation reduced the adverse impacts of negative weather shocks on food security. Scognamillo, Mastrorillo and Ignaciuk (2024) used multiple waves of a nationally representative household survey and applied an instrumental variable approach to address selection endogeneity. The study showed that PSNP beneficiaries were *less likely* to experience food insecurity and

5. See World Bank data for 2023.

Prior work conducted by Knippenberg and Hoddinott (2019) employing a similar identification as Scognamillo, Mastrorillo and Ignaciuk (2024) found that droughts led to a reduction in the number of months during which a household perceived itself as food secure. Importantly, these impacts lasted for up to four years following the drought. Additionally, PSNP payments mitigated the initial impact of drought shocks by 57 per cent and eliminated their adverse effects on food security within two years. Dasgupta and Robinson (2021) found qualitatively similar results but did not account for endogeneity in programme participation. In contrast, an earlier study by Béné, Devereux and Sabates-Wheeler (2012) that used propensity score matching to account for non-random selection into the programme, found no statistically significant difference in the impact of drought and other weather events on food security between PSNP participants and non-participants.

Moving to MGNREGA, a large-scale PWP that guarantees rural employment for 100 days per year, Ajefu and Abiona (2019) applied a difference-in-differences (DiD) approach to study the effect of positive "wet" shocks and negative "dry" shocks on labour market outcomes. They show that MGNREGA decreased the adverse effects of dry rainfall shocks on labour supply. In villages not exposed to MGNREGA, one-standard deviation negative rainfall shock decreased the village employment rate by an average of 4.2 percentage points (p.p.), while in the villages exposed to MGNREGA, the effect of negative rainfall shock on the employment rate was not statistically significant. This mitigation effect was similar for men and women. These findings underscore the role of MGNREGA in creating additional employment opportunities during weather shocks. However, it also showed that MGNREGA could increase child labour especially during periods of "wet" shocks.

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Some studies also examined whether participation in PWPs mitigated the impact of weather shocks through its effects on agricultural productivity (Daidone and Fontes, 2023; Gazeaud and Stephane, 2023; Rosenzweig and Udry, 2014; Taraz, 2023). Taraz (2023) addressed this question in India by showing that MGNREGA exacerbated the adverse effects of low rainfall on yields. By increasing labour demand, the programme created higher agricultural wages that were less elastic with respect to weather shocks, which in turn reinforced the negative effect of weather shocks on agricultural production. Similarly, Rosenzweig and Udry (2014) found that the implementation of MGNREGA was associated with increases in harvest-stage wages, particularly in years with bad rainfall shocks. Taraz (2023) showed that the benefits from MGNREGA payments still exceeded the MGNREGA-induced yield losses, especially for households with marginal landholdings. Tiwari (2022) used quasi-exogenous variations in yearly weather

and compared those effects of weather shocks before and after the introduction of the MGNREGA. The results indicated increased crop yield volatility after the implementation of the MGNREGA, coupled with additional yield losses of 8 per cent during a year of insufficient rainfall, attributed to increased labour costs.

In the Ethiopian context, Daidone and Fontes (2023) reported a negative association between the PSNP and agricultural productivity, especially when hit by adverse shocks. In contrast, Gazeaud and Stephane (2023) did not find any discernible differential effect of the PSNP on agricultural productivity during periods of negative rainfall shocks.

Several studies analysed the impact of the PSNP on livestock holdings (Andersson, Mekonnen and Stage, 2011; Devereux and Guenther, 2007). Andersson, Mekonnen and Stage (2011) found that PSNP participation did not seem to assist households in coping with significant weather shocks, as they tended to sell livestock due to a lack of alternative income sources. Similarly, Devereux and Guenther (2007) suggested that, during shocks or the hungry season, the PSNP did not prevent many households from selling productive assets.

Effects on intermediate outcomes. Next, we reviewed the studies that focused on proxy measures of coping capacity, such as savings, selling and ownership of productive assets under non-shock situations. Gehrke and Hartwig (2018) reviewed the evidence of programme effects on savings and productive investments for eight PWPs: THIMO (Cote d'Ivoire), PSNP (Ethiopia), MGNREGA (India), MASAF (Malawi), KEP (Nepal), VUP (Rwanda), YESP (Sierra Leone), and CfW (Somalia). Note that some (PSNP, MGNREGA, MASAF KEP, VUP) had medium-term poverty reduction objectives or were providing employment guarantees, while others had short-term relief objectives.

In various PWPs, participants increased savings, especially when they had long-term access to PWPs. Studies on the YESP in Sierra Leone (Rosas and Sabarwal, 2016) and the KEP in Nepal (Nepal National Planning Commission, 2012) indicated a higher participation in informal saving groups and asset ownership. Importantly, KEP's evaluation shows that household were investing in livestock, household articles and mobile phones, which can have long-run effects and enhance both their coping and adaptive capacities. However, programmes with limited duration, such as the Somali CfW, increased productive investments initially, but the effect faded away in the longer term (FAO, 2013). Similarly, the Rwandan VUP generated positive effects on savings and livestock holdings in the short term, but these effects faded away shortly after participation if households took part only

^{6.} Note that in Figure 1, we also relate some of these outcomes - in particular investment in productive assets - with adaptive capacity.

^{7.} The Rosas and Sabarwal (2016) study is a short-term evaluation.

for one period (Hartwig, 2014). The Ethiopian PSNP showed increased asset accumulation, particularly of livestock, after four years of participation (Andersson, Mekonnen and Stage, 2011; Berhane et al., 2014). Gilligan, Hoddinott and Taffesse (2009) also document the PSNP participants did not experience faster asset growth than the comparison group. Unlike many PWPs with no long-run effects on these outcomes, the ad-hoc PWP THIMO in Cote d'Ivoire increased savings and productive investments within just four months of participation and the effect persisted in the medium term (Bertrand et al., 2017).

Another review of eleven experimental evaluations of PWPs (Comoros, Côte d'Ivoire, Laos, Djibouti, Sierra Leone, Egypt, Tunisia, Democratic Republic of Congo (DRC), urban Ethiopia) by Bagga et al. (2023) found mixed evidence on savings. Specifically, in five out of eleven PWPs (Cote d'Ivoire, Djibouti, Egypt, Tunisia, rural DRC), programme effects on savings were positive, while in another six programmes they were not statistically different from zero. They also distinguished between short-run and medium-run effects and in four out of eight medium-run effect studies, the effect was positive, while in the remaining four studies, it was not statistically significant. The effects on households' assets were analysed for only seven programmes: three of which showed an increase in household assets index (two in Tunisia and one in rural DRC).

To summarize, most of the empirical studies indicated that participation in PWPs increased households' coping capacity through higher savings in the short run and the holding of productive assets. However, the evidence of the long-term and medium-term effects on savings is less clear, which may suggest that PWPs have limited ability to affect the adaptive capacity by influencing saving habits.

As pointed out previously, PWPs are likely to increase the adaptive capacity of households through the adoption of modern technologies, knowledge and practices related to climate-smart agriculture, diversification of income-generating activities, and diversification of livelihoods in general. Therefore, we next review PWPs' effects on these outcomes.

Gehrke (2013) showed that participation in MGNREGA increased the use of riskier but more profitable crops, fertilizer and irrigation levels. Zimmermann (2020) employed a regression-discontinuity design to examine the effects of MGNREGA on livelihood diversification and found that participation in MGNREGA increased the opening of small enterprises. Similarly, the evidence from ad-hoc PWPs in Sierra Leone, rural DRC, and Côte d'Ivoire indicated that participants were significantly more likely to set up new enterprises after the programme than non-participants (Rosas and Sabarwal, 2016; Bagga et al. 2023).

In contrast, Weldegebriel and Prowse (2013) did not find a beneficial effect of the Ethiopian PSNP on livelihood diversification and risk management. Specifically,

8. For both Egypt and DRC, the authors considered two different experimental evaluations.

they looked at farm versus non-farm income increase, as a measure of households' diversification of activities and applied a propensity score matching methodology. They showed that there was no significant effect of the PSNP on livelihood diversification (neither for farm nor non-farm income), while it notably increased natural-resource extraction, suggesting that the PSNP encouraged a negative adaptation strategy. Additionally, Kozicka et al. (2024) showed that PSNP had a negative effect on crop diversity, which may decrease farmers' resilience to climate shocks. For their analysis, they applied the DiD approach combined with propensity score matching. Hoddinott et al. (2012) studied the effects of the PSNP on the use of fertilizer and investment in water retention, using matching techniques. Participation in the PSNP alone did not increase the use of fertilizer or agricultural investment. However, when combined with other food-security programmes designed to increase agricultural productivity the effect of the PSNP turned positive, hinting at the potential role of complementary investments. Using propensity score matching, Gilligan, Hoddinott and Taffesse (2009) found a significant increase in fertilizer use among PSNP beneficiaries, along with a higher share of own enterprises compared to the control group.

Beegle, Galasso and Goldberg (2017) evaluated the effect of Malawi's MASAF on various outcomes including the use of fertilizer, relying on across- and within-village randomization. Overall, the PWP did not increase fertilizer use, maybe due to limited employment duration in the MASAF in comparison to, for example, the Indian MGNREGA. In contrast, a non-experimental study by Scognamillo and Sitko (2021) based on multivariate regressions, showed that Malawi's MASAF was associated with the adoption of CSA practices, such as building soil water conservation structures and applying the use of fertilizer.⁹

In summary, PWPs have great potential to enhance households' adaptive capacity by promoting livelihood diversification through business activities, as indicated in most studies. However, the evidence regarding the impact of PWP wages on the adoption of CSA practices and agricultural technology is mixed. Some studies even report negative effects, suggesting that the wage component of PWPs may not be sufficient to induce farmers' adaptation to climate shocks. Table 2 provides a synthesis of the main results of the empirical studies examined.

The infrastructure component of PWPs

Tiwari et al. (2011) and Esteves et al. (2013) showed that the activities undertaken under MGNREGA were linked to decreased variability in crop yields, enhanced soil fertility, improved crop productivity, reduced soil erosion and, consequently, an overall increase in crop yields along with a decline in the agricultural

9. Please note the dashed line linking the wage component to technology in Figure 1.

Proxy outcome	Number of studies	Adverse effect	No effect	Beneficial effect
Food security and vulnerability to climate shocks	4	0	1	3
Employment vulnerability to climate shocks	1	0	0	1
Productivity vulnerability to climate shocks	4	3	1	0
Selling livestock during shocks	2	0	2	0
Savings	14	0	6	8
Ownership of productive assets	15	0	5	10
Savings (long or medium-run)	9	0	5	4
Livelihood diversification (includes self-employment)	7	1	1	6
Use of technology/CSA practices (e.g. fertilizer)	6	1	2	3
Flood control infrastructure, water infrastructure, soil quality, cultivated land, transportation costs.	6	0	1	5
Effect on non/participants	3	0	1	2
Business training (transition to self-employment)	1	0	0	1
CSA training (usage of CSA practices)	2	0	0	2
Forestry skills	1	0	0	1

Source: Authors' elaboration.

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vulnerability index. Similarly, Fisher (2020) analysed 798 MGNREGA projects and concluded that these projects helped vulnerable households to confront climate shocks. This evidence directly indicates that the infrastructure component of the MGNREGA positively affects capacities to cope and to adapt to climate shocks; however, this evidence is rather descriptive.

A quasi-experimental study of Gehrke (2015) applied the DiD approach to study the effects of India's MGNREGA infrastructure on agricultural productivity and the employment of non-participants. Specifically, the study compared farmers who had had any form of MGNREGA activity undertaken close to their lands with farmers who had not. The results indicated that there was a positive effect of MGNREGA activity on agricultural production but no effect on the demand for labour. The study also indicated significant heterogeneity, with different types of infrastructure favouring specific groups. Landowners, for instance, benefited from land development-related infrastructure, while flood control infrastructure benefited the rural landless population, increasing their employment opportunities. This indicated that the infrastructural component of the MGNREGA may help households to adopt to future shocks.

Christian et al. (2015) analysed the effect of infrastructure created by Yemen's Labor Intensive Work Program (LIWP), a PWP that provides short-term employment to poor rural households in the construction of local infrastructure within a conflict setting. The LIWP construction projects included reclamation of agricultural lands from harmful plants, protection of irrigation canals and water sources, improvement of rural roads, paving of rural markets, rainwater harvesting, construction of shallow wells, and terrace repair. The evaluation was based on the random assignment of 60 of 120 communities into participation in the LIWP in the first year (2010), while the remaining 60 control communities entered the programme in the second year (2011). Thus, the evaluation highlighted the short-term effects of LIWP infrastructure on water accessibility and transportation costs. The results suggested that the LIWP-created infrastructure reduced the average length of water-fetching trips during the rainy season, leading to an increase in water availability. Moreover, increased access to water resulted in one to two fewer months of water shortage per year. Furthermore, most households (about 80 per cent) reported that they benefited directly from the projects. This again indicates that PWP infrastructure is climate-smart and increases the capacity to cope and adapt to climate shocks.

Levine et al. (2024) investigated the long-term (3–5 years) impacts of PWP assets on livelihoods and resilience in North Wollo, Ethiopia and in Makueni County, Kenya. In the first case assets such as check-dams, tree planting and infiltration trenches were meant to ensure soil and water conservation, while in the second earth dams were created to improve water access. To assess programme impacts they employed a mixed-method approach and relied on retrospective information. For neither of the two programmes were positive benefits of the assets found, despite previous claims which led these programmes to be considered successful. In Wollo, the assets were generally still of good quality and functioning; the main problems lied in the wrong planning of activities (e.g. planting at the wrong time of the year; too many assets on a piece of land). In contrast, in Kenya, a technical appraisal detected major problems in the construction or maintenance of several dams, which precluded its functionality.

Finally, some studies did not disentangle the effect of the wage component of PWPs from that of the infrastructure component but focused on the effects of PWPs on non-participants, arguing that they were probably driven by the public infrastructure. Within the Ethiopian PSNP framework, the quasi-experimental study by Scognamillo, Mastrorillo and Ignaciuk (2024) found that the positive impacts of the programme on food security during weather shocks extended partially to the broader community beyond direct participants. This was likely attributed to the nature of the public works executed through the programme, particularly the integrated community-based watershed development initiatives. The World Bank (2018) conducted a randomized control trial (RCT) within

Egypt's PWP – The Emergency Labor Intensive Investment Project (ELIIP) – which aims to build and protect community assets in poor communities. ELIIP's infrastructure component includes several sectors including some climate-smart activities, such as protection of the Nile riverbanks, the cleaning and upgrading of canals, and roads upgrading. The village-based randomization allowed to study effects on both participants and non-participants in treated villages. The study found no statistically significant infrastructure effects for the likelihood of being affected by shocks, such as loss of harvest and loss of property.

Overall, there is some initial evidence that the infrastructure created by PWPs – when adequately designed and realized – contributes to climate resilience, but the empirical literature is still limited, especially that which relies on sound quantitative methods to derive firm conclusions. Moreover, most evidence is based on India's MGNREGA and therefore might not be generalizable to short duration or ad-hoc emergency programmes.

The skill development component of PWPs

The third component of PWPs is skill development. If PWPs include training on CSA practices or other forms of on-the-job training, they may enhance adaptation to climate-related shocks via the acquired skills.

Gehrke and Hartwig (2018) summarized the results from several PWP programmes that contain a skill development component, such as THIMO (Cote d'Ivoire), PSNP (Ethiopia), CfWTEP/YEP (Liberia), and LIWP (Yemen). Specifically, the THIMO incorporated compulsory courses on entrepreneurship; the YEP included technical skills training, internships, and employment search support; and the PSNP and the LIWP included on-the-job training. Kenya's Kazi KwaVijana Programme (KKV) also incorporated training and labour market activation, since its main goal was to improve youth employment outcomes. Another example of a programme which may affect climate resilience through skill development is the MASAF (Malawi), since it increases the use of CSA practices promoted in the country. However, the evidence concerning the skill component of PWPs is scarce and mainly draws on non-experimental studies and observational data, with few exceptions. Below we detail the results of these studies.

In general, the evidence indicates that participation in on-the-job training combined with wage and infrastructure can enhance participants' knowledge levels in CSA practices and increase income and employment. One example is the Ethiopian PSNP where participants received training in soil and water conservation and afforestation. Andersson, Mekonnen and Stage (2011) suggested that participants acquiring forestry skills through the PSNP could explain its positive impact on tree holdings. However, the study did not

disentangle this skill component from the rest of the programme components. More qualitatively, one survey suggested that almost half of those involved in the PSNP gained soil and water conservation skills that they subsequently applied on their personal land (Lieuw-Kie-Song, 2011).

Bertrand et al. (2017) evaluated the effect of the training component of the THIMO in Cote d'Ivoire, exploiting the fact that a random subset of beneficiaries was offered basic business training to facilitate transition into self-employment or training in job-search skills to facilitate access to the job market. While the study found no impacts on employment, it found a positive effect on earnings, driven by non-agricultural and self-employment activities in the group assigned to complementary business training.

Beierl (2021) applied a DiD approach to study the skill and other components of Malawi's MASAF, using the number of CSA practices (soil and water conservation) and days worked on these CSA practices as indicators of a skills vector. The study showed an increase in CSA practices in MASAF catchments compared to the control catchments, with the effect being driven by non-participants. Scognamillo and Sitko (2021) demonstrated that involvement in the MASAF was correlated with an increased adoption of CSA methods, fostering sustained utilization over multiple agricultural seasons. Further, it showed that the combined impact of participating in the MASAF and maintaining the use of soil and water conservation structures significantly enhanced households' productivity and welfare. According to Scognamillo and Sitko (2021), this effect is probably due to the application of skills acquired during MASAF public works to the farmers' own fields.

In summary, although patchy, the limited evidence available suggests that the skills development component of PWPs in combination with the infrastructure component can improve climate resilience.

Discussion and conclusions

With the ongoing pace of climate change, it is necessary to identify policies that support households' resilience to climate-related shocks. This article has focused on the role of PWPs from both a theoretical and an empirical perspective. We developed a diagrammatic conceptual framework to understand how, and to what extent, PWPs foster climate resilience, and conducted a comprehensive review of the empirical evidence on the effects of PWPs on climate resilience, linking it to our conceptual framework. While a number of previous studies have reviewed the evidence of the effects of PWPs (Gehrke and Hartwig, 2018; Beierl, 2021; Bagga et al., 2023), these studies do not focus directly on climate resilience. Similarly, previous studies have created conceptual frameworks that explain the link between social protection programmes and climate resilience,

but this literature either had a more general focus on all social protection programmes (Costella et al., 2023) or was not directly connected with the recent empirical literature (Beazley et al., 2016). Hence, we attempt to fill this gap.

We suggest that PWPs may affect households' capacity to cope with weather shocks through the wage component by creating additional economic resources during the period of negative shocks; and by promoting savings and investments in productive assets to bolster future adaptive resilience. Additionally, the wage component of PWPs may affect the capacity to adapt to climate change by inducing households to use different technology (especially, climate-smart technology) and, in general, to diversify livelihoods. Second, the infrastructure component of PWPs has the potential to promote climate resilience by enhancing households' long-term adaptive capacity. This is especially the case when PWPs are used to create "climate-smart" assets, such as water conservation or swales, or provide services such as afforestation, which may benefit the entire community. Third, as PWPs are often combined with training, households' capacity to adapt to weather shocks can increase, for example, by inducing them to use CSA practices and to diversify livelihoods.

Our review of the evidence suggests that the wage component of PWPs interacts significantly with weather shocks. Participants in PWPs are less likely to reduce their labour supply or experience food insecurity during negative weather events than non-participants. However, PWPs may also exacerbate the adverse effects of climate-related shocks on agricultural productivity. This could be due to spillover effects, where PWPs decrease labour supply in agriculture and agricultural wages become less responsive to negative weather shocks. Moreover, most empirical studies from different countries indicate that participation in PWPs enhances households' coping capacity through the accumulation of productive assets, with evidence on the effect on savings being mixed. However, these benefits typically materialize when people participate in the programme for several years and are thus predominantly observed in long-term PWPs, such as the Indian MGNREGA. Furthermore, the results of the review indicate that long-term employment guarantee programmes such as the MGNREGA have the potential to enhance households' adaptive capacity by encouraging higher-risk investments and the adoption of CSA practices. In contrast, less generous or short-term emergency programmes appear to have limited bearing on the adaptive capacity.

We noticed very few quasi-experimental studies focusing on the infrastructure component: these suggest better protection from weather shocks for the whole community where the PWP was implemented, which is likely driven by community assets created through the programme. There are, instead, numerous descriptive studies indicating that community assets – such as rural roads, water management and watershed development initiatives – of PWPs positively affect climate resilience. Projects focusing on rural connectivity, water management

and watershed development initiatives help households to deal with climate-related hazards. A few quasi-experimental studies suggest positive effects for the whole community in treatment villages, such as a reduction in the negative effects of weather shocks on food security, which is likely driven by community assets created by the PWPs.

Finally, the overall evidence on the skill-development component of PWPs suggests that combining on-the-job training with wage support and infrastructure development can enhance participants' knowledge of CSA practices, while also increasing their income and employment opportunities, potentially promoting livelihood diversification. However, evidence on the skill component of PWPs is very limited and primarily based on non-experimental studies.

In general, the effects of the different components of PWPs on climate resilience may largely depend on how the programme is designed and implemented, as well as on the objectives (e.g. long-term development versus ad-hoc measures). Some studies highlight the relevance of factors such as regularity in payment, adequate management of funds, and quality of assets created through the PWPs in explaining their effectiveness. While it is key that transfers are delivered on time to support households coping with shocks, several sources have documented delays in the disbursement of wages (Mugabo, 2018 in Rwanda; Steinbach et al., 2020 in India; and Hoddinott et al., 2011 in Ethiopia). Furthermore, without quality and well-maintained infrastructure, PWPs are unlikely to increase resilience: some studies provide evidence of the positive effects of active community participation in the different phases of the project cycle in achieving this objective (Shigute, 2022; Burchi and Sakketa, 2025). The International Labour Organization (ILO) through its employment-intensive investment programmes (EIIP) has provided extensive guidance on how to optimize labour inputs in PWPs to highlight the fundamental function of PWP assets and to promote an efficient production of quality and durable assets (McCord et al., 2024). Yet, most of these design features are quite underexplored in the literature, highlighting a key evidence gap for policy makers aiming to use PWPs to enhance climate resilience.

Another major gap relates to the contexts from which our studies were drawn. We mostly drew upon evaluations conducted in Ethiopia and India, and to some extent Malawi. Further, existing studies focus on rural areas, while PWPs are also used in urban and peri-urban settings and in humanitarian contexts. Variation in employment opportunities between urban and rural areas or across humanitarian settings may influence the degree to which on-the-job training can lead to long-term employability and, subsequently, resilience to future shocks.

In brief, our review highlights that PWPs can be used as an important policy tool to strengthen the resilience of beneficiaries and reduce poverty in the face of climate shocks, particularly if investments in high-quality and relevant infrastructures are made. However, more research is needed to provide evidence on which

intervention components of PWPs and which design features matter the most for effective resilience building. In particular, there is a lack of scientifically sound evidence on the impact of PWPs through their infrastructure/service component. In addition, future studies should explore the effectiveness of combining infrastructure projects with skills development and on-the-job training to enhance the resilience capacity of beneficiaries, and beyond. Finally, PWPs - more than other social protection schemes - can have relevant (positive) effects on the entire communities in which they are implemented, especially through the infrastructure component. This is especially the case given the increasing emphasis on climate-smart infrastructures, which specifically have the objective of fostering resilience. Since there are only very few rigorous studies that investigate PWPs' impacts beyond those on their immediate beneficiaries, more research should be oriented towards a more comprehensive documentation of these spillover effects. Only with adequate information on the overall effects on different members of society, and on the channels through which these effects materialize, can policy makers take decisions about when to implement PWPs (especially in comparison with other social protection interventions), and how to design them.

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Social protection and resilience in protracted crises

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Abstract This article critically examines perspectives on social protection's role in strengthening resilience capacities in protracted crises – contexts where conflict and displacement persist for five years or longer. These crises shape how stakeholders navigate their mandates to provide support, while influencing how affected communities seek to withstand, recover from, and adapt to ongoing shocks. International actors have promoted social protection as a means to strengthen absorptive, adaptive and transformative resilience capacities at household and community levels. While resilience has become a central concept in social protection policy and programming, much underlying evidence and assumptions stem from stable settings. Protracted crises introduce increased and distinct challenges, including conflict-related insecurity, disrupted public services, and legal uncertainty for displaced populations. Despite these difficulties, social protection for resilience-strengthening is still encouraged as an alternative to piecemeal humanitarian assistance. Drawing on global policy and research reports, and empirical evidence from a multi-country research programme, this article identifies four key limitations in approaches that aim to strengthen resilience through social protection in protracted crises. First, many approaches focus on supporting absorptive capacities. Second, there is often misalignment between the nature of interventions and the drivers of vulnerability. Third, current sectoral approaches work in silos. Finally, there is insufficient attention to local support mechanisms. By critically engaging with these limitations, this article contributes to debates on the relationship between social protection and resilience. It concludes by offering reflections on how aid actors can

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Keywords social protection, cash benefit, aid coordination, resilience, conflict, international

Introduction

In recent years, social protection has been embraced as a key instrument to strengthen the resilience of individuals, households and communities (ADB, 2018; Bowen et al., 2020; World Bank, 2022; Costella et al., 2023). Following definitions of resilience by the Intergovernmental Panel on Climate Change (IPCC, 2022) and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES, 2024), here resilience refers to household-level capacities to cope with shocks and stressors, as well as to improve one's condition, despite disturbances associated with crises. Whilst resilience is not inherently a pro-poor concept (Béné et al., 2014), the United Nations (UN) Sustainable Development Goals, including Goal 1 (End poverty in all its forms everywhere), can guide aid actors' commitments to improve resilience through social protection. The concept of resilience gained currency in development and aid debates following the entangled global food and financial crises that unfolded between 2007 and 2009. Since then, many international aid agencies have developed strategies and approaches on resilience specifically, to bridge humanitarian responses to address acute needs with interventions that aim to strengthen the longer-term capacities of households and communities to withstand stresses and shocks. Key agendas within social protection policy, including Shock Responsive Social Protection (SRSP) and Adaptive Social Protection (ASP), are closely coupled with wider strategies to build resilience (Cornelius, Béné and Howland, 2018; O'Brien et al., 2018; Bowen et al., 2020). The SRSP agenda aims to contribute to systems that build resilience ex post by ensuring that shock-affected populations have access to support, thus limiting the likelihood of a shock tipping into a crisis. Adaptive Social Protection focuses on ex-ante support to households to increase their capacities to prepare for, cope with and adjust to shocks and stressors. The assumption is that social protection interventions, especially those that include multiple components and/or connections with complementary services, such as seen in cash-plus programmes (interventions where cash transfers are combined with other forms of complementary support), can contribute to resilience strengthening efforts.

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While resilience has become an important aim in social protection policy and programming, much of the underlying evidence and assumptions of its role come from peaceful and stable settings. There has been limited consideration of the scope for social protection to contribute to resilience in contexts characterized by conflict and other dimensions of fragility (Wiggins et al., 2021; Lind, Sabates-Wheeler and Szyp, 2023). This article considers the limitations of using social protection, and social assistance instruments more specifically, to strengthen resilience in protracted crises - settings where conflict and displacement last five years or more (ICRC, 2016; UNHCR, 2020; Moffett and Narayan, 2024). As discussed below, protracted crises cover heterogeneous settings. In contexts with functioning institutions and governance, including some settings of polycrises that involve climate-driven crises, broader policy responses may be possible where institutional social protection can play a significant role (see Devereux and Solorzano in this issue). Still, in many protracted crises, governments can be parties to conflicts and may not have effective control over their territory, and/or non-state armed groups can be present and involved in delivering basic services (Lind and Sabates-Wheeler, 2024). Conditions and dynamics in protracted crises have two types of implications for social protection, and more narrowly social assistance programmes. On the one hand, weakened administrative capacities, politicized decision-making, and armed conflict all undermine programme operations and require considerable care to manage as part of conflict sensitivity. On the other hand, conflict and fragility can compound other drivers of vulnerability and poverty that social assistance programmes seek to address. Thus, protracted crises not only make it more difficult to sustain provision, but they also shape the vulnerability context in ways that can complicate commitments to coverage that is inclusive and that avoids entrenching existing inequalities.

In this article we take a critical perspective and identify four key limitations in policy and programming approaches that aim to strengthen resilience through social protection in protracted crises. Our methodological approach draws on a scan of global stakeholder policy and research reports focusing on resilience and social protection policy and programming, with a particular focus on the use of social protection in protracted crises. Keyword searches were conducted of Google and academic search engines to identify relevant documents. The review was limited to documents published in English since 2011. Here, global stakeholders include multilateral organizations (including UN agencies as well as international financing institutions), international NGOs, bilateral donors, and

^{1.} As the initial scan was conducted in February 2023, for the purpose of incorporating the latest evidence when this article was drafted in 2025, additional papers from 2024 and 2025 were reviewed and integrated as relevant.

Furthermore, we draw empirical evidence from the Better Assistance in Crises (BASIC) Research programme, which examines the relationship between social protection and humanitarian assistance across protracted crisis contexts in sub-Saharan Africa and the Middle East. BASIC Research included studies undertaken on the role of social assistance in strengthening livelihoods and climate resilience in Ethiopia and Niger (Lind et al., 2025; Naess et al., 2025; Watson, Bozari and Taffa, forthcoming). Other country-based work included research on social protection provision during conflict in Sudan (Birch, Carter and Satti, 2024), marginalized people navigating access to social assistance in Uganda (Shaw, Holland-Szyp and Boham Okiror, 2025), and social assistance delivery capacities in Yemen (Carter, Al-Absi and Harvey, 2024). Complementary research addressed the scope of cash-plus programming in protracted crises (Lind, Sabates-Wheeler and Szyp, 2023; Sabates-Wheeler, Lind and Holland-Szyp, 2025) and international actors' perspectives on the integration of climate change into social protection policies and approaches (Holland-Szyp and Selby, 2025).

The following section briefly elaborates on protracted crisis contexts, and the challenges these present for resilience and social protection. The article then turns to a review of each of four limitations. It concludes with reflections on how aid actors can reconsider their approaches to strengthening resilience in protracted crises, advocating for strategies that are more collaborative, understanding of, and adapted to local contexts.

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Protracted crises

Since the early 2000s, there has been a noticeable increase in the concentration of severe poverty in areas affected by conflict. Poverty, as a dimension of vulnerability, influences resilience capacities, and creates needs for support in these contexts, including for social protection interventions. By one 2024 estimate, more than 40 per cent, or 455 million people in acute poverty, are estimated to live in countries affected by conflict (UN News, 2024). All ten countries topping the 2025 States of Fragility index of the Organisation for Economic Co-operation and Development (OECD) are in protracted crisis: South Sudan, Somalia, Afghanistan, Yemen, Democratic Republic of the Congo, Central African Republic, Chad, Sudan, Haiti, and the Syrian Arab Republic (OECD, 2025). A growing proportion of global humanitarian assistance is directed to these settings. In 2024, 91 per cent of funding required for interagency appeals was for protracted crises, jumping from 29 per cent in 2014 (Development Initiatives, 2024). The

primary aim of a significant share of social assistance in protracted crises is to protect food security and nutrition, in other words, to establish or sustain the coping capacities of households and individuals (Lind, Naess and Bailey, 2024). Social protection, as a primary tool for poverty reduction, is increasingly deployed in these environments where persistent poverty severely constrains people's ability to withstand and recover from shocks. The incorporation of resilience in aid strategies indicates a growing sense of fatigue among international donors regarding prolonged crises. Indeed, part of the appeal of social protection in such settings as an alternative to humanitarian assistance is that mechanisms and systems are developed that, over time, aid-recipient states will direct, lead and finance. However, critical perspectives of aid's embrace of resilience highlight how this shifts responsibility from the state to the individual. These perspectives also question the feasibility of resilience strengthening in protracted crisis, where overarching systems may remain dysfunctional, and the risks of conflict persist (Jaspars, 2021).

Aid approaches often equate resilience with different capacities. For example, Béné et al. (2014) conceptualize resilience in terms of three sets of interacting capacities: absorptive (referring to coping capacities to buffer the impacts of shocks), adaptive (capacities to learn and adjust to drivers, trends and processes) and transformative (capacities to change direction and create a fundamentally new livelihood). Others emphasize anticipatory capacities – or, abilities to anticipate shocks and stresses and reduce their impacts through preparedness and planning – as a related dimension of resilience (Costella et al., 2017; Solórzano and Cárdenes, 2019). Whereas Béné et al. (2014) emphasize the centrality of transformative capacities in their understanding of resilience, Bahadur et al. (2015, p. 13) instead distinguish transformation as "an approach to holistically and fundamentally build, reshape and enhance people's capacity to adapt to, anticipate and absorb shocks and stresses".

Conditions and dynamics in protracted crises introduce increased and distinct challenges for interventions to support resilience, including conflict-related insecurity, disrupted essential public services, and legal uncertainty for displaced populations and minority groups (Lind et al., 2025). Social protection programmes that aim to build resilience in protracted crises require to critically reflect on the assumption that social protection can do more than maintain absorptive capacities when households are grappling with the impacts of conflict-related dynamics and processes. Some argue that stability is a pre-condition for developing adaptive and transformative capacities (Béné et al., 2014), others that absorptive capacities are foundational for adaptive capacities and that strengthening these during conflict is important in turn for strengthening livelihoods when conditions permit (Lind, Naess and Bailey, 2024). In settings where there is a lower "baseline", and where violence continues to

Findings

This section presents four limitations of normative aid approaches that aim to strengthen resilience in protracted crises by using social protection. First, social protection programmes in protracted crises often prioritize supporting absorptive resilience capacities that help individuals cope with immediate shocks. Second, and related to the first, is that the emphasis on supporting individual and household-level capacities to absorb shocks implies that social protection interventions address symptoms rather than the root causes of vulnerability. Third, in programme delivery, siloed approaches persist in many protracted crisis settings due to institutional constraints, the differing mandates of agencies involved in supporting household welfare, and the challenges of implementation in resource-constrained environments. Fourth, local support mechanisms and networks are often an afterthought in normative approaches, thereby missing opportunities to build on existing systems of solidarity and mutual assistance. Each of these is reviewed in turn.

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Limitation 1: Focus on supporting absorptive capacities

The predominant focus of the social protection sector in recent years has been responsiveness to acute shocks (i.e. SRSP), rather than addressing the needs for adaptation and transformation over the longer term (Holland-Szyp and Selby, 2025). Indeed, most social protection programmes that aim to strengthen people's resilience capacities focus on buttressing *absorptive* capacities rather than necessarily seeking to achieve *transformative* outcomes (Agrawal et al., 2020; Tenzing, 2020; Kundo et al., 2024). This is particularly the case in protracted crises, where ongoing conflict-related processes and displacement dictate what is possible. Whilst evaluative work has documented and established the positive contributions of social protection to supporting absorptive capacities, there is less focus and evidence concerning the potential negative outcomes for resilience, including maladaptation that could reinforce or create new vulnerabilities (Eriksen et al., 2021). Resilience in protracted crises settings has been questioned (Davoudi et al., 2012). At its root, it implies an individual or household return to

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Evidence from Ethiopia shows how the Productive Safety Net Programme (PSNP) helped to maintain people's absorptive capacities in a context of interacting climate change and conflict associated pressures that narrowed the range of adaptive livelihood options (Lind et al., 2025). PSNP beneficiaries in crisis-hit areas described the programme as being significant to their ability to cope yet insufficient to build assets. This protective function of the programme, while valuable, was itself diminished by a low cash transfer value, which did not keep pace with severe inflationary pressures. PSNP payment levels were far below what could have directly contributed toward adaptive capacities (Lind et al., 2025). Yet, the PSNP still played an important role in preventing beneficiaries from slipping further into vulnerability. Moreover, it ameliorated and reduced the prevalence of distress coping strategies for crisis-affected beneficiaries, such as the selling of productive assets. Especially during covariate shocks such as conflict, when networks of mutual assistance were strained, it provided critical support (Naess et al., 2025).

The core intent of social assistance in conflict settings (guarding a baseline status of a household/individual, as determined by their level of subsistence and/or cash) is an inseparable part of what it means to support resilience. Thus, emphasizing resilience should not detract from the core protective purpose of social protection, especially in areas where violence and displacement are, and will continue to be, key drivers of vulnerability (Lind et al., 2025). While social protection programming in protracted crises necessarily focuses on supporting absorptive capacities, rather than on more ambitious adaptive and transformative capacities, this limitation is due to contextual dynamics and the extensive needs associated with conflict and displacement as drivers of vulnerability rather than shortcomings in programme design as such. Knowledge of crisis-specific delivery challenges such as levels of violence, system fragility, aid dependence, and stakeholder configurations can better inform how and to what extent social protection may contribute to resilience in protracted crises. Widespread and heightened levels of need that exist in protracted crises, combined with donor fatigue with sustaining external support over many years in these settings, constrain what social protection programmes can achieve. A focus on sustaining absorptive capacities is arguably an appropriate focus for social protection programmes until post-conflict conditions allow a focus on adaptive capacities and building assets (Lind, Naess and Bailey, 2024). Still, whereas social protection programmes might seek to address socio-political and security barriers that constrain adaptive and transformative capacities, incorporating these additional aims should not come at the expense of sustaining routine provision (Lind et al., 2025). As resilience is not a pro-poor concept, in the sense that it is

not a "one-size-fits-all" response, and does not exclusively apply to, or necessarily benefit, the poor, resilience-building cannot and should not replace the poverty reduction efforts of social protection (Béné et al., 2014).

Limitation 2: Dissonance between the nature of interventions and vulnerability drivers

While social protection interventions in protracted crises often seek resilience as an objective or outcome, in practice there is a mismatch between the level of intervention (focusing on the individual and household levels) and the drivers of vulnerability in these places (Béné et al., 2014; Eriksen et al., 2021). Drivers of vulnerability in protracted crises are structural and include destroyed infrastructure, discriminatory regimes, the politicization of governance and persistent violence (Lind et al., 2025). One critique of the focus on resilience strengthening within aid policy and programming in crises is that it shifts responsibility from states and international actors to individuals to reduce their own vulnerability, an unrealistic expectation in settings bearing the imprint of chronic conflict and instability (Jaspars, 2021). This tendency to address symptoms rather than causes means programmes tackle the lack of resilience while overlooking structural origins (Cannon and Müller-Mahn, 2010; Béné et al., 2018).

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Research in Uganda revealed that social assistance for marginalized people, including people with disabilities, single mothers and the elderly, primarily offers individual-level, often one-off support through cash, food or asset transfers. Due to inadequate, unpredictable and infrequent provision, impacts rarely extend beyond enabling basic survival. Meanwhile, structural drivers of vulnerability – stigma, discrimination, marginalization, violence and abuse – remain unaddressed, leaving recipients burdened with unrealistic expectations to improve their own situations (Shaw, Holland-Szyp and Boham Okiror, 2025). Similarly, support provided through Ethiopia's PSNP is insufficient in addressing structural drivers of vulnerability, as discussed above. Programme elements beyond transfers have not delivered sustained or systematic improvements in community-level resilience. For example, public works activities have struggled to meaningfully reduce climate vulnerability in highly degraded landscapes, with watershed rehabilitation efforts failing to prevent devastating floods (Naess et al., 2025).

The gulf between how social protection programmes conceptualize resilience, often as something encompassing sustained improvements in livelihoods, and operationally what social protection interventions are constrained in achieving in protracted crises, has significant implications. Standalone social protection interventions are poorly positioned to address conflict-related processes, displacement and other structural drivers of vulnerability. Addressing these

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drivers requires complex, politically sensitive, long-term actions, making them less appealing to donors that seek quick, measurable results. Still, while standalone social protection interventions are ill equipped to address structural drivers of vulnerability, they can mitigate household-level impacts. When connected with broader efforts to address climate change and conflict, they might also potentially contribute to building resilience beyond absorptive capacities.

Limitation 3: Siloed approaches impede intersectoral connectivity

Intersectoral connections are particularly crucial in protracted crises, where vulnerability drivers span multiple domains. Building resilience beyond buttressing absorptive capacities necessitates connections between social protection interventions and wider efforts in the humanitarian-development space, including those centred on supporting livelihoods, managing disaster risk, providing health care and education, and peacebuilding (Sabates-Wheeler, Lind and Holland-Szyp, 2025). Despite recognition of the added value of linking social protection with disaster risk management and climate adaptation through the Adaptive Social Protection agenda (Bowen et al., 2020), implementation at scale has not materialized (Mohamed et al., 2025). Operationalizing notions of Adaptive Social Protection falter due to differing mandates, terminology barriers, and lack of a shared vision (Biggs, Schlüter and Schoon, 2015; Mohamed et al., 2024). Climate and social protection actors operate with different technical expertise, using distinct terminologies, complicating coordination (Naess and Holland-Szyp, 2021; Naess, Selby and Daoust, 2022; Holland-Szyp and Selby, 2025). Mainstreaming climate considerations into social protection policies and approaches remains limited, illustrated by the difficulty for aid actors of applying climate information and assessing climate vulnerability, as well as the inaccessibility to climate finance for social protection in conflict-affected areas (Holland-Szyp and Selby, 2025). In fact, these challenges intensify in protracted crises, where supporting infrastructure and social protection systems are weak or nascent and dependent on international technical assistance and finance. With international assistance following an overly projectized approach, investments required in sustainable social protection systems and their intersectoral connections become secondary priorities. Despite advocacy for layered support and cross-sector collaboration (FAO and Red Cross Red Crescent Climate Centre, 2019; Resilience Hub, 2022), many beneficiaries, particularly the poorest, receive transfers without links to complementary services or sectors. As Arnold and de Cosmo observe (2015), disaster response plans rarely include social protection actors, while climate change efforts are typically led by environmental ministries, reinforcing sectoral silos.

At the policy design level, research in Ethiopia reveals that the PSNP struggles

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Cross-sectoral coordination and complementary services integration is needed for social protection to meaningfully contribute to addressing drivers of vulnerability in protracted crises (Lind, Sabates-Wheeler and Szyp, 2023). However, coordination has tangible costs that are rarely acknowledged or resourced - successful cross-sectoral collaboration requires dedicated time, funding, and clear operational definitions of what is being coordinated, by whom, and toward what specific outcomes (Slater, Haruna and Baur, 2022). Without this precision, calls for "better coordination", such as between social protection and humanitarian workers, remain ineffective. When appropriately resourced and context-specific, strategic collaboration of social protection with other sectors has the fuller potential toward strengthening resilience, for instance, by connecting cash-plus programming with peacebuilding initiatives, which could strengthen the capacity to address underlying fragility drivers (Sabates-Wheeler, Lind and Holland-Szyp, 2025). Practical examples include embedding social protection within conflict resolution processes or creating explicit pathways between social protection and protection services for marginalized groups. Additionally, adequately investing in frontline workers is essential for effectively implementing coordinated approaches in resource-constrained settings (Carter, Al-Absi and Harvey, 2024; van Halsema, Bansal and Barca, 2024).

In most protracted crisis settings, people rely by far on their own resources and those they mobilize through their networks to survive, adapt and transform. In areas with limited state presence or gaps in formal social protection provision, non-state networks step in, become crucial first responders during crises, and persist long after formal aid ceases (Mohamed, 2022; Mohamed et al., 2024; Oware, Zembe and Zembe-Mkabile, 2025). These local solidarity mechanisms involving family, neighbours, religious figures, and community leaders - operate more nimbly and, thus, respond more quickly, in ways that formal systems are typically unable to (Weingärtner, Pichon and Simonet, 2017; Joossens, Manca and Zec, 2022; Mohamed, 2022). Yet, normative resilience approaches often overlook vernacular understandings and grassroots efforts (Ziervogel et al., 2017). Thus, there remains significant unexplored potential to connect social protection provision and assistance delivered through local support mechanisms. The challenge of linking local support mechanisms with social protection systems is particularly acute in protracted crises, where formal systems are limited or non-existent. While there is some interest within global policy discourse on local support mechanisms, such as through "whole of society" approaches to strengthening resilience by supporting their ownership of potential solutions (WFP, 2021; ICRC and IFRC, 2023; Mercy Corps, 2023), efforts to institutionalize connections between formal and informal realms of provision show mixed results. For example, attempts to expand coverage by drawing on local mechanisms have inadvertently politicized local assistance (Abbas, 2024). Aid directed through or with legitimate local support channels offers advantages - including access to hard-to-reach areas and rapid response capability - but must be implemented accountably to prevent exclusion of marginalized people and those deemed "undeserving" (Brody et al., 2016; Weingärtner, Pichon and Simonet, 2017).

In Sudan, community-level mutual aid initiatives rooted in cultural traditions of social solidarity serve as vital humanitarian lifelines, particularly for vulnerable women, children, and displaced populations when the state and international aid is unavailable. Whilst these initiatives were overwhelmed by the scale of crises, evidence suggested that formal cash and food transfer programmes were more effective, inclusive, and accountable when they collaborated with and empowered these local groups, leveraging their needs assessments, targeting, and accountability mechanisms. Yet, these local actors remain an afterthought, marginalized within the aid system, treated as subcontractors rather than receiving sustained investment to develop their core capacities including financial resilience to withstand conflict-related insecurity which disrupts their operations (Birch, Carter and Satti, 2024). Similarly, research in Niger demonstrates how diverse local support

Despite their limitations, local support mechanisms and networks remain crucial for strengthening resilience in protracted crises. While policy sometimes acknowledges their relevance, ways of operationalizing linkages often remain underdeveloped. Rather than creating parallel delivery channels during shocks, aid recipients might benefit from assistance routed through local support systems, or better yet, building on existing traditions, reinforcing "resilience from below" through empowered first responders (Birch, Carter and Satti, 2024; Mohamed et al., 2024). Social protection interventions must be informed by contextual awareness of these networks and traditions to build connections that add value to existing implementation arrangements. Interlinkages between formal and informal systems already exist in some settings but can lack intentionality and adequate support to work optimally. Careful referral mechanisms between formal and informal services offer another promising pathway, provided they avoid crowding out or distorting existing systems (van Halsema, 2025). For programmes that aspire to extend coverage, country-specific research is needed to understand how to achieve synergies with local support mechanisms. Strengthening resilience through social protection requires more than merely contracting local organizations; it demands building upon existing local practices and priorities, with due attention to oversight to avoid reinforcing inequalities. Strengthening adaptive capacities ultimately requires accountably supporting inclusive forms of non-state social provision that persist through crises when other providers cannot (Lind, Naess and Bailey, 2024). In increasingly uncertain times, social protection that empowers effective local actors becomes critical for reducing dependence on volatile donor funding and for building sustainable resilience.

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Conclusion

In this final section, we offer reflections on how aid actors can reconsider their approaches to strengthening resilience in protracted crises, by advocating for strategies that are more collaborative, understanding of, and adapted to local

contexts. The limitations of social protection interventions in strengthening resilience in protracted crises are embedded in the broader challenges of how resilience itself is conceptualized, operationalized, and integrated across multiple systems. Our analysis has highlighted four key limitations of current approaches.

First, the predominant focus on absorptive capacities reflects the immediate priorities and dynamics in protracted crisis settings, which influences what is possible. While social assistance programmes have demonstrated success in helping households maintain baseline subsistence and reduce erosive coping strategies, they frequently lack mechanisms to enhance flexibility and robustness amid uncertainty (Lind et al., 2025). This focus on short-term shock absorption, while necessary, means that investments in resilience capacities beyond coping are missing. While a protective function must be the core contribution of social protection to resilience strengthening in protracted crises, social protection interventions can contribute much more with appropriate levels of finance and political will.

Second, there exists a fundamental dissonance between the nature of social protection interventions and the structural drivers of vulnerability they aim to address. While interventions predominantly target individuals and households through cash transfers and livelihood support, the drivers of vulnerability often lie in domains such as governance, service delivery, and security provision (Cannon and Müller-Mahn, 2010; Béné et al., 2018). This means that social protection frequently treats symptoms rather than addressing root causes, particularly in protracted crises where vulnerabilities stem from destroyed infrastructure, discriminatory regimes, and ongoing violence. To go beyond this limitation, social protection in protracted crises must be situated within broader efforts to tackle structural drivers of vulnerability, especially those involving efforts to resolve conflict, build social cohesion and support drivers of peace.

Third, despite widespread recognition of the benefits of cross-sectoral coordination, siloed approaches to strengthen resilience with limited intersectoral connectivity persist due to institutional constraints, differing mandates, and implementation challenges. Limited resources and support for sub-national implementers and frontline workers can severely constrain effective service delivery (Carter, Al-Absi and Harvey, 2024; Lind et al., 2025). In protracted crises, where governance structures are weak and public administration is underfunded, coordination tends to emerge out of necessity rather than design. Without intentional linkages, such as for coordination with complementary services, siloed approaches will continue to predominate. Addressing this requires not just technical alignment but also navigating institutional barriers, including misaligned funding mechanisms and narrowly interpreted mandates. Moving beyond coordination efforts that remain largely technical in nature, towards cross-sectoral linkages with shared accountability is needed.

Fourth, normative approaches to strengthen resilience in protracted crises inadequately engage with local support mechanisms that provide vital and often timely support. These mechanisms of solidarity and mutual assistance involving family, friends, neighbours, and community leaders, often fill gaps left by other actors, are first responders during crises, and remain long after formal aid has stopped (Mohamed et al., 2024). Yet, these local actors remain marginalized within the aid system, often an afterthought, treated as subcontractors rather than receiving sustained investment to develop their core capacities, thereby missing opportunities to build on existing systems of solidarity and mutual assistance. Strengthening resilience through social protection may include explicitly incorporating local support networks (as well as their current practices) into policies and programmes, referral mechanisms between formal and informal support, and documenting successful cases of support and mobilization (Watson, Bozari and Taffa, forthcoming).

Our findings underscore that social protection on its own is insufficient to build adaptive and transformative resilience in protracted crises. This would require a coordinated array of policies, such as social, economic and peacebuilding interventions. This coordinated approach aligns with both the ambitions of UN Sustainable Development Goal 1, target 1.3, which calls for nationally appropriate measures that substantially cover the poor and vulnerable, and the International Labour Organization's social security standards that emphasize comprehensive protection as a human right. Ultimately, many of the constraints on strengthening resilience in protracted crises through the use of social protection, including the presence of armed groups, continuing violence and the existence of discriminatory regimes, are beyond the remit of social protection interventions to shift. Still, while there are clear limitations to using social protection to strengthen resilience in protracted crises, social protection interventions can provide vital support to coping capacities and prevent further regression into even deeper vulnerability. In that sense, sustaining routine provision can be recognized as an important way that social protection strengthens resilience. Beyond this, there remains considerable scope to explore social protection's contribution to adaptive and transformative capacities through both improving coordination with other services and sectors, as well as through empowering local support mechanisms.

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Social assistance and informal social networks and the resilience of the population in Ukraine

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Abstract Resilience is conceptualized as a property of subjects (individuals, families, households, communities, or nations) and is intrinsically linked to coping with and overcoming vulnerability, indicating that subjects may require external assistance during crises. Ukraine's social protection system during the Russian-Ukrainian war has demonstrated sufficient resilience in protecting against life-cycle risks. The State has also responded rapidly to the emergency crisis of war. International humanitarian organizations likewise have responded rapidly with numerous humanitarian aid programmes. However, funding opportunities are diminishing. This requires the most efficient use of limited resources. This study implements a community-oriented approach, with a focus on localization in risk distribution through an analysis of monitoring data produced by international organizations and local research in Ukrainian communities. Key findings include overestimated expectations of family and friend support coupled with underestimated self-reliance (approximately 20 per cent) during 2022-2024. Institutional support (volunteer, public, and international organizations) showed increased significance, while overall self-reliance decreased in favour of external support sources.

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Future research directions include analysing expected-versusactual assistance dynamics, investigating social support structure change factors, examining social trust transformation across institutions, and developing optimized support resource distribution programmes.

Keywords social protection, social assistance, social policy, community, resilience, international organization, Ukraine

Introduction

As a result of the Russian-Ukrainian war, Ukraine's social protection system has faced significant challenges (Ignatyuk et al., 2024), yet it has been able to provide support to all major vulnerable population groups in response to both life-cycle risks and war-related risks. International humanitarian organizations have played an invaluable supporting role by providing Ukrainians with in-kind assistance, cash support, and services, while also promoting resilience and development through organizational and methodological support in responding to the war emergency.

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Against the backdrop of GDP contraction and rising inflation during wartime, the social protection system is experiencing a particularly acute shortage of public resources. The years 2024–2025 also show a trend toward decreasing volumes of international humanitarian aid. This justifies the need for a systematic analysis of the current state of the social protection system and the search for ways to modernize it.

With the large number of various social benefits in Ukraine, there is a problem on the one hand of instances of duplication between them and, on the other hand, cases of exclusion of certain groups/persons from the vulnerable categories of the population. In early 2025, an experimental project on providing basic social assistance was launched. Within the framework of the PeReHID initiative, international humanitarian organizations together with the Ministry of Social Policy of Ukraine are working on recommendations for transitioning the system from humanitarian response to recovery and sustainable development. However, developing effective programmes and strategies requires not only budgetary

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^{1.} In Ukraine, the objective of the PeReHID Initiative (Pathways for Reinforcing the Humanitarian–Development Nexus in Ukraine) is to support the transition of parts of the humanitarian caseload into an inclusive, shock-responsive national social protection system. For more information, see socialprotection.org.

calculations and analysis but also consideration of how people apply their own survival strategies during wartime.

This article compares the conclusions of programme developers and strategies for transitioning from humanitarian response to sustainable functioning of the social protection system with an analysis of trends in applications from the affected population in the war situation to receive assistance.

The article is structured as follows: based on qualitative document analysis, Ukraine's social protection system and its response to war challenges are characterized; the contribution of international humanitarian aid to social support is noted; the shared vision of the Ministry of Social Policy of Ukraine and the international humanitarian community regarding the prospects for developing the social protection system under conditions of diminishing resources is described; the resilience of the Ukrainian population is identified, and a statistical analysis of data obtained from surveys conducted in 2022–2024 on applications for assistance from the affected population in response to war challenges is presented.

This study implements a community-oriented approach, with a focus on localization in risk distribution through an analysis of monitoring data produced by international organizations and local research in Ukrainian communities (Hilhorst, 2018). A limitation of the study is that it analyses data from only one region, Sumy Oblast, which does not reflect the situation in Ukraine as a whole. However, this analysis is indicative, as it concerns a border region of Ukraine that has the longest border with the Russian Federation (more than 310 miles of international border).

The social protection system in Ukraine

Ukraine belongs to the social welfare states that guarantee social protection to all citizens. Its legal character is enshrined in the Constitution of Ukraine (1996, art. 3), where human life, dignity, and security are recognized as the highest social values.

The social protection system in Ukraine provides social protection to a significant portion of the country's population. It covers social groups including pensioners, the elderly, low-income persons, the unemployed, people with disabilities, orphaned children and children deprived of parental care, and other vulnerable population groups. Thus, life-cycle risks are covered quite comprehensively.

In the Verkhovna Rada of Ukraine, the highest legislative body of state power, there is a Committee on Social Policy and Protection of Veterans' Rights. The implementation of the State's social function is also ensured by the Ministry of

2. See the Constitution of Ukraine (1996) [Конституція України], Verkhovna Rada of Ukraine.

Finance of Ukraine, the Ministry of Social Policy of Ukraine, the Ministry of Veterans Affairs of Ukraine, the Ministry of Digital Transformation of Ukraine, as well as the State Service for Children's Affairs.

Social protection bodies function at the state, regional and local levels. Indeed, a model of the organizational structure of the executive body of village, settlement and city councils on issues of social protection of the population and protection of children's rights has been developed (Cabinet of Ministers of Ukraine, 2021).

Local self-governing bodies in Ukraine – village, settlement and city council – have the right to develop targeted and comprehensive social protection programmes that are financed from local budgets.³ Complementing state strategies, these programmes allow for a more targeted response to the needs and vulnerabilities of the local population. They are based on the priorities and resource capabilities of specific communities and can serve as a crisis response tool to strengthen their social resilience.

The main underlying principles of the social protection system for implementing social policy at all levels in Ukraine are transparency, subsidiarity and interagency cooperation.

Since the COVID-19 pandemic, the social protection system in Ukraine has intensified efforts toward digitalization. The procedure for applying for assistance has been simplified through the implementation of a "single window" mechanism, electronic services of the state system "Diia", personal citizen accounts, as well as services on the websites of the State Employment Service and the Pension Fund of Ukraine.⁴ Digitalization is seen as a key stage in modernizing the system, aimed at reducing duplication of social benefits and avoiding the exclusion of vulnerable population groups (Tonea and Palacios, 2022).

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The response to war challenges

In response to the challenges caused by Russia's war against Ukraine, the social protection system has adapted to new conditions through a combination of domestic policy and international humanitarian support. Since 2014, special attention in developing social security strategies and programmes has been given to ensuring institutional stability and social cohesion.

The adaptation of the social protection system to war conditions was accompanied not only by institutional transformations but also by the need to respond to new social challenges arising from profound demographic changes.

^{3.} See Law of Ukraine "On Local Self-Government in Ukraine" (21 May 1997) [Закон України «Про місцеве самоврядування»], Verkhovna Rada of Ukraine.

^{4.} The Ukrainian public websites can be accessed here: the Diia (Pensions, benefits and assistance); the State Employment Service of Ukraine; the Pension Fund of Ukraine (Electronic services portal).

Russia's armed aggression against Ukraine has led to significant demographic shifts and the emergence of new social categories requiring support. As a result of the war over the past 10 years, the proportion of war veterans and their family members has increased, and a category of internally displaced persons (IDPs) has emerged (UNHCR Ukraine, n.d). The processes of population ageing and declining birth rates have significantly accelerated. Life-cycle risks have been compounded by war-induced risks (such as displacement and disability). For both of these risk groups, the relevant population categories receive social assistance from the State and territorial communities (Khoroshev, 2024).

Despite the strain, financial support for the social sector in Ukraine remains relatively stable. According to the Ministry of Finance of Ukraine, the volume of expenditures on social assistance in 2021–2024 fluctuated within the range of 4.1–4.7 billion dollars of the United States⁵ (USD) (Ministry of Finance of Ukraine, 2024).⁶ At the same time, according to a UNICEF report (UNICEF, 2023), in 2024, the total state budget of Ukraine amounted to 3,309 billion Ukrainian hryvnia (UAH) (approximately USD 81.3 billion), of which 15 per cent (UAH 487.2 billion or USD 12.0 billion USD) was directed to social protection and population support. In the structure of these expenditures reported by UNICEF (2023):

- Social protection for persons in difficult life circumstances UAH 88.7 billion (+3 per cent compared to 2023);
- Assistance to children and families UAH 27.6 billion (+3 per cent compared to 2023);
- Support for persons with disabilities UAH 6.7 billion (+88 per cent compared to 2023);
- Assistance to low-income families UAH 20.2 billion (+30 per cent compared to 2023);
- Housing subsidies and benefits UAH 49.9 billion (+32 per cent compared to 2023).

However, expectations regarding Ukraine's state budget for 2025 indicate a certain reduction in the priority to be given to the social sector. According to forecasts, the total budget will amount to approximately UAH 3,929 billion (about USD 87.3 billion), of which 11 per cent (UAH 439.7 billion or USD 9.8 billion) is planned to be directed to social protection and social support, which is 7.9 per cent less compared to 2024. A reduction in transfers to local budgets is anticipated, dropping to UAH 8.2 billion compared to UAH 10.4 billion in 2024. The decrease in funding will particularly effect: citizens in difficult life

^{5.} In May 2025, 1.00 US dollar (USD) = 41.57 Ukrainian hryvnia (UAH).

^{6.} The yearly figures (in USD millions) are: 2021 = USD 4,077.4 million; 2022 = USD 4,658.6 million; 2023 = USD 4,669.5 million, 2024 = USD 4,495.7 million.

circumstances (UAH 81.8 billion, -7.8 per cent); pensioners (UAH 236.9 billion, -12.8 per cent); and recipients of housing subsidies (UAH 42.3 billion, -7.8 per cent). At the same time, certain areas show expectations of growth: social protection for children and families (+8.3 per cent), support for low-income households (+10.3 per cent), and persons with disabilities (+4.8 per cent) (UNICEF, 2024).

Meanwhile, some observers note that formal stability in budget proportions does not always indicate actual funding adequacy. In particular, a study by Voborský et al. (2024a), prepared within the framework of the PeReHID initiative, shows that the total volume of social protection funding in Ukraine remains relatively stable in terms of GDP share. However, the real value of this funding has significantly decreased due to inflation and massive loss of income among the population under war conditions (Voborský et al., 2024b).

In conditions where the real capacity of the state budget to support socially vulnerable groups has decreased, international humanitarian organizations play a critical role in providing assistance to the population. Even before the full-scale invasion, humanitarian aid of approximately USD 190 million was planned for 2022 (OCHA, 2021). By 2023, the volume of humanitarian support funding had increased to USD 3.9 billion (OCHA, 2023). Owing to international support, numerous programmes of cash transfers, in-kind assistance, and provision of social services to vulnerable population groups are being implemented.

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Examples include, in particular, multipurpose cash assistance from the UNHCR (UNHCR, n.d.) and cash assistance in the social protection sector (Global Protection Cluster, 2023). To identify beneficiaries of multipurpose cash assistance, an approach based on engaging local civil society organizations for data collection and initial assessment of compliance with international organizations' criteria was actively applied.

In this context, multipurpose cash assistance from international organizations for affected Ukrainians amounted to the equivalent of 0.25 per cent of GDP in 2023, while state social assistance reached 14.68 per cent of GDP. However, funding for multipurpose cash assistance programmes decreased from USD 1.48 billion in 2022 to USD 821 million in 2023. In 2024, the humanitarian request to such programmes decreased to USD 643 million USD (Voborský et al., 2024b). This indicates that international humanitarian aid in the form of multipurpose cash support is decreasing at a rather rapid pace.

A gradual decline is also observed in the total volume of financial needs, which are determined within the framework of annual humanitarian response plans. According to humanitarian cycle documents, the volume of necessary funds for humanitarian support in Ukraine has decreased over the past three years: USD 3.9 billion in 2023 (OCHA, 2023); USD 3.11 billion in 2024 (OCHA, 2024); USD 2.63 billion in 2025 (OCHA, 2025).

Social assistance, informal social networks and the resilience of the population in Ukraine

From this, it follows that international humanitarian aid in all its forms shows a decreasing tendency, albeit not at such a rapid pace as in the case of multipurpose cash programmes. Despite this, humanitarian aid in the fourth year of the full-scale war remains highly relevant for vulnerable segments of the population. At the same time, in the humanitarian environment, there is a growing understanding of the need to transition from temporary responses to long-term integrated solutions.

The budgetary and humanitarian funding streams that can be traced through open-source disclosures are brought together in Table 1; owing to the fact the compilation draws only on publicly available figures, the numbers should be viewed as indicative rather than exhaustive.

Prospects for reform

In Ukraine, the social protection system has demonstrated sufficient resilience regarding providing protection against life-cycle risks under wartime conditions. The State responded rapidly to the war emergency, implementing appropriate social assistance programmes. International humanitarian organizations responded equally quickly with numerous humanitarian aid programmes. However, funding opportunities are diminishing, requiring the most efficient use of limited resources

Table 1. Government and international humanitarian and social protection financing for Ukraine (2021–2025)

Indicator	2021	2022	2023	2024	2025*
Share of total state budget allocated to social protection & social support	-	-	-	15% (USD 12.0 bn)	11% planned (USD 9.8 bn)
State social assistance expenditure, Ministry of Finance of Ukraine (USD mn)	4077.4	4658.6	4669.5	4495.7	_
Humanitarian response plan (OCHA) – Required funding (USD bn)	-	0.19	3.90	3.11	2.63
Funding of multipurpose cash-assistance programmes by international organizations (USD bn)	-	1.48	0.821	0.643	-
Multipurpose cash assistance to affected Ukrainians (% of Ukraine's GDP)	_	-	0.25%	_	_
State social assistance as % of GDP	_	_	_	_	14.68%

Notes: *2025 figures labelled «planned» reflect draft-budget or preliminary humanitarian-sector allocations. The table summarizes only publicly available (open source) figures; confidential or unpublished allocations are therefore not included. A dash (–) denotes that no official or consolidated figure was available for the reporting year. All monetary values are expressed in constant 2024 USD equivalents for comparability. "Multipurpose cash-assistance programmes" refers to unrestricted cash transfers coordinated by UN agencies and INGOs. Sources: Authors' compilation from UNICEF (2023; 2024), OCHA (2022; 2023; 2024; 2025).

(Voborský et al., 2024a). In this context, the Ministry of Social Policy of Ukraine, together with international humanitarian partners, is implementing the PeReHID initiative (Pathways for Reinforcing the Humanitarian–Development Nexus in Ukraine), which includes partnerships with USAID, DG ECHO, FCDO, SDC, UNICEF, IOM, UNHCR, WFP, CCD Network, DRC, NRC, R2P, and STAAR/DAI Global UK Ltd (Voborský et al., 2024a; Voborský et al., 2024b).

In July 2024, the PeReHID initiative outlined a series of steps to improve the system of humanitarian cash transfers through the social protection system:

- Focusing humanitarian cash transfers on populations directly affected by the war.
- Coordinating transitional additional payments in response to humanitarian needs for coordinated targeted assistance, to avoid duplication.
- Strengthening coherence between the humanitarian response and the social protection system through legal reforms and the standardization of data sharing agreements.
- Removing access barriers and expanding coverage with more adequate social assistance programmes across the life cycle and enhancing these programmes' adaptability to shocks.
- Considering possibilities for gradually increasing payment levels for key social assistance programmes, taking into account high inflation since the onset of the invasion.

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- Prioritizing the increase in payment levels for programmes that offer the highest return on investment and demonstrate the largest inflation gaps.
- Creating special working groups to develop a harmonized approach (Voborský et al., 2024b).

In August 2024, within the framework of the PeReHID initiative, a number of steps were outlined aimed not only at improving humanitarian cash transfer mechanisms through the social protection system but also at modernizing the country's social protection system and its existing programmes. In particular, the report provided for the following key emphases (Voborský et al., 2024b):

- Focus investments on programmes with the highest level of poverty reduction and human capital development.
- Separate the calculation of social assistance levels from the statutory subsistence minimum, as the latter is used not only for social protection programmes but also for other state payments and wage setting.
- The need to monitor potential risks of exclusion and non-use of assistance that may arise in connection with the implementation of the pilot project on basic social assistance (Cabinet of Ministers of Ukraine, 2025).
- Expand the use of automatic registration mechanisms to reduce the level of non-utilization.

The PeReHID initiative also provides for a number of steps to strengthen the social protection system for specific population groups (Voborský et al., 2024b):

- Extend the term of childbirth assistance from 36 months to 72 months (this is expected to reduce the poverty rate among families with children younger than age 6 from 51.6 per cent to 46.1 per cent).
- Increase the contribution base to the Pension Fund, among other measures, through further inclusion and equal pay for women and persons with disabilities in the labour market.
- Provide a centralized procedure for internally displaced persons (IDPs) to access civil documents that are archived at the local level or which have been destroyed because of the war.
- Revise the subsistence minimum for persons who cannot work to account for the requirement for an equal standard of living and the higher costs associated with disability for persons with disabilities.

The recommendations of the PeReHID initiative take into account that the full-scale invasion limits fiscal space in terms of the possibilities for further reform without substantial international assistance in the medium and long term.

It should be noted that the Humanitarian Needs and Response Plan for Ukraine for 2025 comprehensively addresses the transition from an emergency humanitarian response to reconstruction and sustainable development. In this context, two focuses are seen as relevant: i) transitioning from a large number of cash payments to the development of multipurpose cash social assistance; ii) developing an effective system of social services.

In the conditions of ongoing war, it is worth considering the significant differentiation of the security situation in different regions of Ukraine. Accordingly, state social protection programmes and international humanitarian initiatives should adapt to local risks and population needs.

Comprehensive and targeted programmes implemented by communities at the local level are designed to complement state and international support mechanisms. However, it remains insufficiently studied to what extent local programmes actually contribute to poverty reduction (Voborský et al., 2024a). Analysis of the situation indicates that the community-based targeting approach to social protection is not yet fully implemented and researched in the Ukrainian context.

Defining resilience: The social resilience of the Ukrainian population

This article addresses the phenomenon of the social resilience of the Ukrainian population. According to an analysis conducted by the International Organization for Migration (IOM, 2023), despite high levels of stress, Ukrainians

demonstrate higher levels of psychological endurance, hope, and trust in civic initiatives compared to other countries that have experienced armed conflicts. Complementing these findings, the Ukrainian Center for Independent Political Research (UCIPR, 2022) notes the growing role of civil society in maintaining social justice, particularly through the activity of volunteer networks and new Ukrainian movements that form stable horizontal connections in communities.

In broad terms, the concept of resilience is associated with the ability to recover and continue proper functioning during and after a crisis or traumatic event (Kimhi and Eshel, 2009). According to the extensive literature, for individual resilience to be demonstrated there must be a challenge to overcome (Graber, Pichon and Carabine, 2015). Absorption, adaptation and transformation are commonly accepted personal capacities that enable the process of resilience in response to traumatic events (Aslam Saja et al., 2021; Béné et al., 2014; Graber, Pichon and Carabine, 2015; Jones and D'Errico, 2019; Keck Sakdapolrak, 2013). Resilience does not exclude variability and does not presuppose a return to previous modes of functioning (Olsson et al., 2015). The factors that permit individual resilience can vary: a positive outlook is important for some, while defensive pessimism is important for others; family support can be critical for some (Antonovsky, 1979 and 1987), while certain others depend on self-reliance (Parkinson, Duncan and Kaur, 2018). Though the traumatic effects that result from war persist for extended periods, the prospect of "post-traumatic growth" is possible (Kimhi and Eshel, 2009) which makes possible resilience in the longer-term (Popham, McEwen and Pluess, 2021).

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For use in humanitarian and development practice, the Resilience Measurement Technical Working Group defines resilience as a capacity that ensures adverse stressors and shocks do not have lasting adverse effects on development (Resilience Measurement Technical Working Group, 2014).

Our key focus, "social resilience", addresses the need for and includes relationship patterns, interpersonal resources, and group capital (Vigoda-Gadot, Cohen and Mizrahi, 2022); the result of planned preparation and adaptation to danger (Pelling, 2003); the ability to accumulate capital for overcoming threats (Obrist, Pfeiffer and Henley, 2010).

In the context of Ukraine, set against the backdrop of GDP contraction, rising inflation, and decreasing volumes of international humanitarian aid in conditions of prolonged war, it is extremely important to understand and consider not only institutional changes in the social protection system but also the resilience, capacity for independent functioning, and survival strategies of the affected population. Specifically, in protracted conflicts, the social resilience of local communities, rooted in high levels of self-organization, social horizontal connections and self-control, often becomes a key factor in overcoming the crisis.

An in-depth analysis of these factors of social resilience is presented in a study conducted by the German Marshall Fund (Volintiru and Kravets, 2025). The authors emphasize that the resilience of the Ukrainian population is based on several interconnected elements: deep values of freedom, a decentralized structure of society with a developed culture of self-organization, as well as a shared vision of the future within the European community and transatlantic institutions. It is these factors that contribute to the ability of Ukraine's diverse society to act cohesively in times of crisis (Volintiru and Kravets, 2025).

At the same time, an important source of information about internal resilience are changes in citizens' behaviour regarding seeking help in conditions of prolonged conflict. Research results on the dynamics of the population's applications for support allow for a better understanding of self-organization mechanisms and adaptation to new risks. This, in turn, provides a foundation for effective planning of the transition from a humanitarian response to a sustainable model of social protection.

Empirical study of aid sources structure during wartime: A case study of Sumy Oblast

For a deeper understanding of the actual functioning of the social protection system and population self-organization under war conditions, empirical analysis of specific territories is necessary. In view of this, a study was conducted on the structure of aid sources utilized by residents of Sumy Oblast - a border region directly experiencing the impact of the full-scale war. Comprehensive analysis of survey data collected during 2022-2024 allows for identification of the main categories of entities to which the population turned for assistance, as well as tracking the dynamics of these appeals in the context of war and the transformation of the social protection system. The study included a series of staged surveys that allowed for tracking the dynamics of aid-seeking strategies under conditions of significant socio-political transformations caused by the full-scale war. The choice of Sumy Oblast as a research region is due to its geographical location on the border with the Russian Federation, which determines the high intensity of threats and dynamic changes in the social structure. The region experienced not only direct military actions and temporary occupation but also significant socioeconomic pressure, including partial business relocation, which deepened budgetary and institutional challenges. As a result, Sumy Oblast emerges as a representative territory for analysing aid-seeking practices under emergency conditions.

Thus, a comprehensive approach to collecting and analysing empirical data over several years has allowed not only to identify the main sources of social assistance but also to reveal the characteristic dynamics of their use in conditions of prolonged military conflict and accompanying social transformations.

The empirical basis of the study consists of data from four waves of surveys conducted in 2022–2024. The first wave (n=655, of which 158 men and 497 women) was conducted in October 2022; the second (n=184, of which 79 men and 105 women) in June 2023; the third (n=322, of which 102 men and 220 women) in November 2023; and the fourth (n=332, of which 110 men and 222 women) in October 2024. This sample structure provided an opportunity to analyse transformations in aid-seeking strategies at different stages of the military conflict.

Data collection was carried out in a mixed format, which included individual face-to-face interviews and online questionnaires using Google Forms. The research toolkit was aimed at studying the prerequisites for social resilience and sources of assistance. This article presents the results of an analysis of responses to the question: Who did you turn to for help in a situation related to the full-scale Russian invasion?

The research context assumed that this question concerns assistance in response to emergency risks, i.e. additional requests for help against the background of existing and permanently available social protection regarding life-cycle risks.

Data processing procedure

The processing of empirical data included several stages. The first step was to calculate the relative proportions of responses (in percentages) for each variable based on data from four waves of surveys. To ensure inter-variable comparability, the results were normalized. The next step was to search for typical patterns of aid requests, carried out using cluster analysis. As a result, it was possible to structure the obtained data and identify generalized models of aid requests.

All statistical calculations were performed using the STATISTICA 13.0 package, with subsequent verification of the significance of identified group differences using analysis of variance (one-way ANOVA).

Research limitations

Despite the representativeness of the collected material for a specific border region and the multi-wave nature of the study, a number of methodological limitations should be taken into account. First, the sample was formed based on the principle of accessibility, which may limit the possibility of generalizing the results to the entire population of Ukraine. Second, a part of the surveys was conducted online, potentially excluding less digitally active categories of the

population – in particular, older people or residents of rural areas with limited internet access.

It is also worth noting that the self-assessment of sources of received assistance is based on the subjective experience of respondents, which may contain memory effects, social desirability, or situational interpretation of events. Finally, the time intervals between survey waves were unequal, which could affect the comparability of results between individual periods, particularly in connection with peak stages of hostilities or changes in state and international population protection policies.

Ethical aspects of research

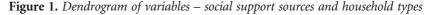
All data collection procedures complied with the basic ethical standards of socio-psychological research. Participants were provided with information about the purpose of the study, voluntary participation, and the right to refuse to answer any question. Informed consent was obtained orally or in writing, depending on the survey format. Data processing was carried out in compliance with the principles of anonymity and confidentiality.

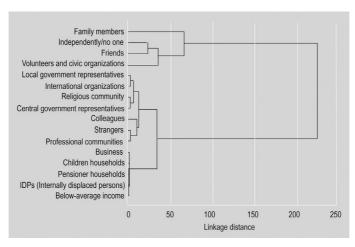
Statistical processing

After completing the collection of empirical data, stepwise statistical processing was carried out, aimed at identifying typical structures in requests for assistance. The main focus was on cluster analysis as a method that allows for identifying internal patterns in the variations of aid sources actualized during a period of social turbulence.

To determine the optimal number of clusters, a preliminary hierarchical cluster analysis was conducted using Ward's (1963) method and Euclidean distances (Figure 1). Analysis of the dendrogram revealed the natural structure of the data, which indicates the presence of four main clusters. At a linkage distance level of about 100 units, a clear division of variables into four groups is observed, which justifies the choice of the number of clusters k=4 for further analysis by the k-means method.

The obtained results of the cluster analysis allowed us to identify four stable groups of assistance sources, as shown in Table 2. It demonstrates the affiliation of each variable to the corresponding cluster and the magnitude of the distance to the cluster centre. To assess the statistical reliability of clustering, an analysis of variance was conducted, the results of which are presented in Table 2. The results of the k-means cluster analysis are presented in Table 2, which shows the affiliation of each variable to the corresponding cluster and the distances from the cluster centres.





Source: Authors' elaboration.

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The statistical significance of the identified clusters was confirmed by the results of analysis of variance (Table 3), which demonstrates a high significance of differences between clusters (p < 0.001).

The results of the analysis of variance confirmed statistically significant differences between the obtained clusters across all variables (p < 0.001). In particular, the highest level of inter-cluster variation was observed for cluster 3 (F = 298.39), which indicates its pronounced heterogeneity. In clusters 1, 2, and 4, F-values varied within the range from 58.79 to 62.20, demonstrating a stable but less differentiated structure.

Structure and interpretation of the identified clusters

The conducted cluster analysis revealed a clear four-cluster structure with an uneven distribution of variables. A pronounced asymmetry in cluster size is notable: Cluster 3 combines 12 variables, whereas Clusters 1, 2, and 4 contain one to two variables each. This indicates the isolation of several relatively homogeneous types of subjects to which the population turned for assistance under conditions of full-scale war, as well as one numerically heterogeneous group with diverse characteristics.

Cluster 1. Family assistance. Includes exclusively the variable "Family members" with minimal distance from the centre (0.01), which indicates the leading role of

Table 2. Mean values of social support sources by clusters and descriptive statistics

Source of Support	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Mean (%)	CV	Skewness
Family members	0.01	0	0.000	0.000	48.073	0.146	1.163
Volunteers and civic org.	0	0.01	0.000	0.000	15.753	0.503	-0.800
Local government reps.	0	0	4.233	0.000	6.415	0.412	-1.423
International organizations	0	0	2.753	0.000	5.095	0.393	-1.364
Colleagues	0	0	4.366	0.000	5.928	0.473	2.395
Religious community	0	0	2.080	0.000	3.378	0.756	-1.039
Central government reps.	0	0	1.603	0.000	3.963	0.387	-2.732
Strangers	0	0	1.369	0.000	2.623	0.330	7.003
Professional communities	0	0	1.049	0.000	3.095	0.391	3.208
Business	0	0	2.370	0.000	0.855	0.263	3.700
Children	0	0	2.355	0.000	38.340	0.202	-4.390
Pensioners	0	0	2.455	0.000	35.880	0.183	-4.910
IDPs	0	0	2.595	0.000	20.510	0.317	-4.380
Income	0	0	2.176	0.000	56.590	0.111	3.250
Independently/no one	0	0	0.000	5.785	27.975	0.250	-1.229
Friends	0	0	0.000	5.785	27.195	0.235	0.987

Notes: Mean values are expressed in percentages. CV = Coefficient of variation; Skewness reflects asymmetry of distribution.

Source: Authors' elaboration.

Table 3. Results of the analysis of variance (ANOVA)

Case ID	Between	df	Within	df	F	signif.
2022_10	2482.88	3	168.94	12	58.79	0
2023_6	2519.8	3	167.16	12	60.3	0
2023_11	2984.72	3	40.01	12	298.39	0
2024_10	3482.97	3	223.98	12	62.2	0

Source: Authors' elaboration.

this source of assistance. Among all the studied sources, family assistance has the highest average indicator (48.07 per cent), confirming its dominant significance in the system of support sources. The low coefficient of variation (0.15) indicates high homogeneity and stability of this source. The positive slope (1.16) indicates

a trend toward increasing trust in it over time, albeit moderate, which may reflect a gradual strengthening of the role of family assistance.

Cluster 2. Volunteer assistance. Represented by the variable "Volunteers and civic organizations" with minimal distance (0.01), which also indicates a conceptually homogeneous type of assistance source. The average indicator (15.75 per cent) is significantly lower than for family assistance but higher than for most institutional sources. A relatively high coefficient of variation (0.5) indicates noticeable heterogeneity of this assistance source, possibly due to various forms of volunteer activity. The negative slope (-0.8) indicates a certain decrease in requests for volunteer assistance in dynamics, which may be related to increased capability and reduced need for external assistance during the studied period.

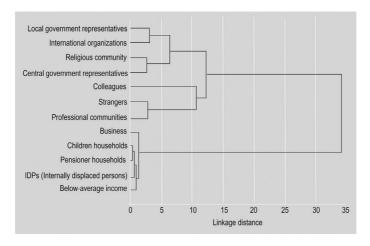
Cluster 3. Institutional and broad social assistance. The largest and most diverse cluster, combining both formal institutions and socially vulnerable groups. Within the cluster, there is significant variation in distances from the centre: from 1.05 (Professional communities) to 4.37 (Colleagues), indicating the presence of a core and periphery. Due to the high level of diversity in this cluster, additional clustering was conducted.

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Cluster 4. Autonomous and assistance from friends. Combines the variables "Independently/no one" and "Friends" with identical distances from the centre (5.79) and identical average indicators (27.98 per cent and 27.79 per cent, respectively). However, these variables have opposite slopes: negative for "Independently/no one" (-1.23), indicating a decrease in the tendency toward autonomy, and positive for "Friends" (0.99), indicating an increase in the role of assistance from friends. Such a combination may reflect a redistribution of help-seeking strategies from autonomous to socially oriented, increasing social cohesion.

The dynamics of the cluster structure over four years indicates certain stages of adaptation of social interaction to war conditions. The increase in inter-cluster differentiation in 2023 can be interpreted as a reaction to the aggravation of socioeconomic instability and the need to search for alternative sources of assistance. Conversely, the decrease in differentiation in 2024 likely reflects processes of partial stabilization, unification of mutual aid practices, and the growing role of horizontal networks as a compensatory mechanism under conditions of limited official resources.

For a more detailed understanding of the structure of the largest cluster (Cluster 3), an additional cluster analysis was conducted exclusively for the



Source: Authors' elaboration.

variables that compose it. The results of the secondary clustering are presented in Figure 2.

According to the results of the secondary analysis within Cluster 3, three subclusters of assistance receipt in response to emergency risks were identified.

Subcluster 3.1. Local assistance infrastructure combines sources of local institutional support, particularly local self-government bodies and social services, which provide basic administrative and social functions at the community level.

Subcluster 3.2. *Centralized state support* encompasses key elements of the centralized state system related to administrative management, employment, pension provision, and social transfers.

Subcluster 3.3. *Non-governmental and religious support* includes sources of assistance provided outside the state system – from religious communities, and civic and international organizations.

The results of the k-means subcluster analysis are presented in Table 4, which shows the affiliation of each variable to the corresponding subcluster and the distances from the subcluster centres.

The analysis of variance confirms statistically significant differences between the subclusters identified within the third cluster. As shown in Table 5, the results of one-way analysis of variance (ANOVA) for each data cross-section (2022–2024) verify the validity of division into subclusters at the significance level (p < 0.05). The highest indicator of between-group variance was recorded in the case of

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Table 4. Distribution of variables by subclusters and distance from cluster centres

Source	Subcluster 1	Subcluster 2	Subcluster 3	Means (%)	Coefficient of Variation (CV)	Skewness
Local government representatives	1.78	0	0	6.42	0.41	-1.42
International organizations	0.59	0	0	5.1	0.39	-1.36
Religious community	1.48	0	0	3.38	0.76	-1.04
Central government representatives	1.00	0	0	3.96	0.39	-2.73
Colleagues	0	2.83	0	5.93	0.47	2.39
Strangers	0	1.54	0	2.62	0.33	7
Professional communities	0	1.60	0	3.1	0.39	3.21
Business	0	0	0.43	0.86	0.26	3.7
Children households	0	0	0.10	38.34	0.2	-4.39
Pensioner households	0	0	0.13	35.88	0.18	-4.91
IDPs (Internally Displaced Persons)	0	0	0.25	20.51	0.32	-4.38
Below-average income	0	0	0.26	56.59	0.11	3.25

Source: Authors' elaboration.

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Table 5. Results of the analysis of variance (ANOVA) by subclusters

Case ID	Between	df	Within	df	F	signif.
2022_10	59.2625	2	21.50249	9	12.40235	0.002592
2023_6	111.0529	2	10.79407	9	46.297707	0.000001
2023_11	24.4933	2	8.598585	9	12.817928	0.002324
2024_10	57.5445	2	39.07786	9	6.626531	0.017015

Source: Authors' elaboration.

2023_6 (F = 46.30; p < 0.001), which indicates the maximum expressiveness of structural differences between subclusters during this period.

The F-criterion values remain statistically significant in all cases, which allows us to conclude about the stability of the identified subcluster structure within the third cluster in the dynamics of time cross-sections. Thus, the results of the analysis of

variance confirm the expediency of further interpretation of the content of the identified subclusters.

General characteristics of the subcluster structure

The results of the secondary cluster analysis, presented in the table, demonstrate a clear differentiation of variables that were part of the third cluster into three subclusters with distinct functional and structural features.

Subcluster 1. "Institutional structures". This subcluster combines representatives of formal institutions: local authorities (1.78), international organizations (0.59), religious communities (1.48), and central authorities (1.00). The indicators of distance from the cluster centre reveal an internal hierarchy: international organizations are closest to the centre (0.59), which may indicate their key role in this subcluster at the stage of crisis interventions under war conditions, while representatives of local authorities are the most distant (1.78).

Analysis of mean values shows limited representation of these sources in the overall assistance system – from 3.38 per cent for religious communities to 6.42 per cent for local authorities. The coefficients of variation demonstrate varying degrees of homogeneity: religious communities have the highest indicator (0.76), reflecting their high heterogeneity, while government bodies demonstrate moderate variability (0.39–0.41). Particularly significant is the dynamics reflected by slope indicators: all variables in this subcluster have negative values, from -1.04 (religious communities) to -2.73 (central authorities). This indicates a systematic decrease in requests for assistance to formal institutions in response to crisis situations during the study period, which was most pronounced regarding central authorities.

Subcluster 2. "Professional and social environment". This subcluster includes colleagues (2.83), strangers (1.54), and professional communities (1.60). The structure of distances from the centre shows that colleagues are significantly distant from the centre compared to other variables, which may indicate their peripheral role in this subcluster.

Mean values range from 2.62 per cent (strangers) to 5.93 per cent (colleagues), demonstrating moderate representation of these sources in the assistance system. Coefficients of variation (0.33–0.47) indicate an average level of heterogeneity of these variables.

The most notable feature of this subcluster is the distinctly positive slope of all variables: from 2.39 (colleagues) to an extremely high 7.0 (strangers). This indicates a rapid increase in appeals to broad social networks and professional

contacts, especially to strangers, which may reflect a shift toward greater social openness and horizontal solidarity.

Subcluster 3. "Socially vulnerable groups and economic aspect". This subcluster demonstrates the greatest internal coherence, combining business (0.43), households with children (0.10), households with pensioners (0.13), internally displaced persons (0.25), and groups with below-average income (0.26). Minimal distances from the centre indicate high structural cohesion of these variables.

Analysis of mean values shows significant representation of these demographic groups in the sample: households with below-average income constitute 56.59 per cent of the sample, namely, households with children (38.34 per cent); households with pensioners (35.88 per cent); IDPs (20.51 per cent). This distribution reflects the socio-demographic profile of the studied population. The exception is the indicator "Business" (0.86 per cent), which in the context of the study may reflect the proportion of business structures as potential sources of assistance in response to emergency risks.

Slope indicators in this subcluster demonstrate multidirectional tendencies. For socio-demographic categories, a strong negative slope is observed (from -4.38 to -4.91), which may indicate a decrease in the proportion of these groups in the sample during the study period. This may be related to demographic transformations: decreased birth rates, migration of women with children, pensioners, and changes in IDP status.

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In contrast, economic indicators demonstrate a positive slope (3.7 for business and 3.25 for households with below-average income), indicating an increase in the representation of business as a source of assistance and an increase in the proportion of low-income households. The latter tendency may reflect processes of economic differentiation and growing social inequality.

Particularly informative are the coefficients of variation, which indicate varying degrees of homogeneity of these categories in the sample. The lowest indicators are for households with below-average income (0.11) and households with pensioners (0.18), indicating their stable representation. In contrast, IDPs demonstrate a higher coefficient of variation (0.32), which may reflect greater variability of this category, associated with migration processes.

The grouping of indicators into one subcluster may indicate an interrelationship between socio-demographic status and economic vulnerability. In particular, households with children, pensioners, and IDPs often fall into the below-average income category, forming a complex problem of socioeconomic vulnerability.

It is noteworthy that these demographic and economic variables are structurally separated from institutional assistance mechanisms (Subcluster 1), which may indicate insufficient correspondence between institutional programmes and the needs of the most vulnerable socio-demographic groups.

Summarizing the results of the cluster analysis, it can be asserted that the structure of social assistance sources under conditions of full-scale military conflict has a multi-level character. Informal networks play a leading role – primarily family assistance and help from friends, while institutional mechanisms demonstrate a moderate level of engagement. Simultaneously, the formation of a separate circuit of horizontal assistance through professional communities, civic initiatives, and incidental social contacts is observed. Such a multidimensional model reflects adaptive strategies inherent to society under conditions of prolonged social crisis.

The results of the analysis also reveal a number of systemic vulnerabilities in the structure of social support. In particular, high dependence on family ties as the main source of assistance in response to crisis risks may create additional threats for persons who do not have developed family networks. A significant decrease in appeals to state and international institutions indicates the limited capacity of official assistance channels and potentially complicates the implementation of large-scale social protection programmes during periods of emergency.

Situational dynamics

At the time of writing, the military situation in the Sumy Oblast has significantly deteriorated. Due to shelling of border settlements, the population was evacuated mainly to the city of Sumy. According to quantitative expert assessments, for a population of approximately 300,000 in the city of Sumy (based on statistics prior to the full-scale invasion of 24 February 2022), as of April 2025, there are approximately 30,000 internally displaced persons in the city, with high mobility dynamics observed in this contingent. As a result of forced displacement, these people have lost those sources of assistance which, in the course of the above statistical analysis of survey results, were identified as the most influential in response to emergency risks: family and friends. Their ability to cope independently with challenges has decreased due to lost property. Since evacuation occurs from rural areas, people have lost private housing, domestic animals, and gardens as means of subsistence. Under these conditions, the need for institutional assistance becomes extremely acute.

Discussion of results

The obtained data indicate that under conditions of full-scale military conflict, the system of assistance sources in Ukrainian society has a multi-level and simultaneously uneven structure. Informal networks proved to be the most resilient – primarily family ties and relationship between friends, which demonstrated the highest indicators of appeals and stability. These findings

support the assumption made by Goodwin et al. (2023) that the family is a critically important resource for coping with stressors caused by various types of loss, including, but not limited to, material losses. Thus, the key role of social support in enhancing individuals' resilience in the context of a humanitarian crisis is highlighted.

In contrast, the role of official institutions – both state and international – remained moderate and demonstrated a tendency toward decreasing requests during the studied period. This coincides with the results of the VoxUkraine study (see Tamilina, 2024), which records relatively low trust in a number of state institutions among Ukrainians during the war period.

Thus, the research results confirm the advantage of horizontal, informal support mechanisms over vertical institutional structures. This conclusion should be taken into account in strategic planning of the social protection system under conditions of prolonged crisis, especially given limited resources and changing social dynamics.

Such expansion of horizontal networks corresponds to general tendencies identified in studies of civil society during the war in Ukraine, where networks oriented towards civic activism have substantially expanded and grown, often becoming more informal and spontaneous (Stepanenko and Stewart, 2025).

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At the same time, the findings reveal notable vulnerabilities: a strong reliance on family networks leaves those who, for objective reasons, lack such ties at heightened risk of exclusion (Moret-Tatay et al., 2025). Moreover, unequal access to resources across social groups points to growing social stratification under the war-induced crisis – an outcome that echoes earlier evidence on humanitarian assistance in protracted emergencies (Moskalenko, 2024).

The dynamics of changes across time cross-sections indicate that in the initial stages of the full-scale invasion of Russian troops into Ukraine, there was an activation of the search for new channels of mutual assistance. However, over time, a partial unification of assistance practices and certain stabilization of the social structure occurred. This may indicate both the formation of new stable social connections and the gradual normalization of crisis states in mass consciousness (Tamilina, 2024).

The obtained data are important for developing social assistance programmes for vulnerable population groups. The results of this study allow for the identification of the most reliable sources of assistance and reveal areas where there is a need for additional intervention from the State or civil society. Additionally, the cluster analysis of collected data provides empirical justification for principles of building resilient social protection systems under conditions of prolonged crisis and can be used as an analytical basis for further social interventions.

Assumptions and recommendations

Thus, the results of statistical analysis of survey data from 2022–2024 provide grounds to assert the high role of internal connections and mutual assistance among the Ukrainian population (using the example of Sumy Oblast) in response to challenges caused by the full-scale war.

Under the current circumstances, the security situation in border areas, particularly in Sumy Oblast, remains complex, causing a significant number of internally displaced persons from the border areas to the regional centre. This, in turn, creates a critical need for humanitarian support, multi-purpose cash assistance, and an effective social protection system.

Given the limited resources, the need to avoid duplication and exclusions in providing assistance, as well as taking into account regional differences in the security situation, it seems appropriate to implement a "community-based targeting approach in the social protection sector". Based on the model proposed by McCord (2013), this approach requires adaptation to Ukrainian realities, taking into account the war context and the functioning of territorial communities.

It is presented that a community-based targeting approach in the social protection sector:

- Offers value due to the community's internal knowledge, information that is available only at the community level, and unavailable at the levels of the state and international organizations.
- Assumes that communities or their representatives take responsibility for distributing resources provided from external sources; alternatively, they act as agents who apply or verify the application of externally defined criteria.
- Minimizes state-level technocratic barriers to decision-making in the interest of communities.
- Prevents the risks of opaque decisions being made without community involvement and local accountability
- Can be implemented in various way, including in-kind or cash assistance, fee waivers, insurance, food aid, and wages for public works.

However, a good level of social consensus is an important prerequisite for a successful community-based targeting approach in the social protection sector. Moreover, the approach can be subjective, has its own limitations, particularly regarding lack of transparency, corruption, discriminatory practices, and the exclusion of the poor who are considered "unworthy" at the community level. Accordingly, a functional protocol for accountability, appeals with a complaints mechanism, and formal opportunities for contestation should be implemented within the approach.

According to McCord's (2013) conclusions, the community-based targeting approach in social protection is not universally ideal due to potential risks of

corruption, exclusions, and subjective decisions at the local level. However, the results of the analysis of survey data from 2022–2024, as well as the recorded important role played by internal horizontal connections (family, friends, professional, as well as between strangers) provide grounds to believe that the risks of this approach can be minimized under conditions of war crisis.

An additional argument in favour of community-based targeting is the practice developed in Ukraine during 2022–2024 of involving local civic organizations in data collection for the initial assessment of compliance with the criteria of international organizations for providing multi-purpose cash assistance.

Community-based targeting, tested under conditions of combined life-cycle and war-related risks, can become the basis for further development of social protection programmes both at the state and local levels. This potential can be strengthened with the simultaneous development of mechanisms for social consensus and the restoration of the full functioning of bodies of self-organization of the population as representative organizations for local communities. Such bodies, operating at the place of residence and encompassing neighbourhood communities, including house, street, block, micro-district, and district committees in cities, as well as village and settlement committees, enable more effective identification of social welfare needs and facilitate more targeted delivery of social assistance (Verkhovna Rada of Ukraine, 2001).

In addition to transfers and cash payments, investments from the government and supranational structures remain equally important for implementing programmes aimed at the comprehensive restoration of oblasts and their territorial communities.

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Conclusions

In Ukraine, prior to the full-scale invasion, an effective social protection system already addressed various life-cycle risks for social groups including pensioners, the elderly, low-income persons, unemployed people, people with disabilities, orphans and children deprived of parental care, and other vulnerable population groups. An important component of this system is the decentralization-based concept of providing basic social services at the local community level, as well as supplementing state programmes through targeted and comprehensive social protection programmes at the local level.

Under the current conditions of the full-scale Russian invasion, financial support for the social sector in Ukraine remains relatively stable. In response to war risks, the capacity of the social protection system in the country was promptly reinforced by international humanitarian organizations. Due to international support, numerous programmes of humanitarian cash transfers, in-kind humanitarian assistance, and service-based assistance have been implemented.

The Ministry of Social Policy of Ukraine, together with international humanitarian partners, is addressing the issues of maximizing the effective use of limited resources and improving the cost-effectiveness of responses. In this context, the relevant international initiative PeReHID (*Pathways for Reinforcing the Humanitarian–Development Nexus in Ukraine*) is being implemented (see Voborský et al., 2024b).

Within this initiative, a number of practical solutions have been developed aimed at both improving the mechanisms of humanitarian cash transfers through the social protection system and modernizing the system to increase its effectiveness, avoid duplication, and prevent vulnerable population groups from not receiving assistance. The resilience of the Ukrainian population demonstrated against the backdrop of war risks should be particularly noted.

The conducted research allowed for the identification of a multi-level structure of social assistance sources in response to war risks. Cluster analysis revealed functional differentiation, allowing for the description of four main types of assistance sources 1) family assistance; 2) volunteer assistance; 3) institutional and broad social assistance; 4) autonomous and assistance from friends, as well as a separate horizontal level of social interaction not related to institutional structures. Dynamic cross-sections (2022–2024) demonstrate a gradual transition from dispersed interaction to the stabilization of assistance channels and the growing role of civic initiatives as a compensatory resource in response to war risks. This does not change the importance of state and local programmes but significantly strengthens them.

The research results can be utilized for social policy and practice in the context of transitioning from humanitarian aid to sustainable development. First, the results emphasize the necessity of investing in strengthening the social capital of local communities as the foundation of social resilience. Second, the identified gap between institutional mechanisms and vulnerable population groups indicates the need to revise approaches to social protection with greater orientation toward the needs of end beneficiaries. Third, the increasing role of horizontal support networks justifies the expedience of developing community-based social protection models as a complement to centralized social assistance programmes. All of the above substantiates the appropriateness of activating the community-based targeting approach in the social protection sector.

Community-based targeting in the social protection sector includes: i) reliance on internal knowledge and community responsibility regarding vulnerable segments of the local population; and ii) consideration of externally defined criteria for external resource transfers for social protection. Community-based targeting in the social protection sector, while minimizing duplication, does not exclude risks of subjectivity, dishonesty and exclusions. This study has documented the important role and strengthening of horizontal networks

(family, friendship, professional, as well as between strangers) in Ukraine (using the example of the border Sumy Oblast) under war conditions. This improves the prospects for community-based targeting in the social protection sector, especially when this occurs against the backdrop of programmes for further development of social consensus and the building of bodies of self-organization of the population, in particular, by place of residence, and also investments in state and non-state social services infrastructure within the framework of recovery programmes.

Further research should be directed at studying mechanisms for combining formal and informal social protection systems and modelling social interventions that enhance the factors that contribute to the resilience of the population under conditions of prolonged humanitarian crises and facilitate the country's transition to recovery and sustainable development.

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