

FINANCING ADAPTIVE SOCIAL PROTECTION IN MALI DISASTER RISK FINANCE DIAGNOSTIC

REPORT

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About the Sahel Adaptive Social Protection Program

SASPP is a multi-donor trust fund managed by the World Bank that supports the strengthening of national adaptive social protection systems in Burkina Faso, Chad, Mali, Mauritania, Niger and Senegal to enhance the resilience of poor and vulnerable households and communities to the impacts of climate change. The programme is supported by Denmark, France, Germany and the United Kingdom.

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LIST OF ACRONYMS

AGIR	Global Alliance for Resilience in the Sahel and West Africa (Alliance Globale pour la Résilience au Sahel et en Afrique de l'Ouest)	DNPSES	Direction nationale de la protection sociale et de l'économie solidaire
ANAM	National Medical Assistance Agency (Agence nationale d'assistance médicale)	DPAE	Forecasting and Economic Analysis Division (Division prévision et analyse économique)
ARC	African Risk Capacity	DRF	disaster risk financing
ASP	adaptive social production	DRM	disaster risk management
AYII	area yield index insurance	DRR	disaster risk reduction
CIGCC	Interministerial Committee for Crisis and Disaster Management (Comité interministériel de gestion des crises et catastrophes)	EAP	Early Action Protocol
CILSS	Permanent Inter-State Committee for Drought Control in the Sahel (Comité permanent inter-états de lutte contre la sécheresse dans le Sahel)	ECHO	Directorate-General for European Civil Protection and Humanitarian Aid Operations
CIMA	Inter-African Conference on Insurance Markets (Conférence interafricaine des marchés d'assurances)	ECOWAS	Economic Community of West African States
CNCR	National Commission in Charge of Refugees (Commission nationale chargée des réfugiés)	EU	European Union
CNOU	National Center for Emergency Operations (Centre national des opérations d'urgence)	FAO	Food and Agriculture Organization of the United Nations
CNSA	National Council for Food Security (Conseil national à la sécurité alimentaire)	FCFA	CFA franc
CNSANPS	National Council for Food and Nutrition Security and Social Protection (Conseil national de sécurité alimentaire nutritionnel et de la protection sociale)	FCP	Pooled Fund of Partners (Fonds commun des partenaires)
CREWS	Climate Risk and Early Warning Systems	FEWS NET	Famine Early Warning Systems Network
CSA	Food Security Commission (Commissariat à la sécurité alimentaire)	FNAF	National Agriculture Support Fund (Fonds national d'appui à l'agriculture)
CWG	Cash Working Group	FSA	Food Security Fund (Fonds de Sécurité Alimentaire)
DGPC	Directorate General for Civil Protection (Direction générale de la protection civile)	FSN	National Solidarity Fund (Fonds de solidarité nationale)
DNH	National Directorate for Water Resources (Direction nationale de l'hydraulique)	GIEWS	Global Information and Early Warning System on Food and Agriculture
DNDS	National Directorate for Social Development (Direction nationale du développement social)	HRP	Humanitarian Response Plan
		IFRC	International Federation of the Red Cross and Red Crescent Societies
		IMF	International Monetary Fund
		IPC	Integrated Food Security Phase Classification
		GDP	gross domestic product
		GIEWS	Global Information and Early Warning System on Food and Agriculture
		i-166	Initiative des 166 Communes
		ICRC	International Committee of the Red Cross
		IDP	internally displaced person
		MINEFIP	Ministry of Economy and Finance (Ministère de l'économie et des finances)

MSDS	Ministry of Health and Social Development (Ministère de la Santé et du Développement Social)	RCP	Representative Concentration Pathway
MSPC	Ministry of Security and Civil Protection (Ministère de la sécurité et de la protection civile)	RSU	Unified Social Registry (Registre social unifié)
OCHA	United Nations Office for the Coordination of Humanitarian Affairs	SAP	Early Warning System (Système d'alerte précoce)
OPIDIN	Inner Niger Delta flood forecast tool (Outil de prediction des inondations dans le Delta Intérieur du Niger)	SI	government-manged grain reserves (stocks d'intervention)
PDNA	Post-Disaster Needs Assessment	SNRRC	National Strategy for Disaster Risk Reduction (Stratégie nationale de réduction des risques de catastrophes)
PDSEC	Economic, Social and Cultural Development Plans (Programmes de développement économique, social et culturel des Collectivités territoriales)	SNS	Strategic Grain Reserves co-funded by and co-managed with donors (stocks nationaux de sécurité)
PDAZAM	Mali Agricultural Productivity and Diversification Development Project in Semi-Arid Zones (Projet de développement de la productivité et de la diversification agricole dans les zones arides et semi-arides du Mali)	UNDP	United Nations Development Programme
PNR	National Response Plan (Plan national de réponse)	UNHCR	United Nations High Commissioner for Refugees
PNRRC	National Platform on Disaster Risk Reduction (Plateforme nationale pour la réduction des risques de catastrophes)	UNICEF	United Nations Children's Fund
RAMED	National Medical Assistance Agency (Régime d'assistance médicale)	USAID	United States Agency for International Development
		UTGFS	Technical Unit for the Management of Safety Nets (Unité technique de gestion des filets sociaux)
		WFP	World Food Programme
		WII	weather index insurance
		WMO	World Meteorological Organization



EXECUTIVE SUMMARY

As part of the Centre for Disaster Protection's support for the World Bank Sahel Adaptive Social Protection programme, the UK-funded Sahel Shock Response Programme seeks to develop a baseline of in-depth analysis on the social protection and disaster risk financing (DRF) landscape in the Sahel.

This diagnostic is the second in a series of discrete, complementary reports produced by the Centre, which seeks to inform the design and programming of the Centre's support for the World Bank programme in its implementation phase, and to function as a resource to support and inform Centre staff, consultants and stakeholders working on the project to understand its operating context, as well as stakeholders and approaches.

The diagnostic focuses on the intersection between DRF and social protection in Mali, and provides an overview of:

1. The main disaster events resulting in significant economic and fiscal impacts over the past 20 years.
2. Existing legislation, institutional arrangements and government programmes to deliver and finance disaster preparedness, disaster response and social protection.
3. DRF sources and instruments relevant to adaptive social protection (ASP).

To develop this diagnostic, the authors have drawn on publicly available data and documentation, confidentially shared reports and targeted key informant interviews. The report is structured as follows: section 1 provides an overview of the key sectors relevant to disaster risk and ASP in Mali, specifically the agriculture and social protection sectors; section 2 presents a profile of the principal hazards and vulnerabilities to disaster risk populations in Mali face; section 3 summarises the data on humanitarian assistance flowing to Mali in response to various disasters and crises; section 4 analyses the existing government and institutional arrangements in place for disaster response and social protection; and section 5 describes the DRF instruments used in Mali.

The report concludes with recommendations for stakeholders on improving DRF in Mali. Recommendations have been formulated with a view to improving the shock-responsive and adaptive capabilities of the social protection system. They are grouped into two categories: (1) recommendations to improve government capabilities for responding to climate-related disasters and compounding shocks through social protection in the medium term; and (2) recommendations for the next phase of support to develop and strengthen ASP programmes.

Recommendations

To enhance government capabilities in disaster risk management, several recommendations are proposed.

1. **Strengthen government capabilities to estimate the macro-fiscal implications of disaster risk and risk-based approaches to budgeting.** This includes enhancing the tracking of budget allocations and expenditures on disaster preparedness, response, and social protection programmes, as well as improving data on disaster impacts.
2. **Strengthen and expand the Unified Social Registry (RSU) to better target vulnerable households for social assistance during crises.** Efforts should focus on increasing the RSU's coverage, adopting data-sharing protocols and maintaining up-to-date information.
3. **Improve capacities to identify and quantify contingent liabilities to better plan and budget for disaster preparedness and response.** This involves assessing financial exposure, conducting fiscal risk assessments specific to climate-related disasters, and developing a comprehensive DRF strategy.
4. **Strengthening domestic financing instruments, such as the Food Security Fund (FSA), which are crucial to facilitating ASP.** These instruments should be made fully operational, with clear and transparent procedures to deliver shock-responsive assistance effectively.

To enhance the next phase of the World Bank's Safety Nets Programme, several recommendations are proposed.

1. **Secure the future of the Emergency Social Safety Net (Jigiséméjiri) project and coverage of most vulnerable regions, to address climate change impacts and reduce tensions over natural resources.** Expansion of social protection should be conflict sensitive, targeting the centre and north-east regions.
2. **Consider innovative multi-hazard trigger designs** that integrate multiple risk drivers, enabling ASP systems to respond effectively to diverse crises.
3. **Strengthen risk financing instruments,** such as African Risk Capacity insurance policies, to provide more comprehensive coverage for both drought- and flood-induced crises, and invest in sustainable insurance markets for key cash crops.
4. **Leverage the capacities of humanitarian partners to complement ASP efforts,** encouraging them to scale up anticipatory action finance and align their assistance with social protection systems.
5. **Connect ASP with ongoing government emergency planning and preparedness efforts for food crises, ensuring integrated and efficient response strategies.**



INTRODUCTION

The ability of social protection programmes and systems to respond effectively to climate-related shocks and disasters depends in large part on how flexibly and rapidly they can scale up – to provide more or different support, to more or different vulnerable populations to cushion them against the effects of such shocks. Adaptive social protection (ASP) systems seek not only to improve responses to shocks and prevent people from sinking (further) into poverty, but to strengthen the resilience of vulnerable people over the longer term to manage risks arising from climate change.

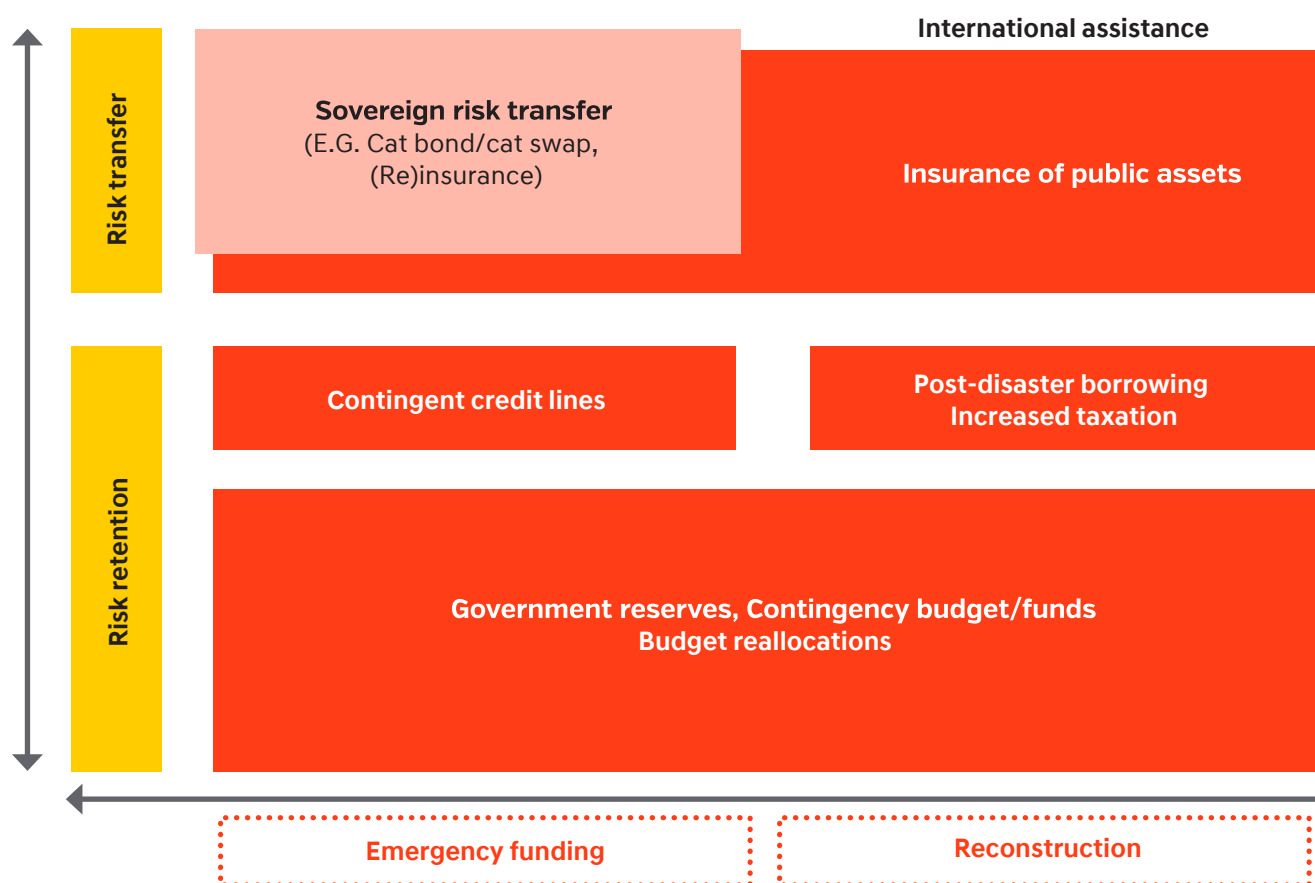
Disasters and crises affect governments as well as vulnerable people: they create contingent liabilities that affect current and future government revenues and expenditures. Governments frequently bear the high costs of response, recovery, and reconstruction following fast- or slow-onset crises, including financing social protection systems.

ASP systems rely heavily on up-to-date information on vulnerable populations' locations, incomes, living conditions, and exposure to various kinds of shocks and hazards. Although modalities exist to quickly and effectively deliver assistance to targeted populations in the event of a shock – most notably cash transfers, which many social protection programmes use – realising the full potential of such modalities also requires adequate financing to be in place. The scaling-up of social protection support is rarely budgeted or prepared for, leading governments to make costly decisions to meet additional financial demands during disasters.

Disaster risk financing (DRF) is the practice of planning and putting in place risk financing for disasters before they happen, through systems that proactively identify and track risks. Effective DRF is complementary to the objectives and features of ASP systems: it enables earlier action ahead of and in response to shocks through combinations of pre-arranged and unplanned funding, helping to prevent vulnerable and affected people from resorting to negative coping strategies. Effective DRF also serves to increase the resilience of households by allowing them to prepare for disasters, and shortening the time needed to recover. Finally, predictable assistance can reduce uncertainty following a disaster and enable households to invest in disaster preparedness and adaptation.

Different types of DRF instruments are relevant to particular types of disasters. Instruments that transfer the risk of disasters to the private sector (e.g. insurance) are better suited to fund responses to very severe (and thus more costly) but infrequent disasters; whereas instruments by which governments retain and manage risk themselves (e.g. national disaster funds) are better suited to less severe (less costly) but more frequent shocks. Effective strategies for preparing and responding to disaster risk typically include combinations of such instruments, to manage as much of the range of disaster risks a particular country faces as possible, as shown in Figure 1.

Figure 1: Illustration of a layered DRF strategy for governments



Source: World Bank (2017).

Pre-arranged forms of financing favoured in DRF will include clearly defined conditions for the release of funds, usually referred to as triggers (objective and verifiable measures of specific indicators reaching pre-determined levels) and planning at national level (how funding is channelled, who it targets and what it is spent on when it is triggered). Anticipatory or pre-arranged forms of finance are generally considered to arrive fastest and offer the greatest value in responding to disasters; whereas unplanned forms of finance (typically secured after crises have happened) are considered to be slower and more uncertain. Pre-arranged financing instruments also allow governments to spread costs over time at a predictable rate. They are found to better complement government disaster risk management (DRM) strategies, as they promote better preparedness and investment in disaster risk reduction (DRR) globally.

Leveraging DRF instruments for financing a particular ASP system involves determining the financial requirements for responses to particular types of shocks of varying magnitudes; identifying appropriate financial instruments to provide resources; and establishing distribution mechanisms to reach programme participants. This report considers the extent to which these aspects are in place in Mali and how they could be strengthened in future programming.

2

SECTORAL OVERVIEW

This section summarises key facts and figures on significant economic sectors in Mali with relevance to disaster risk and social protection.

2.1 Macro-fiscal profile

Mali is the second-largest country in West Africa, with a population of approximately 22.6 million people (2022), which is expected to double by 2035, given the current annual demographic growth rate of 3.2% (World Bank n.d.). Until 2020, macroeconomic stability had been maintained, with growth slowing from 2015 but not falling below 5%.

Since military coups in 2020 and 2021, political instability has become a significant constraint on economic growth. Despite Economic Community of West African States (ECOWAS) sanctions in 2022 in response to the Malian authorities' decision to delay elections initially scheduled for February 2022, the International Monetary Fund (IMF) estimates real gross domestic product (GDP) growth to have been 3.7% in 2022, compared with 3.1% in 2021. Inflation reached 10% in 2022, driven by energy and food price shocks, the regional sanctions disrupting trade networks, and elevated global food prices, but fell to 2.1% in 2023. The IMF projected economic growth would rebound to 4% in 2023, rising to an average of 4.5% over 2024/2025, while the medium-term outlook was subject to significant downside risks from the political transition, insecurity and climate-related shocks. The World Bank (2022)

estimates that political crisis in 2012 cost the equivalent of 23% of GDP between 2012 and 2018, mainly due to depressed investor confidence and forgone private investments, estimated at USD5.3 billion, including USD3.2 billion of foreign direct investment.

It was estimated in 2023 that the government's fiscal deficit remained unchanged since 2021 at 4.8% of GDP, based on the Ministry of Economy and Finance (MINEFIP)'s estimates and in line with the IMF. The deficit level is expected to gradually return to the West African Economic and Monetary Union's ceiling of 3% by 2025. Given limited access to external financing, the fiscal deficit was mainly financed through expensive domestic borrowing on the regional market.

Public debt rose to 52.5% of GDP in 2022, from 50.4% in 2021 (compared with 38.5 % in 2019); the risk of debt distress is moderate (IMF 2023b). This increase can be attributed to various factors, including increased spending on social services, infrastructure projects and efforts to maintain internal security amid regional instability. Budget risk analysis conducted by the Government of Mali (2023) revealed that spending related to security and defence increased from 7.45%

of the annual state budget in 2011 to 23.2% in 2021. In addition, the COVID-19 pandemic exacerbated the situation, as the government had to increase public expenditure to mitigate the health crisis and stimulate economic recovery. In 2020, the government estimated the cost of the emergency COVID-19 response to be around 2% of the GDP (Government of Mali 2023). World Bank BOOST programme budget data indicates that spending related to planning and preparedness for 'natural disasters'¹ – carried out by the Directorate General for Civil Protection (DGPC) – increased between 2004 and 2017 to an annual average of FCFA2.3 billion (USD3.9 million²). The public debt is mainly composed of domestic debt as major donors reduced their support following political crisis in 2020.

In recent projections, the MINEFIP meanwhile has been optimistic about a return to growth and a reduction in the budget deficit, as shown in the Table 1.

Mali is among the most aid-dependent states in sub-Saharan Africa; its level of aid dependency per capita, based on the Geographical Distribution of Financial Flows to Developing Countries of the Organisation for Economic Co-operation and Development Development Assistance Committee, increased from USD30 per person in 2001 to USD53 in 2022 (World Bank n.d.b). Nonetheless, Mali's was one of the 10 least funded international Humanitarian Response Plans (HRPs) in 2021 (UN News 2022), illustrating significant unmet need.

No IMF programmes are currently running in Mali. Its most recent engagements include a three-year extended credit facility approved in August 2019, which comprised total disbursements of USD110 million, which was interrupted by the coups in 2020 and 2021, and ECOWAS sanctions; and in June 2020, a disbursement under the rapid credit facility of USD200.4 million to help finance Mali's urgent balance-of-payments and fiscal needs associated with the COVID-19 pandemic.

Table 1: Projected evolution of key macroeconomic indicators (2023–2025)

Convergence criteria	UEMOA standard	2022	2023 Projected	2024 Projected	2025 Projected
Primary criteria					
Ratio of overall budget balance, including grants, to & GDP	≥3%	-4.7%	-4.5%	-3.7%	-3%
Inflation rate	≤3%	6%	2.5%	2%	2%
Outstanding public debt to GDP ratio	≤70%	53%	53%	52.2%	50.8%
Second-tier criteria					
Wage bill to tax revenue ratio	≤35%	47%	48.3%	46.3%	44.3%
Tax burden rate	≥20%	15.5%	16.1%	16.7%	17.2%
Number of criteria met		1/5	2/5	2/5	3/5

Source: MINEFIP (2023).

2.2 Agriculture

Agriculture is the backbone of Mali's economy, contributing over 38% of GDP and employing over 80% of the active population. Agriculture in Mali is dominated by small-scale production (smallholdings

of less than 5 hectares), with 68% of Mali's farmers producing millet, sorghum, maize and/or rice and over 85% raising livestock (World Bank 2019a). According to the Food and Agriculture Organization of the United

1 The #NoNaturalDisasters campaign aims to change the terminology to show that whilst some hazards are natural and unavoidable, the resulting disasters almost always have been made by human actions and decisions.
2 All FCFA values have been converted using present day (August 2024) exchange rate of 1 XOF = 0.00169 USD

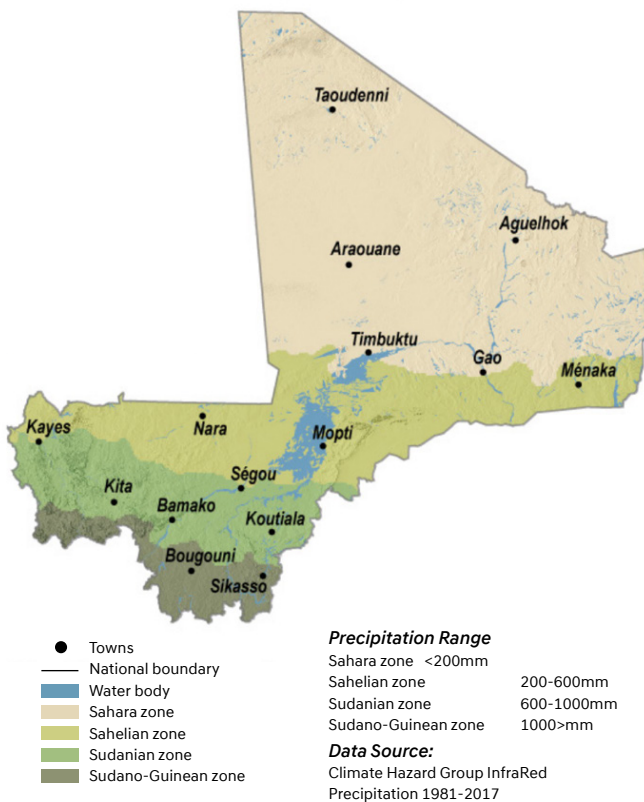
Nations (FAO), the main food crops produced in terms of volume are rice, maize, millet and sorghum, while cotton constitutes the main cash crop. Millet and sorghum are the most consumed cereals, especially in rural areas and by the lowest-income population, and thus are critical for food security. The majority of cereal crops are rainfed, with harvests vulnerable to rainfall variability. The major agricultural region is southern Mali with most production occurring between the capital Bamako, Mopti and Sikasso along the banks of the Niger river, representing one third of Mali's land.

Four major agro-ecological zones make up the territory of Mali, which vary in terms of rainfall and mean temperatures, as shown in Figure 2. The respective zones are: the Saharan zone in the north of the country (occupying 51% of the country's land area, with an average 200mm of precipitation per year); the Sahelian

zone in the centre-north (26% of the country's land area, 200–600mm of rainfall per year), which covers most of the Niger river delta; the Sudanian zone in the centre-south (17% of the country's land area, 600–1000mm of rainfall per year); and the Sudano-Guinean zone in the extreme south (6% of the country's land area, more than 1000mm of rainfall per year). The annual mean temperature ranges from up to 45°C in the north to around 27°C in the south.

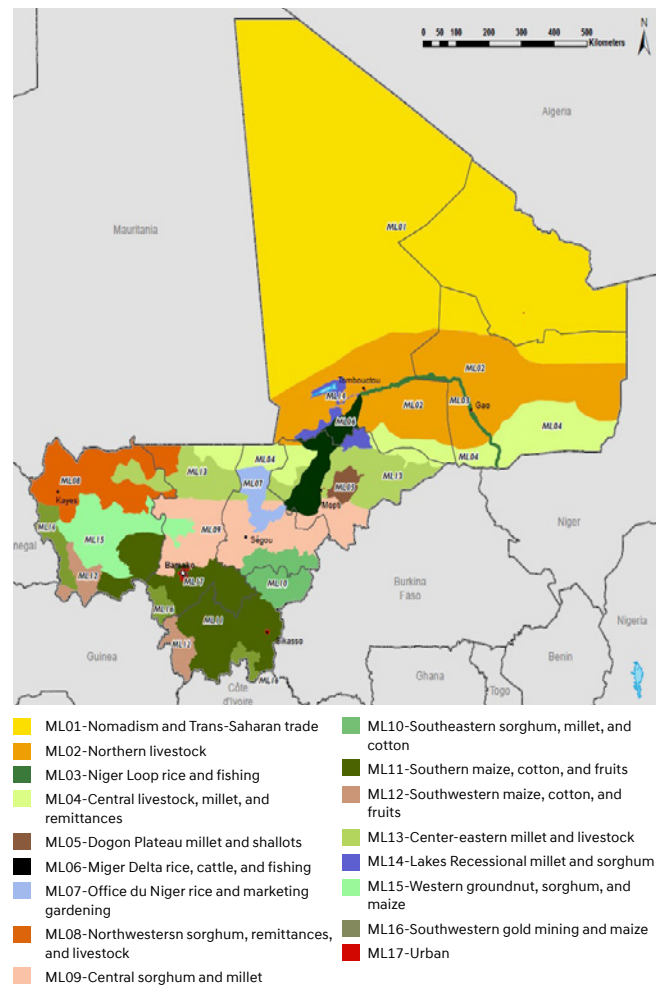
Each zone furthermore has specific patterns of crop production and pastoralism. The largely desert northern regions (zones 1 and 2) have some livestock production under pastoral systems, while the southern regions (zones 3 and 4), which receive relatively higher levels of rainfall, have greater crop production. The Inner Niger Delta constitutes a unique ecological area with important wetlands for wildlife that are also critical for

Figure 2: Agroclimatic zones of Mali



Source: Government of Mali (2007).

Figure 3: Mali livelihood zones



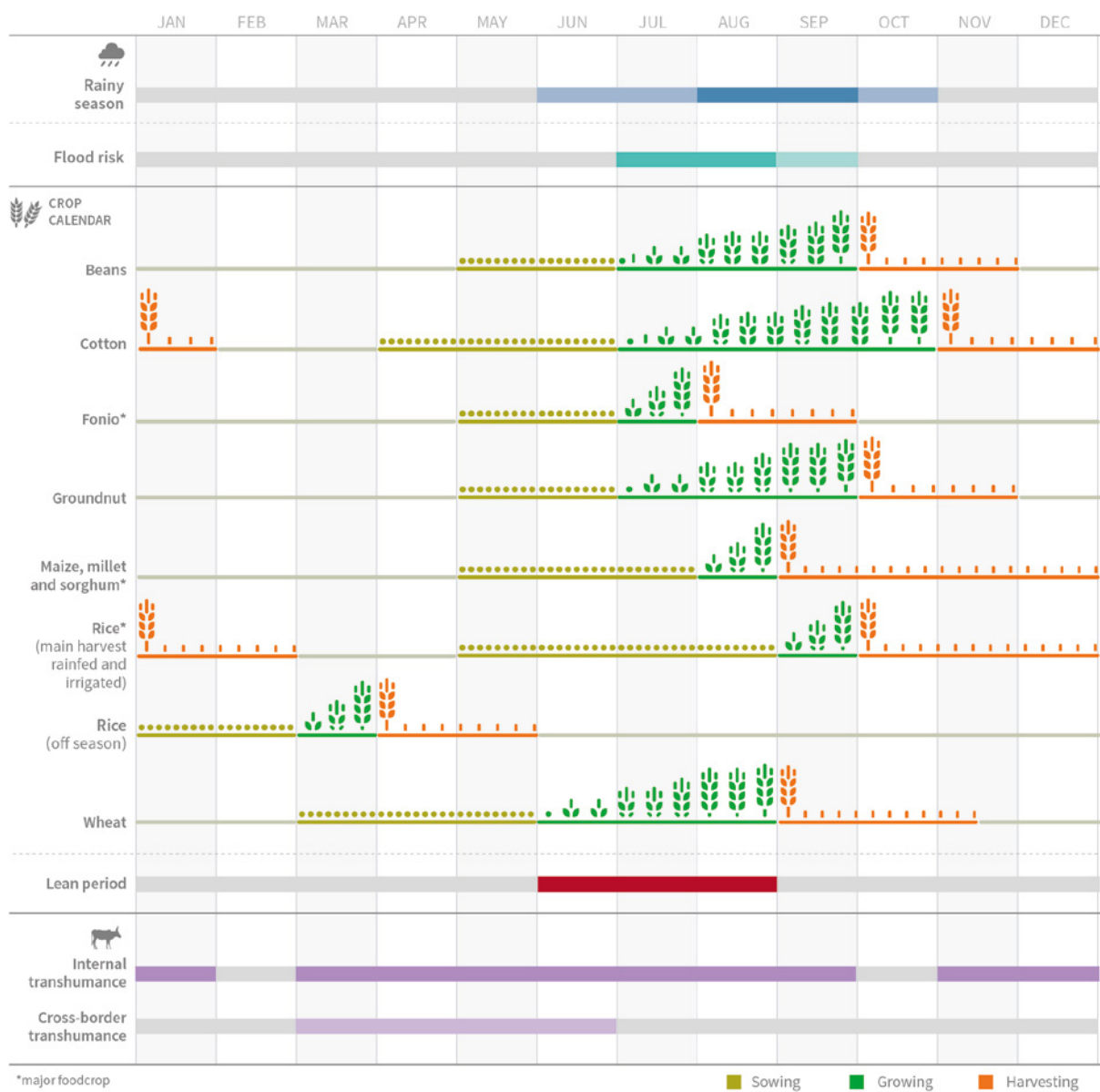
Source: FEWS NET (2014).

food security. The main crop produced here is fluvial rice, both for households' consumption and income. It is a significant area for fishing, being the third most important economic activity in the country.

The rainy season typically occurs between May and October, with a peak in August, and a shorter rainy season in the north. Southern regions receive higher rainfall (700–1200mm) compared with northern regions (200–600mm) (FAO 2017).

As shown in Figure 4, Mali has a single agricultural season for the major food crops (maize, millet and sorghum), with harvesting largely taking place in September. For rice production, the main harvest takes place in October, while a second harvest of off-season rice takes place in June. The lean season during June–August coincides with the rainy season. With limited irrigation systems, irregular and insufficient rainfall affects water availability, contributing to volatility of agricultural output (see section 2.1). During a recent survey conducted by FAO (2024a), a large share of

Figure 4: Mali agricultural and crisis calendar



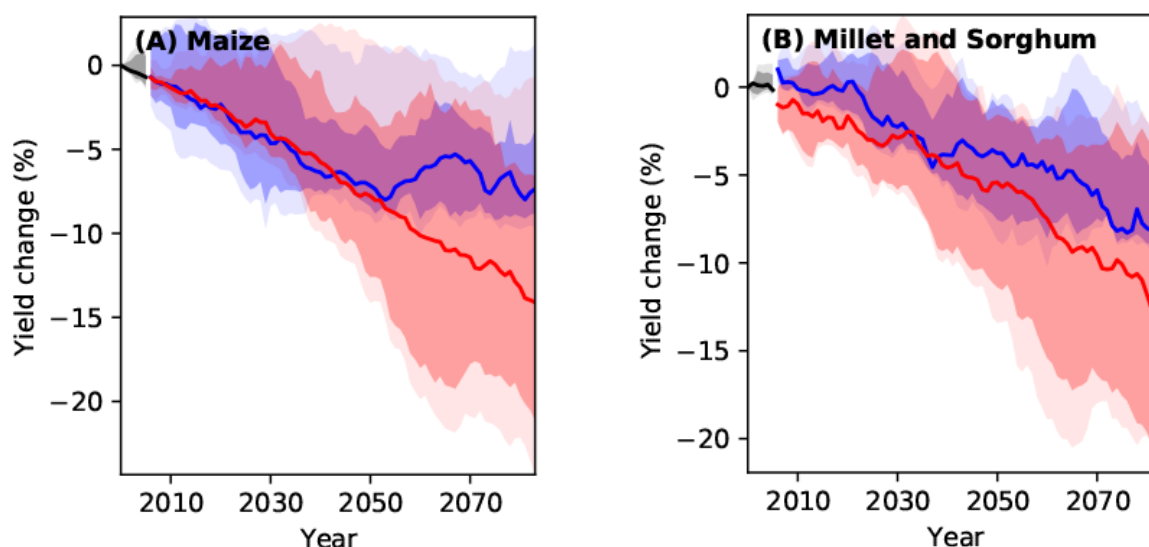
Source: FAO (2023).

producers cited lack of irrigation and fertilisers as factors limiting agricultural production.

Mali is among the countries most vulnerable to climate change. Temperatures have risen 0.8°C since 1960, contributing to a reduction of grazing land in the north (World Bank 2022d). Access to natural resources has historically been a key driver of conflict in the country and recent climatic changes, alongside pressures from an increasing population, have contributed to tensions in rural areas (e.g. between pastoralists and farmers), as well as fuelling wider conflict (World Bank 2022d). Depending on the modelled scenario, temperatures in Mali are projected to rise between 2.0°C and 4.6°C by

2080, compared with pre-industrial levels, with higher numbers of very hot days (days with a daily maximum temperature above 35 C), especially in central Mali. These trends are expected to diminish yields for key food crops in the coming decades, as shown in Figure 5. Higher temperatures and erratic rainfall patterns are also likely to enhance the spread of diseases and reduce the nutritional value of some crops. Longer-term modelling efforts are not conclusive about whether rainfall will become more variable (Tomalka et al. 2020). Importantly, the anticipated climatic changes are not homogenous, with great temperature and rainfall variations expected in the northern regions such as Tombouctou, Kidal and Gao (see Figure 5 and Figure 6).

Figure 5: Projected yield and GDP changes for the main food crops in Mali resulting from climate change (2010–2070)

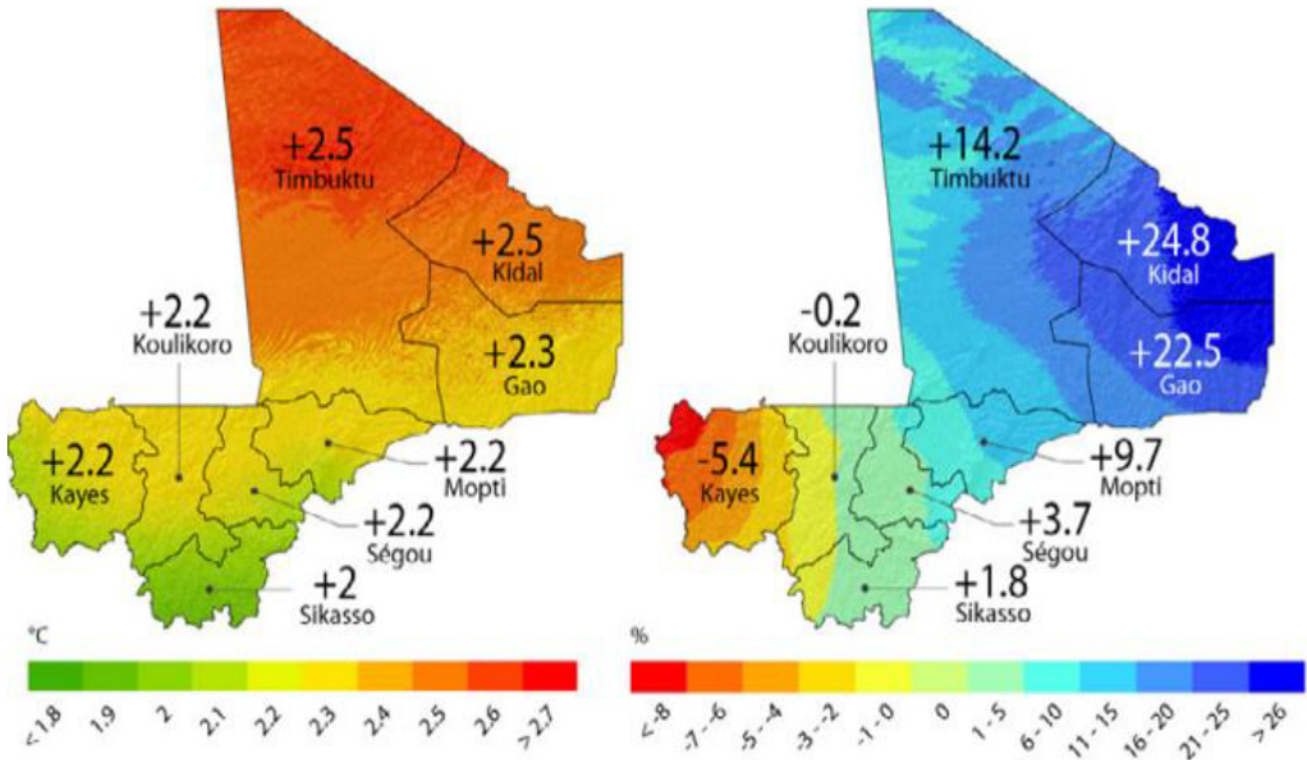


Note: Blue and red lines reflect the median of multiple models based on the RCP 2.6 and 6.0 scenarios respectively, with corresponding shaded areas reflecting the likely and very likely range of model projections.³

Source: Tomalka et al. (2020).

³ The Representative Concentration Pathways (RCPs) represent different climate change scenarios. RCP2.6 represents the low emissions scenario in line with the Paris Agreement; RCP6.0 represents a medium to high emissions scenario.

Figure 6: Projected changes in temperature (left) and precipitation (right) in Mali by 2050



Source: World Bank (2022).

2.3 Social protection

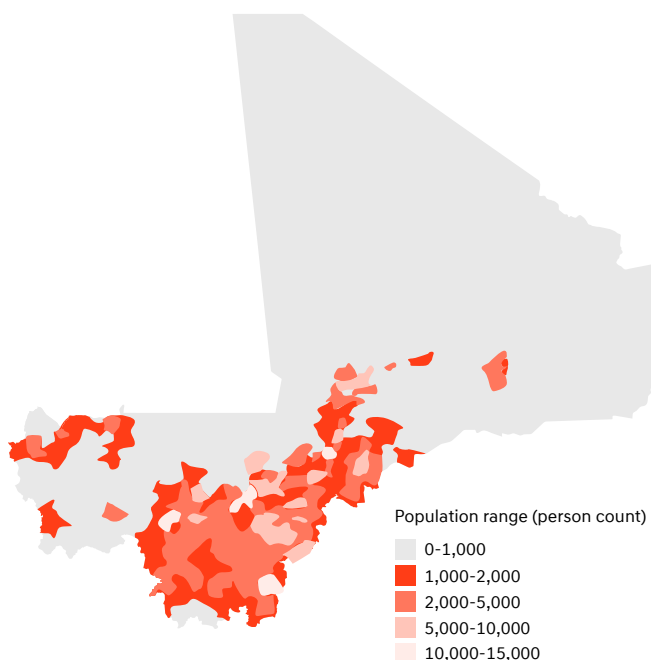
Social protection encompasses measures provided to protect people against economic and social distress. The design and delivery of such measures by the public sector comprise systems intended to help poor and vulnerable people cope with crises and shocks, find jobs, invest in the health and education of themselves and of their children, and protect older people.

The overall level of investment in social protection in Mali is comparable to other countries in the region (ILO 2020), with overall public sector spending of less than 5% of GDP on social protection. Despite this, the Government of Mali has increased its investment in social protection over the past decade, from 0.6% of GDP in 2016 to 2.2% in 2020 (World Bank 2019c; World Bank 2020a). However, the vast majority of this spending is on social insurance (contributory schemes), and thus does not reach the most vulnerable people. According to the World Bank, ‘well-designed social protection programmes are cost-effective, costing countries on average about 1.5% of GDP’. Nevertheless, the Malian

social protection system is fragmented and underfunded, relying to a significant degree on humanitarian agencies that focus on emergency response due in part to the very high rates of poverty and the relatively lower GDP base for social protection expenditure.

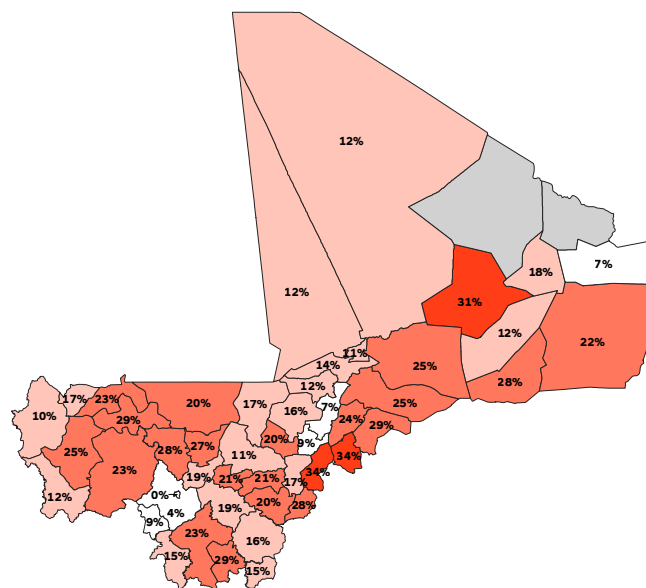
The most populous regions of the country are in the south and east (see Figure 7). These five southern regions (Kayes, Koulikoro, Mopti, Ségou and Sikasso), host an estimated 70% of the 8.5 million poor people in Mali, who predominantly live in rural areas (World Bank 2021). The most populous areas in the south appear to benefit from a wider range of services than the north of the country (see Figure 10 on the geographical distribution of the Jigiséméjiri project in Mali), including livelihoods asset creation, nutrition and cash for work. Targeting based on the concentration of poor households, alongside levels of insecurity in the north, which restricts government access, has limited the package of support for the north for relief activities such as cash transfers

Figure 7: Population distribution Mali



Source: CILSS (2016).

Figure 8: Mapping of poverty levels by district



Note: poverty is calculated as the share of people living on less than USD2.15/day.

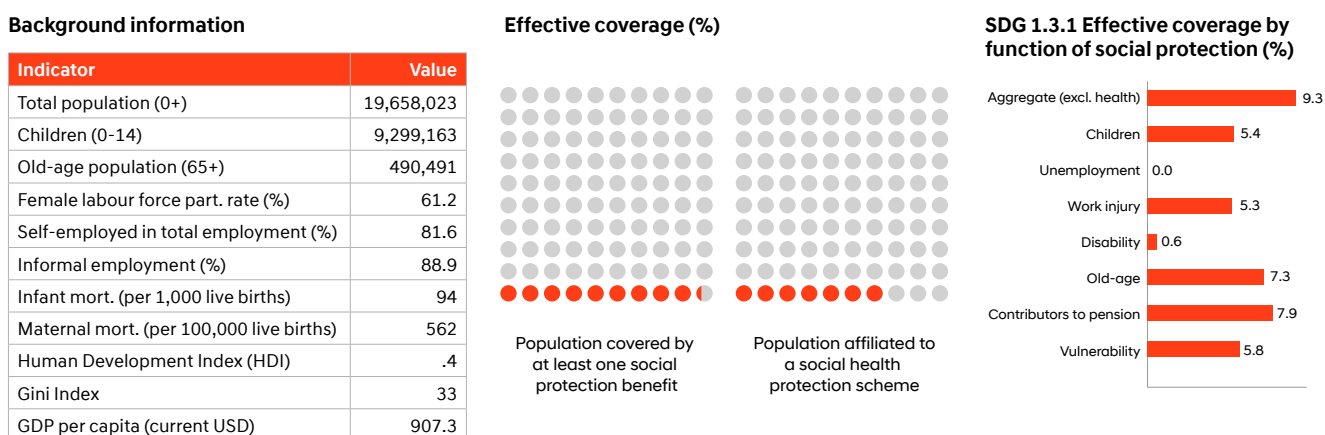
Source: Authors' own, based on poverty headcount using 2017 and 2021 purchasing power parity from World Bank Open Data (2023).

Few people overall in Mali benefit from some form of recurrent social protection. In 2017, the World Bank estimated 78% of Malians were not covered by any form of social protection programme, which could be explained in part by the very high share of the workforce working in informal employment, who are not, therefore,

usually covered (see Figure 9); and despite the recent increase of coverage under non-contributory schemes such as the Jigiséméjiri project and the National Medical Assistance Agency (RAMED)⁴ health insurance programme.

⁴ Régime d'Assistance Médicale (RAMED) created by Law No. 009/030 of 27 July 2009, and managed by the National Medical Care Agency (ANAM) created by Law No. 009/554 of 12 October 2009.

Figure 9: Distribution of coverage by age group and occupation (2020, or latest year available)



Source: ILO (n.d.).

Table 2: Summary of social assistance provided by government projects and programmes (cash and non-cash)

Name	Objective	No. of people covered	Average value of transfers
Jigiséméjiri	To provide support to poor households suffering from food insecurity	105,491 households and 576,907 individuals (World Bank 2023)	Quarterly cash transfers of FCFA10,000 monthly (USD 17) From 2018, transfer value increased to FCFA15,000 (USD 23)
Mali Agricultural Productivity and Diversification Development Project in Semi-Arid Zones (PDAZAM)	To improve agricultural productivity and strengthen resilience of rural households living in the targeted drylands	9,934 households (World Bank 2024a) 10,000 people (target)	FCFA15,000 (USD 23) per household per month for 36 months FCFA250,000 (USD 420) distributed in 2 or 4 installments
Medical assistance scheme (RAMED)	To provide free health assistance to people and their dependents who are not covered by the insurance system and who are living in extreme poverty	937,283 people registered between 2021 and 2021	–
Free food distribution programme	To improve the educational outcomes and nutritional status of children	1,841,067 (2022) in the 179 most vulnerable communes	'half-ration' of food for 3 months of the lean season every year starting around July
School meals	To provide food to students, so 'hunger no longer constitutes a barrier to a child's education in Mali'	1,301 school canteens out of 2,236 are supported by the government	–

Source: Authors' own, based on publicly available reports.

The five principal, limited-scale government-led programmes shown in Table 2 have historically favoured in-kind support (such as lean season food distribution), but are increasingly deploying cash transfers to support vulnerable people.

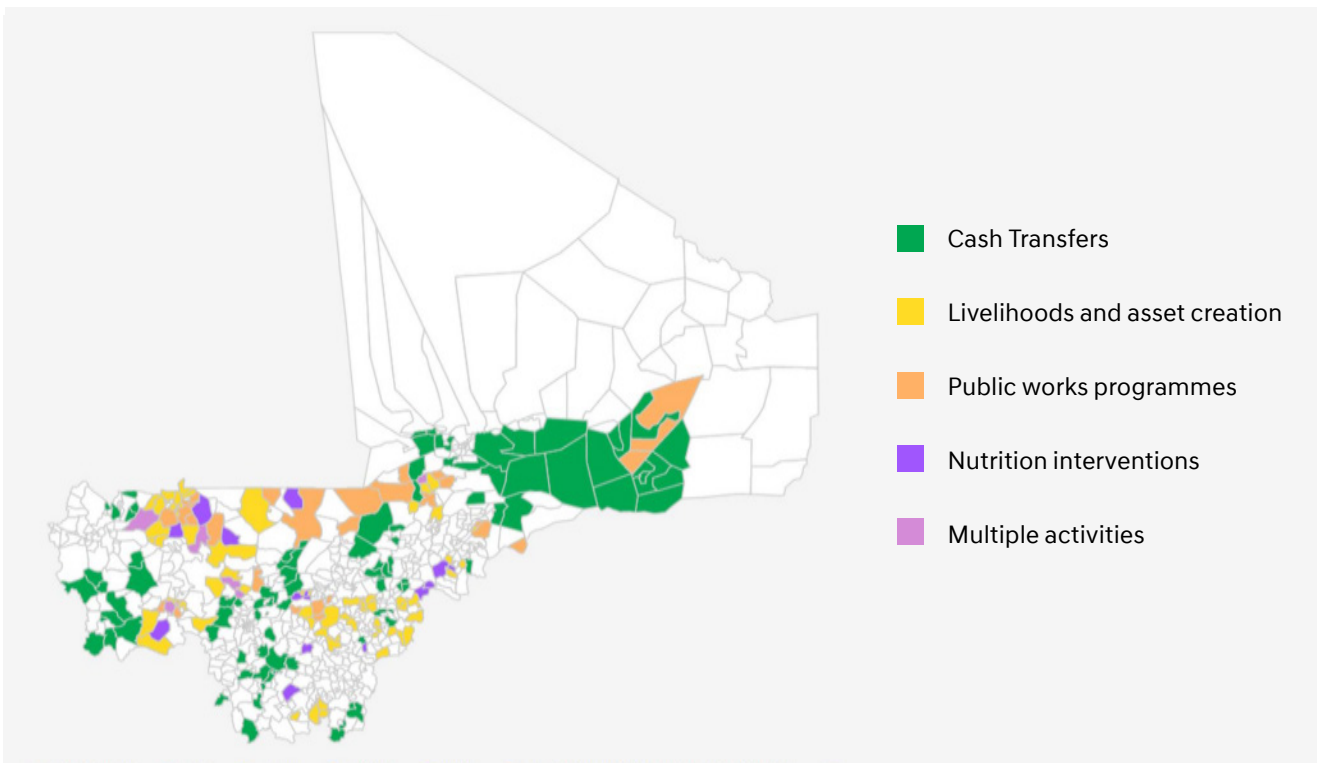
The most significant social assistance programme is the Emergency Safety Nets project, also known as Jigiséméjiri (“Tree of Hope”). Initiated jointly by the World Bank and the Government of Mali in 2013, with USD70 million in financing, it is the largest cash transfer programme and the largest poverty-targeted social assistance intervention in Mali.

The project was originally designed as an emergency intervention to provide quarterly cash transfers of FCFA30,000 (approx. USD50) for three years to a cumulative total of 62,000 poor and food-insecure rural households, limited to five southern regions (Kayes,

Koulikoro, Mopti, Ségou and Sikasso) and the district of Bamako due to security constraints. The project received two additional rounds of financing in 2016 and 2018,⁵ evolving from a focus on ‘food-insecure’ to ‘vulnerable’ households, which formed the basis of an emerging national social safety net programme more specifically defined as ‘adaptive’. In 2016, the project integrated ASP elements, with interventions such as cash transfers linked to short-term (60-day) labour-intensive public works, income-generating activities and shock-responsive cash transfers. In 2018, it increased its target to reach a cumulative number of 100,000 households, in all regions of Mali.

As of March 2023, the project was reported to have delivered cash transfers to 105,491 households and 576,907 individuals, surpassing its target of 100,000 households and 550,000 individuals (World Bank 2023).

Figure 10: Jigiséméjiri intervention areas by type of activity (2021)



Source: Mali Social Safety Net Program Jigiséméjiri Program Activity Monitoring Report January 1 to December 31, 2021

5 The project received two additional rounds of financing – USD10 million in 2016 and USD54.4 million in 2018 – and was restructured three times, in 2019, 2020 and 2023, extending the closing dates of the resources to 30 June 2023. The cash transfer amount was initially a quarterly transfer of FCFA10,000 (USD16.9) (equivalent to 15% of the food poverty line, and 10% of the national poverty line), based on a 2011 World Bank household survey; in 2018, as part of the second additional round of financing, the transfer value was increased to FCFA15,000 (USD25.4) due to currency devaluation and inflation.

A Technical Unit for the Management of Safety Nets (Unité technique de gestion des filets sociaux, UTGFS) was established under the MINEFIP to manage and implement the project, showing the high priority the government gave the project.

To expand the coverage of the Jigiséméjiri project and address the specific needs of rural households in dryland areas within the five southern regions, the World Bank and the Government of Mali initiated the Mali Agricultural Productivity and Diversification Development Project in Semi-Arid Zones (PDAZAM) project in 2018 (launched in March 2019), windowed with USD60 million. Among the different types of investments provided, the project is expected to provide direct cash transfers to 12,000 poor and vulnerable households, amounting to FCFA15,000 per household per month for 36 months, and productive cash transfers for the acquisition of inputs, livestock kits or small pieces of agricultural equipment amounting to FCFA250,000 (USD420) distributed in 2–4 instalments to some 10,000 people. The project covers 12 districts in Kayes, Koulikoro, Ségou and Mopti; their selection was informed by the Country Resilience Priorities – Strategic Plan 2015–2035 (Priorités Résilience Pays – Plan Stratégique 2015–2035) exercise developed under the Global Alliance for Resilience in the Sahel and West Africa (AGIR, further discussed in section 5.2). The project is building on the existing capacities of the UTGFS to oversee the implementation of these activities.

Other social protection initiatives

1. Led by government

In the wake of the COVID-19 pandemic, the government launched the National Emergency Cash Transfer Programme (PFTMU) implemented by the UTGFS (MINEFIP 2016). The FCFA100 billion (USD170 million) government programme, financed by the African Development Bank (AfDB 2024), was expected to reach 352,900 households out of 1 million targeted households in 703 municipalities. This emergency cash transfer programme provided a one-time cash transfer of FCFA90,000 (USD 150) to poor and vulnerable households to mitigate the socioeconomic impacts of the pandemic. Targeting built on the community-based targeting approach established under the Jigiséméjiri project. Mobile payment systems were used to deliver financial support to minimise the need to visit banks and service providers in person (further analysed in section 4).

The Food Security Commission (CSA), as part of its National Response Plan (PNR), supports free food distribution to households that are considered food insecure. Geographical targeting is based on analysis of the Cadre Harmonisé framework – a collaborative process that facilitates predictive insights into food insecurity ahead of each forthcoming lean season and informs response planning – at district level, and based on data from the national Early Warning System (SAP), at commune level. According to the 2023 PNR, it was expected that 30,010 tonnes of cereals would be delivered that season (Government of Mali 2023). The government and its partners in 2022 mobilised over 6,200 tonnes of food for internally displaced people (IDPs).

2. Led by humanitarian organisations

Aside from national social safety nets, the most sizable support to vulnerable people consists of assistance provided during the lean season. The World Food Programme (WFP) in 2022 provided unconditional food assistance to 1.8 million crisis-affected people (see section 3.2). United Nations Children’s Fund (UNICEF) humanitarian cash transfers in 2022 benefitted more than 65,000 people (see section 3.3).

3. Led by donors

To address the limited assistance being provided to the conflict-affected north of the country, the Directorate-General for European Civil Protection and Humanitarian Aid Operations (ECHO) funded an alliance of international NGOs to deliver an emergency cash transfer programme, free food distribution and nutritional support in the northern regions of Gao and Tombouctou where the long-term Jigiséméjiri project could not operate. The Common Framework for Seasonal Social Safety Nets (CCFS), an alliance of five international NGOs formed in 2014, transferred FCFA100,000 (USD 170) in three tranches over one year, replacing the Common Framework for Seasonal Social Transfers (CCTS), which started in 2016 with six international NGOs, transferring FCFA120,000 (USD 200) per year, the same transfer value as Jigiséméjiri. This common framework allowed NGOs to standardise the key features of the cash transfer interventions such as the value of transfers and their frequency.

More broadly, the European Union (EU) member states, Norway and Switzerland together developed a joint programme in Mali for the period 2020–2024.

Strengthening social protection and safety nets is noted as contributing to the development of Mali's human capital. EU member states are committed to ensuring

that safety net programmes to the greatest extent possible include climate data to inform associated preventive measures.

2.4 Key sectoral features and main takeaways for social protection programming

The overview of key sectoral features in Mali can be summarised as follows to frame a wider assessment of social protection programming in the near term.

In recent years, political instability has significantly constrained economic growth, access to finance and international aid. The medium-term outlook is more positive, but at risk of further instability, fuelled by insecurity in the north.

Insecurity is driven in part by conflict over access to natural resources, which is being exacerbated by the impacts of climate change. Projected climatic changes in Mali are not homogenous, with greater temperature and rainfall variations expected in the north, potentially exacerbating existing north-south inequalities in agricultural production capacity.

Agriculture in Mali is a key sector for the economy, dominated by small-scale production of rainfed crops in the more populous south, and livestock in the drier north. With limited irrigation systems, production is highly vulnerable to climatic variations in rainfall. Projections suggest that temperature increases, and possible increased variability in levels of rainfall, will gradually reduce yields of key food crops. These trends are expected to increase the vulnerability of large numbers of vulnerable people active in the agricultural sector and beyond.

A number of social protection programmes exist in Mali, but they are limited in coverage.

Public sector social protection programming is centralised in the more populous southern and eastern regions of the country, where the government has access. Meanwhile, most Malians (78%), particularly those in the north, are not covered by any sort of social protection programme.

The Jigiséméjiri social protection project marks a shift from a patchwork of small-scale initiatives to a longer-term approach to poverty reduction aimed at strengthening the resilience of poor households. It integrates adaptive components and has been used in whole or in part (e.g. its targeting approach) to scale up during recent shocks such as the COVID 19 pandemic. There is significant scope to improve the coverage of the programme and adaptive capabilities, to ensure they can reach a larger number of vulnerable individuals and households at risk of escalating climate shocks, particularly in underserved areas.

With low levels of on-budget aid and poor access to borrowing, it is likely that Mali will continue to be highly dependent on other initiatives led by international actors, as well as ad hoc international assistance. This extends to the financing and capacity required to establish ASP systems.

3

KEY HAZARDS AND VULNERABILITIES

This section provides an overview of the frequency and impact of the most severe disasters recorded in the country (especially floods and droughts) over the past 20

years. It also analyses different sources of vulnerability that can impede a quick response or livelihood recovery from such events.

3.1 Hazard profile

National-level results

Given its exposure to recurrent droughts and floods, Mali is a high-risk agro-climatic environment. Drought is the greatest hazard in terms of numbers of people affected, due to Mali's climate, agroecological zones and uneven distribution of water resources (see Figure 2), leading to food insecurity and severe impacts on the livelihoods of millions of people.

According to EM-DAT, the International Disaster Database, the most severe droughts occurred in 2005, 2011 and 2020. The 2011–2012 drought had a large and long-lasting impact. Based on the most recent six reported drought episodes, the number of people affected by drought can be anywhere between 0.6 million and 6 million, with substantial volatility in very dry years (World Bank 2019b), as shown in Table 3.

Floods are the most frequent hazard that vulnerable people in Mali are exposed to, particularly during the rainy season from June to September. The World Bank (2019b) estimates that floods annually affect up

to 500,000 vulnerable people on average.⁶ Flooding in Mali is primarily driven by heavy rainfall, resulting in overflowing rivers and the disruption of critical infrastructure, such as roads, bridges and agricultural land. The most significant floods occurred in 2007, 2013 and 2022 (see Table 3). Floods furthermore trigger population displacements, with approximately 6,000 people recorded as being displaced across the country in 2021 (IDMC 2024).

Sub-national-level results

In terms of geographical disaggregation of disaster occurrence, based on EM-DAT reports, the regions most impacted by both droughts and floods are Gao, Mopti and Koulikoro, with more than 45% of events impacting these regions, closely followed by Kayes, Tombouctou and Kidal (Figure 11). Bamako and the region of Ménaka only registered flooding events during this period.

⁶ According to the methodology and limitations section, river flood risk (urban/surface flooding is excluded) is estimated at 1km resolution using global meteorological data, and global hydrological and flood-routing models. Estimates of the number of people affected are based on population estimates for those areas, with the entire population within that area considered 'affected' if flooding of any depth occurs.

Table 3: Overview of drought and flood events and their impact in Mali over the past 20 years

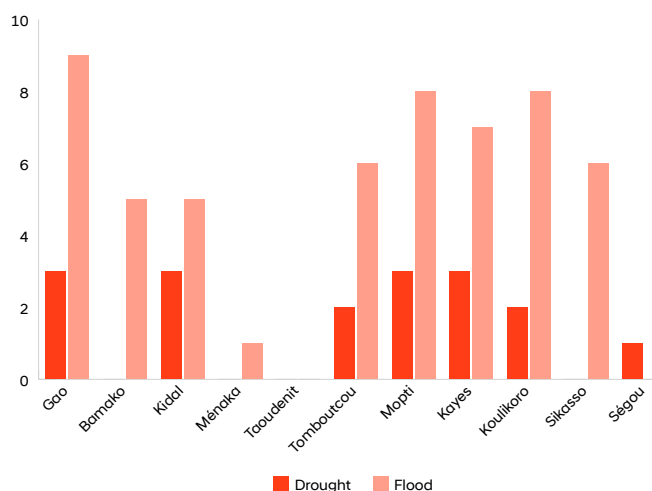
Year	Droughts		Floods	
	No. of events	No of people affected	No. of events	No. of people affected
2003	-	-	1	10,000
2005	1	1,000,000	2	1,860
2006	1	25,000	1	1,000
2007	-	-	2	88,858
2008	-	-	1	2,500
2009	-	-	1	20,406
2010	1	600,000	2	32,000
2011	1	3,500,000	1	15,415
2013	-	-	2	46,000
2015	-	-	1	2,000
2016	-	-	1	9,500
2018	-	-	1	13,150
2019	-	-	2	6,981
2020	1	6,800,000	-	-
2022	1	1,735,753	1	79,012

Source: Authors' own, based on data from EM-DAT (2023).

Note: for a disaster to be entered into the database, at least one of the following criteria has to be fulfilled: 10 or more people reported killed; 100 people reported affected; a call for international assistance; or declaration of a state of emergency.

A separate picture of drought risk emerges from analysis conducted by WFP to enumerate the number of poor growing seasons based on satellite rainfall estimates from 1981 to 2015 (Figure 13). In this instance, regions such as Tombouctou and Kidal emerge at high risk of drought, despite their low population density (see Figure 12).

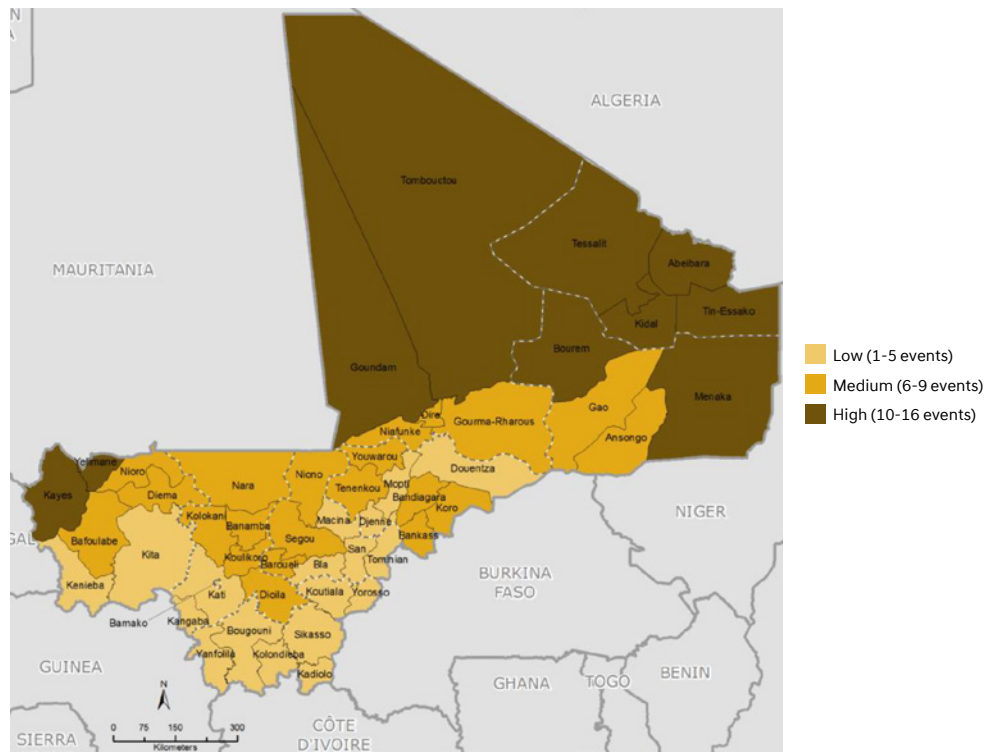
Figure 11: Number of disaster events by region in Mali (2002–2022)



Source: Authors' own, based on data from EM-DAT (2023).

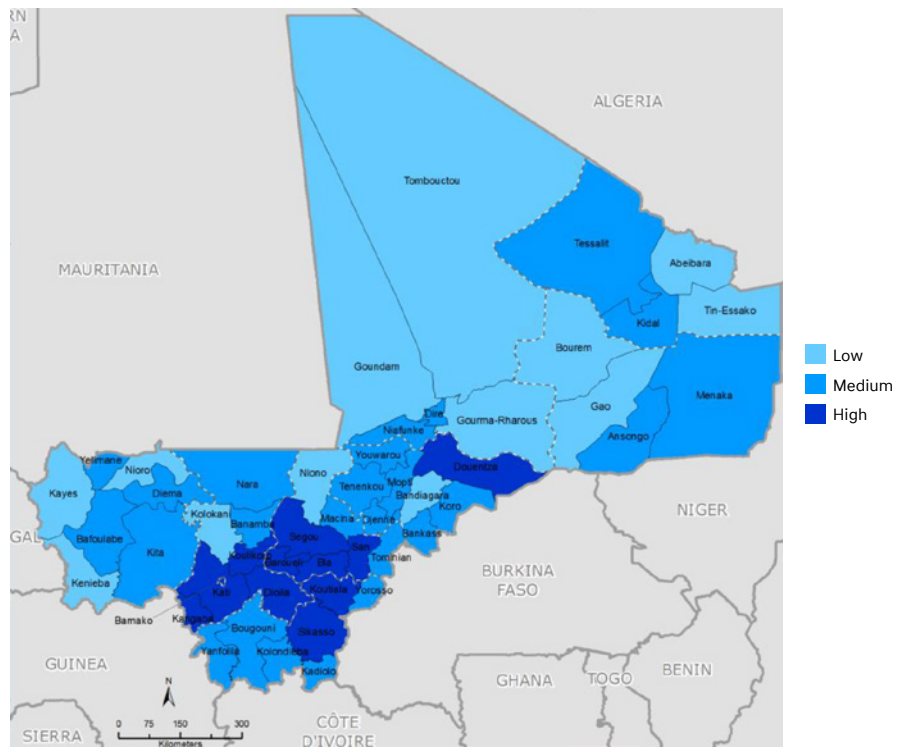
In contrast to drought, the WFP study revealed the main flood-prone areas to be in more densely populated areas, specifically urban areas (such as Bamako) and along the Inner Niger Delta, which covers a surface area of 64,000 square km between Djenné and Tombouctou (Figure 12).

Figure 12: Spatial distribution of drought risk, Mali



Source: WFP (2017).

Figure 13: Spatial distribution of flood risk, Mali



Source: WFP (2017).

Agricultural production

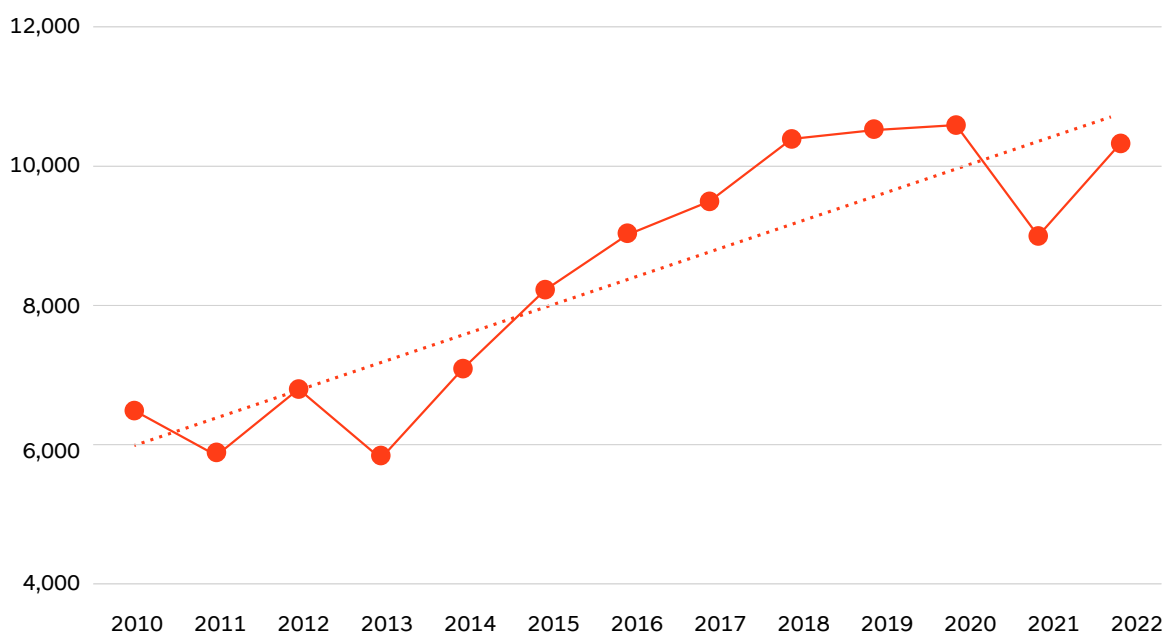
Annual agricultural income losses in Mali due to shocks are estimated to reach USD179 million per year (World Bank 2021b); Ségou, Sikasso and Mopti are the regions where crop losses are greatest. Millet and maize contribute to more than %50 of the aggregated average annual modelled loss of agricultural production; millet shows the highest potential annual loss of total value.

FAO's Global Information and Early Warning System on Food and Agriculture (GIEWS) Country Briefs archive for the 2022–2010 period (FAO n.d.) give more details about years with unfavourable conditions that have significantly affected the production of the main agricultural crops (maize, millet, rice and sorghum). Although overall national crop production increased by 36% between 2010 and 2022, FAO data indicates 2011, 2013 and 2020 as years of reduced production. None of the GIEWS reports give floods as the drivers of production anomalies, except for mentions of erratic rains or localised floods.

The GIEWS Country Briefs, however, note that drought events and insect and rodent infestation in 2011 significantly impacted production, which was later exacerbated by insecurity and population displacement in 2013. This is reflected in the 2021 National Contingency Plan (Plan national de contingence) (2021), which notes that Mali's agricultural sector is threatened by locust invasions and epidemics in addition to droughts and floods.

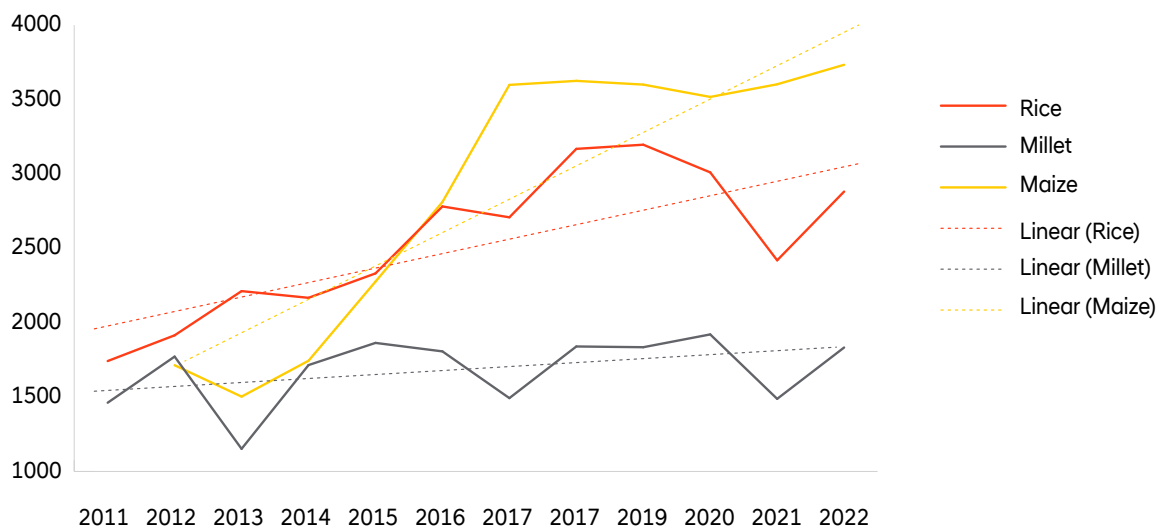
The same reports also present the disaggregated impact of the production loss for the three main crops. As outlined above, millet appears to be the most vulnerable crop in terms of drops in production, which not only has economic consequences, but also in terms of food security; along with sorghum, millet is the staple food of rural and poor populations.

Figure 14: Overview of national production of cereals (million tonnes, 2010–2022)



Source: Authors' analysis, based on FAO (n.d.).

Figure 15: Evolution of national production of three main crops (million tonnes, 2011–2022)



Note: Relevant government bodies (SAP, CSA) have no recent public sector data on the measured impacts of droughts on vulnerable populations. Recent drought and flood plans and strategies refer to figures generated before or shortly after the political crisis in 2012 and are unlikely to reflect the current or projected situation.

Source: Authors' own, based on FAO (n.d.).

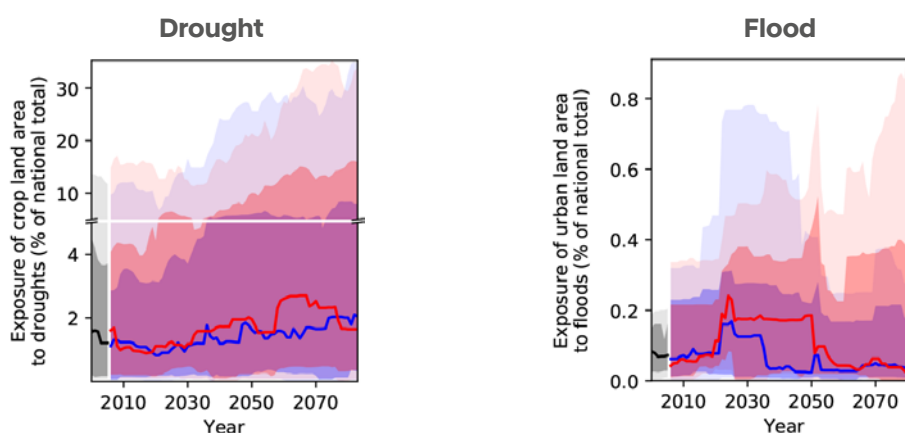
Climate projections

Future dry and wet periods are likely to become more extreme. Projections of the national crop-land area exposed to at least one drought per year suggest that drought exposure could increase up to threefold under the RCP 6.0 scenario (Tomalka et al. 2020). As shown in Figure 16 there is significant modelling uncertainty with regard to drought risk, while exposure of urban areas to river flood risk is projected to hardly change in

the medium to long term. On average, a loss of at least USD35 million in agricultural income will occur once every 10 years (World Bank 2019b).

The G5 Sahel Country Climate Development Report developed by the World Bank (2022b) estimates that by 2050 annual GDP compared to a medium-growth baseline would reduce by 6.4% under the wet and optimistic scenario.

Figure 16: Modelled projections of exposure to drought and flood risk in Mali up to 2080



Note: blue line = RCP 2.6; red line = RCP 6.0.

Source: Tomalka et al. (2020).

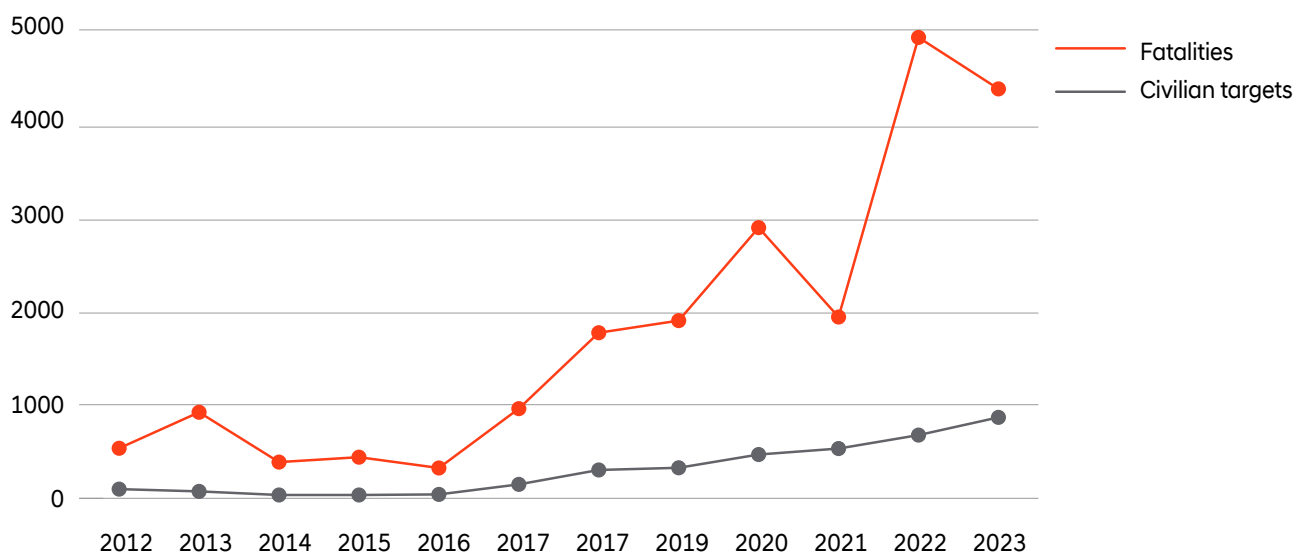
3.2 Conflict

Mali’s security context has deteriorated in several phases since 2012, when it coincided with a poor harvest and pre-existing food insecurity. Insecurity – measured for the purpose of this analysis via the incidence of violence and numbers of fatalities – has since evolved to include not only the northern areas of the country but also central regions (particularly Mopti and Ségou), with nearly 60% of all reported fatalities since 2015 taking place in central Mali (see Figure 17).

From 2012 to 2021, 42% of total conflict-related fatalities were attributed to violent extremist groups, followed by state security forces (28%); 38% of civilian fatalities were attributed to local militias, followed by violent extremist groups. Recent reports suggest that violence targeting civilians increased by 38% in 2023 compared with the same period in 2022 (ACLEDD 2023).

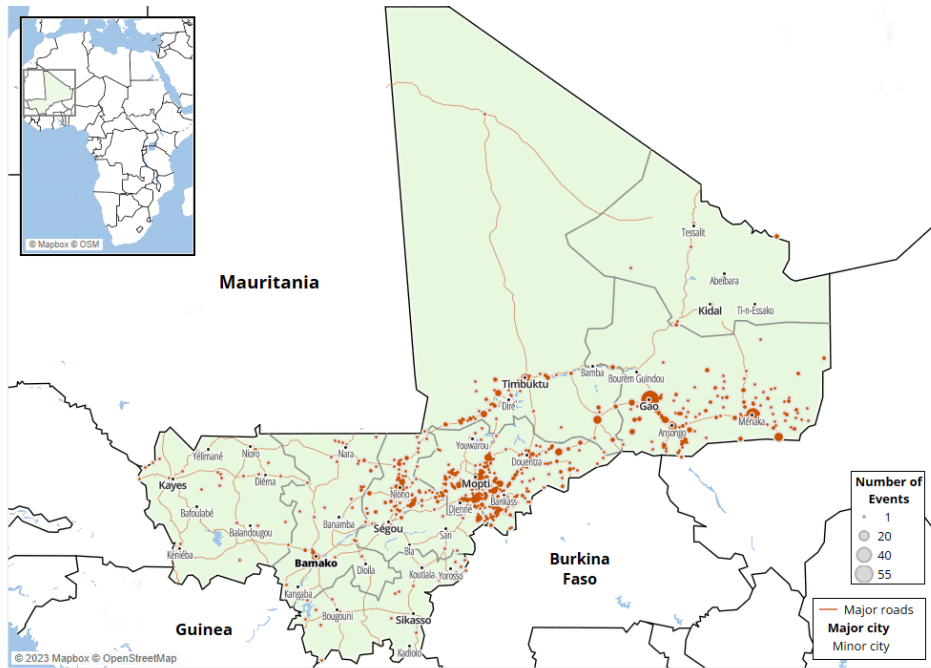
Households in the regions most affected by conflict are also those reported to have the highest rates of poverty. Over half of poor households in the districts of Bandiagara, Douentza and Koro, for example, are in high-intensity conflict zones, whereas the rate of poverty is consistently below 40% in mid- to low-intensity conflict zones such as Djenné and Niafunké districts (World Bank 2022c). Regions affected by conflict have been losing non-agricultural jobs, which has likely led to more households (in these regions) relying on subsistence agriculture, which suffers from declining productivity and low incomes.

Figure 17: Incidence of violence involving civilian targeting and/or fatalities in Mali (2012–2023)



Source: Authors’ own, based on ACLED data, 1997–2023 (ACLEDD n.d.).

Figure 18: Violence targeting civilians in Mali (January 2022–August 2023)



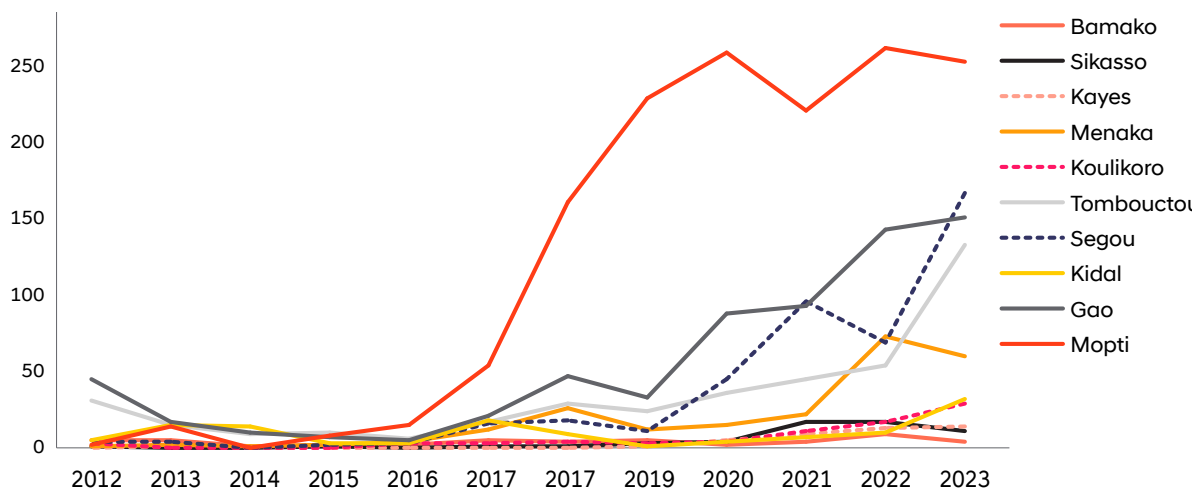
Source: ACLED (2023).

Battles and attacks have spread to new locations in northern Mali, as well as concentrating around towns and major transit routes in Gao, Mopti and Tombouctou (Figure 18).

The rising levels of violence increased the numbers of IDPs to more than 300,000 by late 2020, reaching close to 400,000 by the end of 2023. Forecasts estimate a 17%

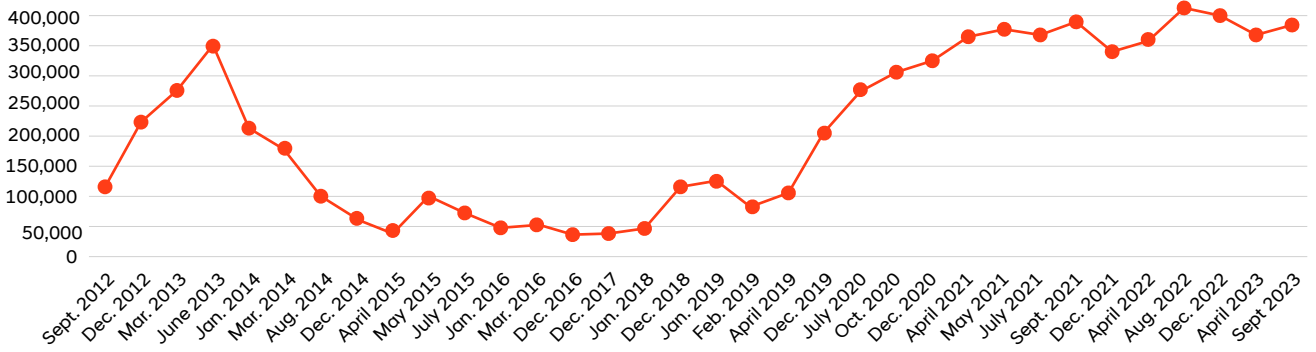
increase in the numbers of displaced people between end-2022 and end-2024 (DRC 2023). According to the International Organization for Migration (n.d.) Displacement Tracking Matrix report of September 2023, the first priority need identified by IDP households themselves are food (97%), housing (50%), money (43%), non-food items (37%), income-generating activities (25%), drinkable water (20%) and health services (12%).

Figure 19: Incidence of violence involving civilian targeting in Mali by district (2012–2023)



Source: Authors' own, based on ACLED (n.d.).

Figure 20: Evolution of IDP numbers in Mali (Sept. 2012–Sept. 2023)

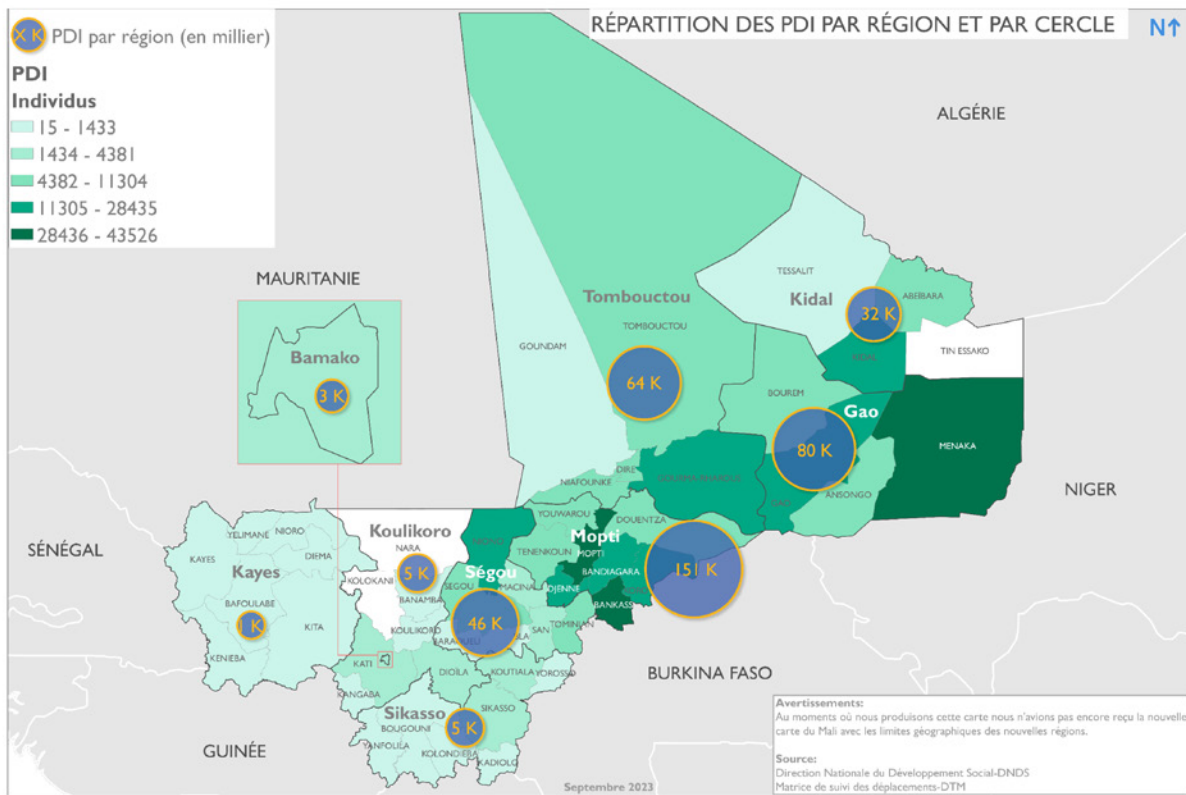


Source: IOM (2023).

IDPs mainly originate from conflict-affected regions in the northern and eastern regions, with the displaced people increasingly moving into southern and eastern regions, as shown in Figure 21.

The regions of Mopti (23%), Tombouctou (16%), Bandiagara (14%), Ménaka (12%), Gao (9%), Ségou (9%) and Kidal (8%) hosted the largest numbers of IDPs as of September 2023, as shown by the percentages in parentheses, calculated based on the number of IDPs per region/total number of IDPs.

Figure 21: Distribution of IDPs by region (Sept. 2023)



Source: IOM (2023).

3.3 Food insecurity

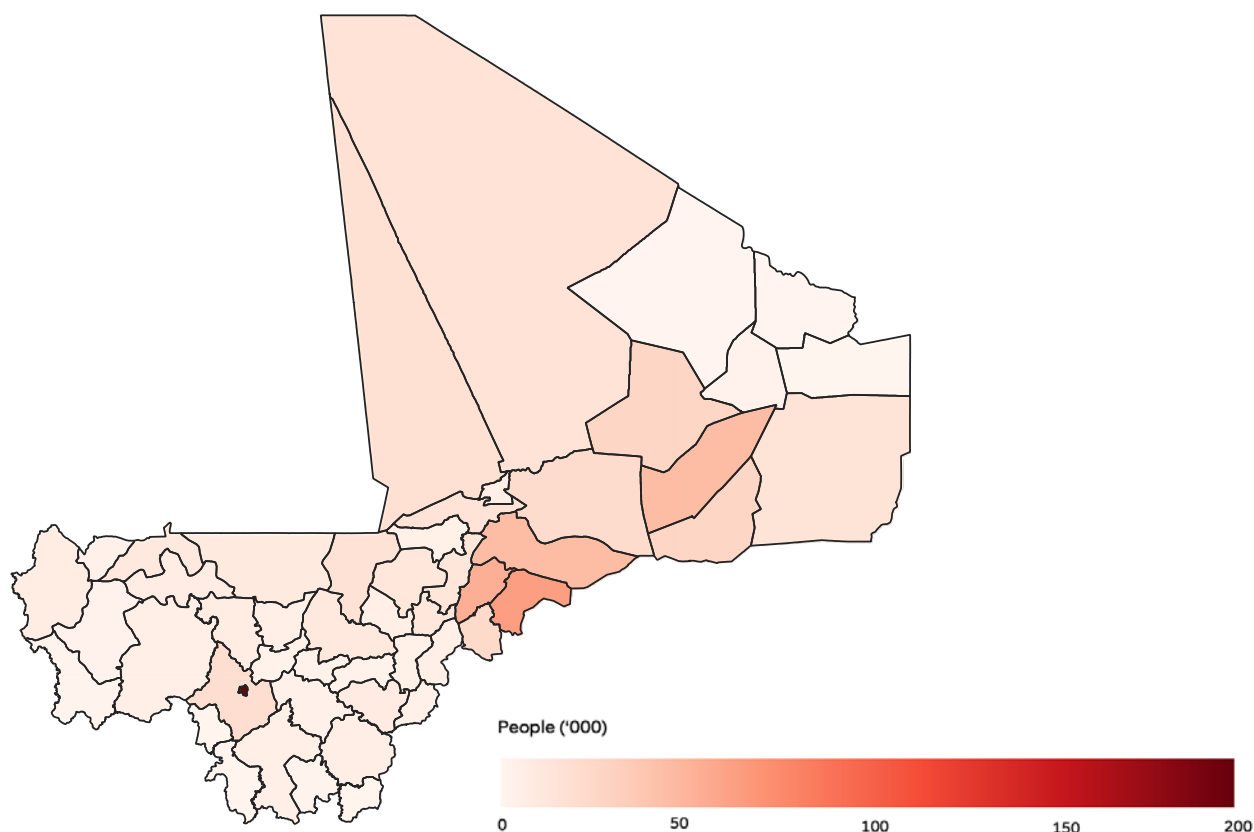
Regional insecurity, limited trade, climatic conditions, conflict and high prices of staple foods are all driving food and nutrition insecurity in Mali. The Global Hunger Index (2023) ranks Mali 98th out of 125 countries, with a score of 25.6, indicating a severe hunger level (where a score of zero on a 100-point scale indicates ‘no hunger’).

Historic figures indicate that on average, 222,000 people are in acute food insecurity or livelihoods crisis – Integrated Food Security Phase Classification (IPC) classification level 3 or above (in other words, IPC3+) in any given year in the long term. The intensity of food security varies between rural and urban areas, with 50.5% and 31% of urban and rural households, respectively, classified as food secure (World Bank 2021c). Over 1 million people were recorded to be in acute food insecurity in 2021, the highest level recorded since 2012 (OCHA 2022).

Food insecurity is most widespread and recurrent at crisis and emergency levels (IPC3 and IPC4, respectively) in the north-eastern regions of the country. For example, the food security situation in the Ménaka region is deteriorating, having reached famine (IPC5) levels in the June–August 2023 Cadre Harmonisé analysis. This is also a region that is hosting a significant number of IDPs.

Analysis points towards the role of insecurity, intercommunal conflicts, unusual population movements and disruptions in socioeconomic activities, with deterioration of livelihoods. Insecurity limits the circulation of foodstuffs and access to fields, particularly for producers in central regions of Mopti, northern Ségou and the Inner Niger Delta. At the same time, farmers cannot reliably cultivate their fields because of recurrent attacks and massacres.

Figure 22: Average annual number of people in IPC3+ by district ('000, 2014–2023)



Source: Authors' own, based on IPC (n.d.).

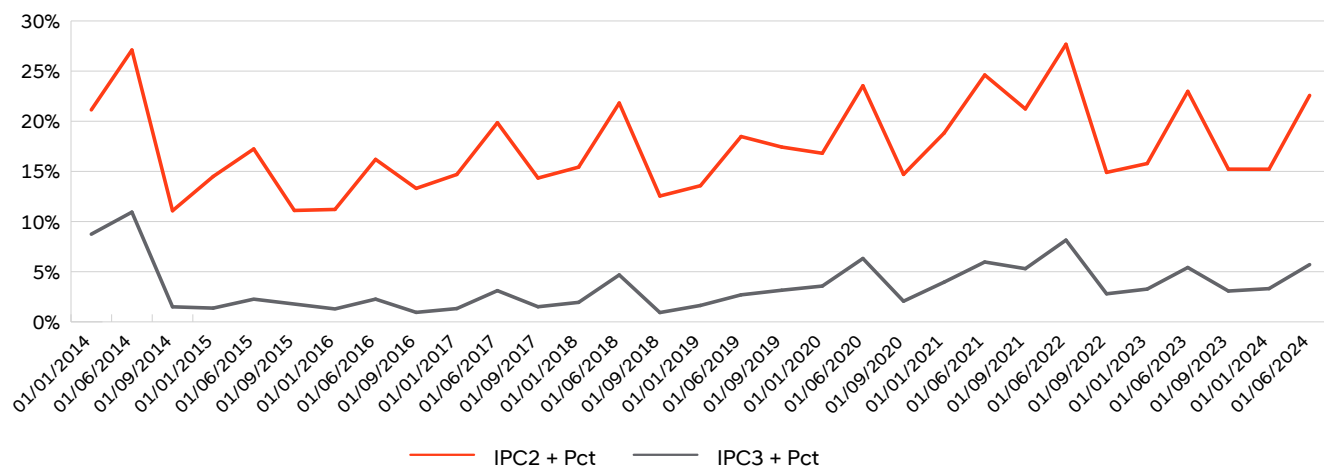
For example, in 2019 WFP Mali used satellite imagery to monitor crop-land abandonment in Mopti linked to the intensification of conflict and insecurity that happened over the course of the year. In the parts of the region where violent events had been reported, widespread crop-land loss was observed, with an overall decrease in cultivated land area detected for 25% of Mopti localities in 2019, compared with pre-conflict years (WFP 2020).

As illustrated in the figures below, spikes in food insecurity at stressed levels and above. (IPC2+ and IPC3+, respectively) have happened in the years 2012, 2014, 2020 and 2022. There appears to be a relationship with the years of drought, whereby major droughts captured in the EM-DAT database are followed by increases in crisis levels of food insecurity in the following year. Little relationship was found between years of flood events and food insecurity, most likely because of the degree to which events in the north of the country, which is less exposed to flooding, drive the levels of food insecurity. The peaks in food

insecurity years also match the patterns in numbers of IDPs (see Figure 20), with the exception of 2014, and in more recent years have been accompanied by a gradual increase in the incidence of food insecurity. This suggests there is a complex relationship between drought, displacement and food insecurity, resulting in interconnected and compound risks, rather than being attributable to a single key driver.

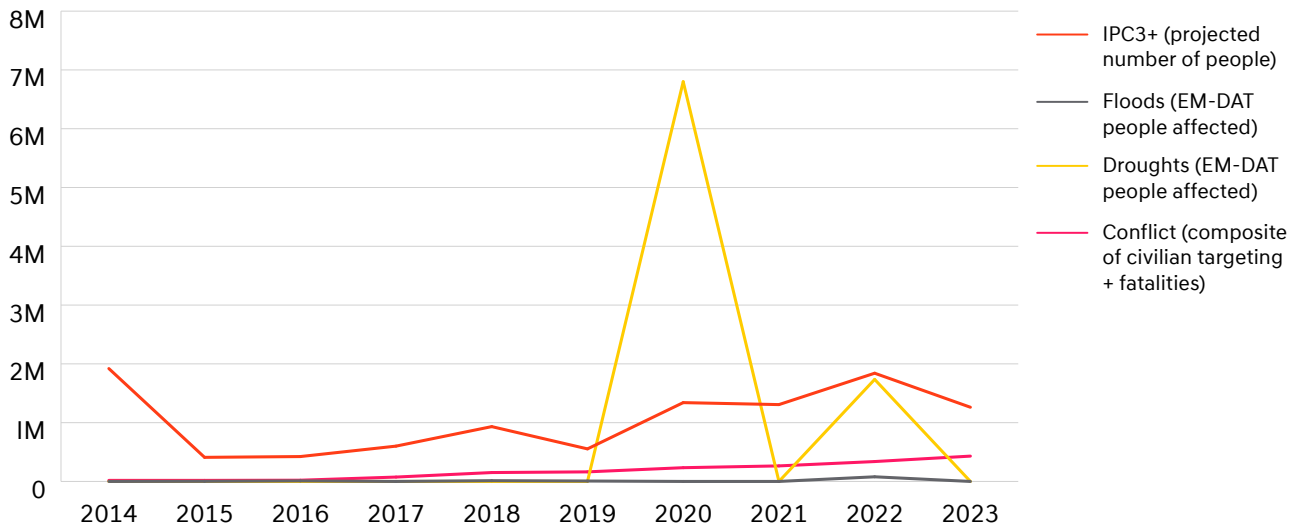
The length of time people spend in crisis levels of food insecurity also points towards the north-east as a highly vulnerable area, demonstrating that people spend 1–3 months of the year in a state of crisis or emergency. This can have implications for the projected duration of support required (e.g., in the form of unconditional cash transfers), as well as on their volume; for people in IPC3+, the protection gap – the difference between anticipated requirements and the assistance that is available – will be significant given the assistance required to attain minimum levels of food consumption.

Figure 23: Percentage of population in IPC2+ and IPC3+ (2009–2022)



Source: Authors' own, based on IPC (n.d.).

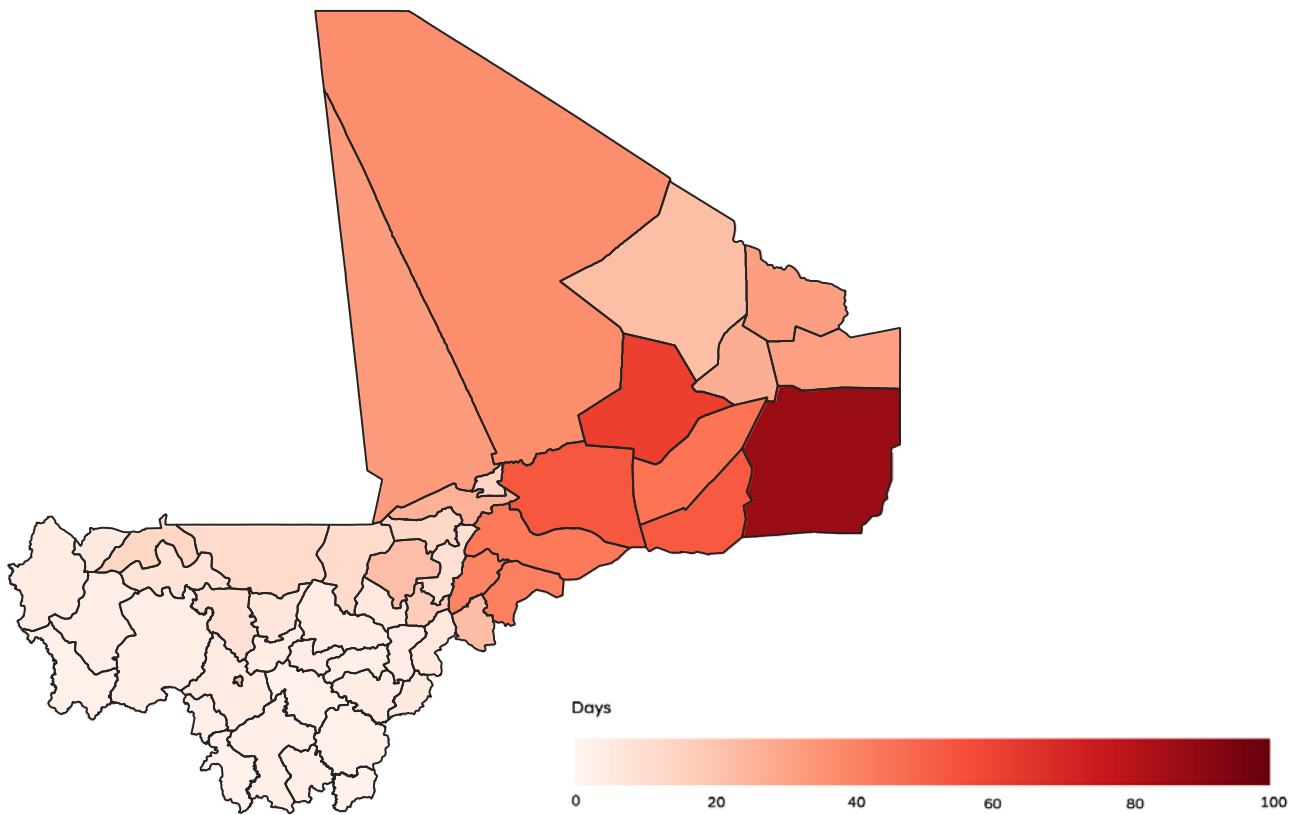
Figure 24: People affected by food insecurity (IPC3+), droughts, floods and conflict over time (2014–2023)



Note: conflict composite = number of incidents of civilian targeting (threshold of x500 people per incident) + number of incidents where fatalities have been recorded. All based on ACLED reports.

Source: Authors' own, based on Cadre Harmonisé data (EM-DAT n.d; ACLED n.d).

Figure 25: Average days per year spent in IPC3+, by district (2014–2023)

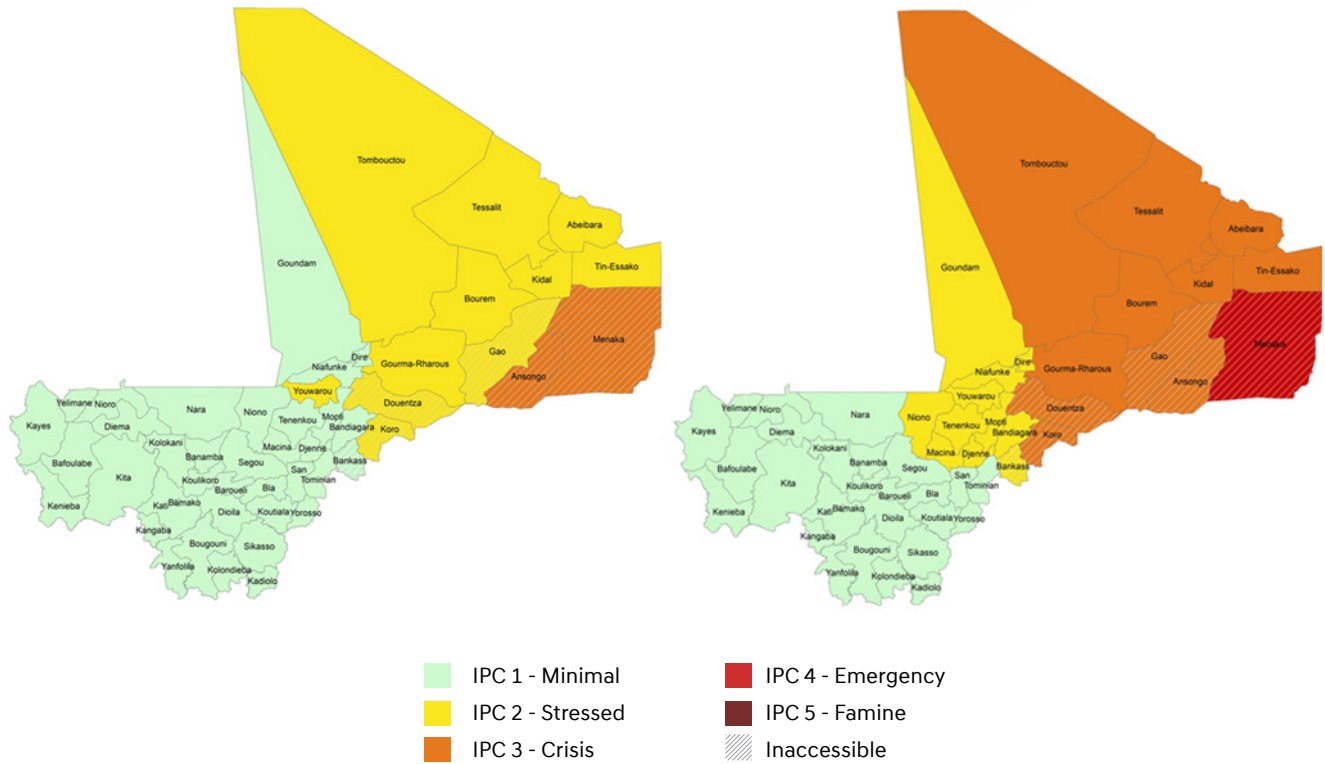


Source: Authors' own, based on biannual IPC data (IPC n.d).

Recent Cadre Harmonisé analysis indicates that over 700,000 people are currently suffering from acute or high levels of food insecurity (IPC3+), representing just over 3% of the total population. These numbers are

expected to reach 1.4million (6% of the population) by the lean season period between June and August 2024 (Food Security Cluster 2023). The most recent Cadre Harmonisé data is shown in Figure 26.

Figure 26: Current and projected people in IPC1–5 (Nov. 2023)



Source: Food Security Cluster (2023).

3.4 Composite risk profile

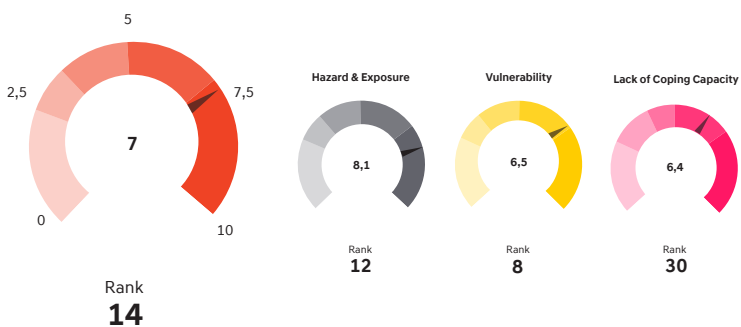
On top of the shocks described above, Mali faces considerable development challenges. The 2021 Human Development Index for Mali stood at 0.428, placing it 186th out of 191 countries (United Nations 2023). High levels of poverty are a key driver of vulnerability, with the share of people living on less than USD2.15/day ranging between 4% and 34% depending on the district (see Figure 8). Development challenges are further exacerbated by conflict in the northern and central regions, leading to significant population displacement and intra- and intercommunal tensions as outlined in the previous section.

The increasing frequency and intensity of climate change-related shocks and stresses, including droughts, have resulted in increased migration to urban areas. The G5 Sahel Country Climate Development Report (World Bank 2022b) demonstrates that many migrants are settling in informal and vulnerable neighbourhoods. These trends are reflected in the poverty numbers, with the poverty rate in Bamako skyrocketing from 4% in 2017 to almost 16% in 2021.

In addition to being highly exposed to the impacts of hazards, Mali's population is also exposed to high levels of pre-existing socioeconomic vulnerability. The INFORM Risk Index, a composite index that takes into

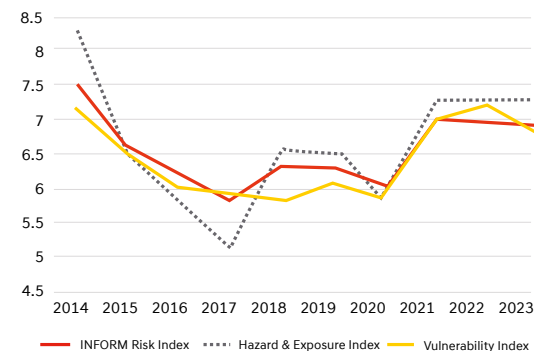
account three dimensions of risk (hazard and exposure, vulnerability and lack of coping capacity),⁷ ranked Mali as 14th in the list of most at-risk countries in the world in 2023. Further detail is outlined in Figures 27–29.

Figure 27: INFORM Risk Index scores for Mali (current and trend)



Source: INFORM Risk Index (2024).

Figure 28: Evolution of INFORM Risk Index components



Source: INFORM Risk Index (2024).

Figure 29: Breakdown of INFORM Risk index by components for Mali



Source: INFORM Risk Index (2024).

⁷ Each dimension encompasses different categories, which are user-driven concepts related to the needs of humanitarian and resilience actors, who designed the platform.

3.5 Implications for social protection programming

Drawing on the data summarised in the sections above, several implications stand out that serve to frame priorities for social protection programming.

Mali presents a complex picture of interconnected drivers of risk. Over the past decade, spikes in drought, food insecurity and displacement have occurred in parallel with the gradual escalation of insecurity. Evidence suggests drought is a key driver of food insecurity, as years of drought have been followed by spikes in projected numbers of people at crisis and urgent levels of food insecurity, but the relationships and direction of causality between these multiple risk drivers are complex and likely to vary across time and geographical area. They pose a challenge and require more flexibility and locally relevant approaches when trying to develop a single index to serve in early warning or trigger-based ASP systems, which are often linked to a single key hazard or risk driver.

The north-east of the country, although sparsely populated, has historically experienced the greatest share of these confluent risks, which is reflected in IPC analysis that indicate high levels of ongoing food insecurity (including famine). Government access to these areas is constrained due to insecurity requiring innovative or partnership-based approaches to programme delivery. Increasingly, central regions (Mopti, Ségou) are also at risk, with high levels of poverty, increasing insecurity and declining government access.

The more populous south of the country is most exposed to risks of flooding. Flooding is a key hazard affecting densely populated areas; specifically, urban areas (such as Bamako). Although not an identifiable driver of food insecurity, flooding brings other significant risks in terms of damage to life and health, and disruption of livelihoods.

Numbers of IDPs are projected to increase, presenting a growing caseload of highly vulnerable people with specific needs, as well as those of their host populations. IDPs mainly originate from conflict-affected areas in the northern and central regions, although intercommunal tensions are rising, with impacts of displacement increasingly moving into southern regions. Targeted assistance to IDPs is critical, with a focus on addressing immediate concerns such as food, housing and non-food items.

Social protection offers a channel to bolster resilience, but also to de-escalate and mitigate potential compounding effects between crises. Providing well targeted, timely and sufficient assistance to vulnerable households could potentially reduce tensions over natural resources in periods of water scarcity; support producers unable to access their lands due to upticks in violence; and assist communities experiencing influxes of IDPs. This will require a holistic and conflict-sensitive approach to evaluating risk, anticipated benefits of programmes and who the programmes should target.



HUMANITARIAN ASSISTANCE

Since 2023, Mali has been in a situation of acute humanitarian crisis, driven by the ongoing conflict coupled with climatic shocks, resulting in an estimated 8.8 million people (42% of the total population) requiring humanitarian assistance, up from 7.5 million in 2022 and 5.9 million in 2021 (ECHO 2023).

4.1 Overall funding flows

Humanitarian assistance is a significant source of funding in Mali for response to disasters, displacement and food insecurity. The large amount of external support flowing to Mali over the past decade illustrates an overall low level of financial resilience or preparedness to manage shocks. As captured in Table 4 and Figure 30, the first national United Nations Office for the Coordination of Humanitarian Affairs (OCHA)-coordinated HRP was introduced in 2012, linked to the political crisis and ensuing security crisis, at which point international aid allocations to Mali transitioned from primarily development assistance to humanitarian assistance.

This section considers the volumes of humanitarian assistance flowing to Mali in response to crises and emergencies, and funded through awareness raising campaigns and appeals.

The humanitarian appeals process comes under the mandate of the UN Humanitarian Country Team, a collaborative body (including both UN and wider stakeholders). Appeal requirements are informed by clusters, which are groups of UN and non-UN humanitarian organisations working on a common theme (shelter, nutrition, health, food security, etc). Representation of government ministries within these groups is limited.

Table 4: Historical development of humanitarian aid in Mali as a share of GDP (USD million, 2012–2022)

Year	GDP (current USD)	UN-coordinated humanitarian appeal requirements	Funds raised in response to appeal	Humanitarian aid as percentage of GDP (%)
2012	12,442	215	153	1.23
2013	13,243	477	265	2.00
2014	14,365	481	239	1.66
2015	13,105	377	132	1.01
2016	14,026	354	146	1.04
2017	15,366	305	142	0.93
2018	17,071	330	179	1.05
2019	17,280	324	166	0.96
2020	17,465	474	228	1.30
2021	19,140	563	222	1.16
2022	18,830	686	299	1.59

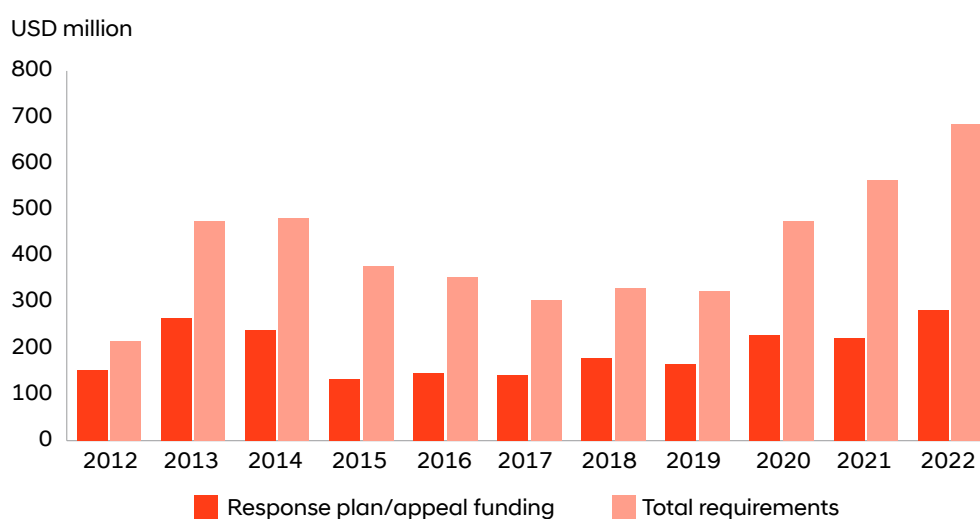
Source: Authors' own, based on data from World Bank (2023) and humanitarian aid information from FTS (n.d.).

Note: No country-specific humanitarian coordinated plan is available for Mali before 2012; a region-wide coordinated plan was prepared for 2010.

Humanitarian appeal requirements over the past decade have fluctuated between USD215 million and USD686 million; less than 50% of the required amount was funded, with donors reducing their contributions shortly after the peak years of crises. While Mali is heavily reliant on ex-post financing of humanitarian assistance through

external donor support, public spending on social assistance has risen more rapidly than humanitarian aid (at approximately 2% and 1%, respectively, in 2021), with overall aid as a share of GDP having remained relatively stable at around 1% across the past decade.

Figure 30: Secured funding for HRP and appeals compared with total annual humanitarian funding requirements (USD, 2012–2022)

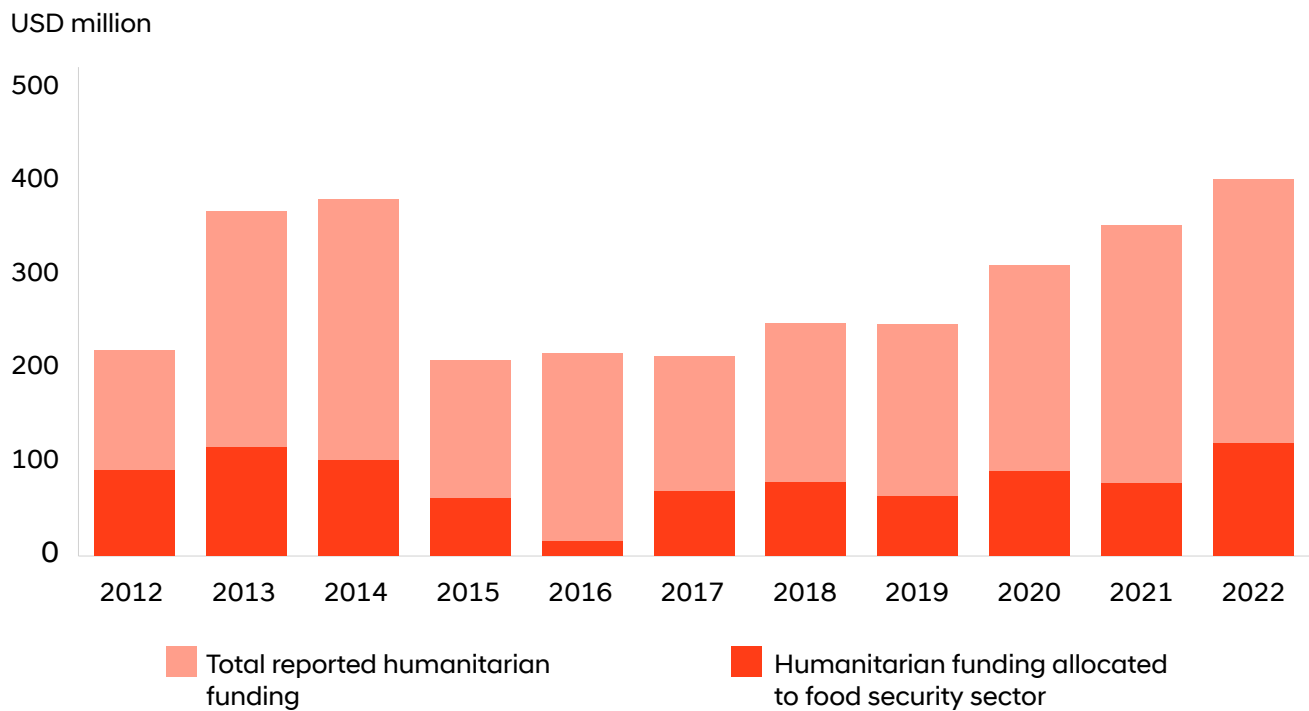


Source: Based on FTS (n.d.).

Data on funding flows appears to align loosely with the spike in conflict and resulting displacement in 2012–2013, and the drought events and spike in food insecurity of 2020–2022, as described in section 2; however, other compounding risks such as flooding and the COVID-19 pandemic are also likely to drive increases in the need for humanitarian interventions. As Figure 31 shows, reported allocations of funding to the food security sector tend to fluctuate between 20% and 40% of overall funding, making it the most funded sector overall; but there is little evidence of observable spikes in funding to this sector associated with the years of drought and food insecurity. The second and third most funded sectors are nutrition, and multi-purpose assistance (which often relates to cash assistance).

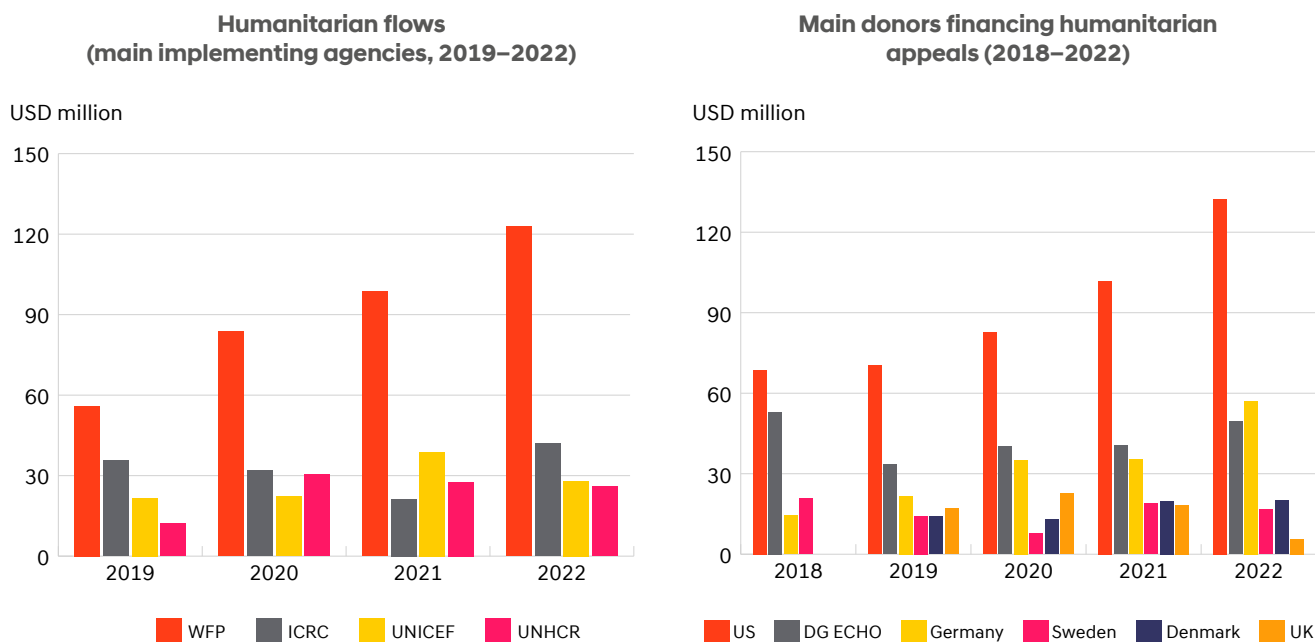
Mali has received more than USD1.5 billion in financing through humanitarian appeals over the past five years (as shown in Figure 30 and Figure 31), with 47% of this financing being implemented by four main organisations: WFP, the International Committee of the Red Cross (ICRC), UNICEF and the United Nations High Commissioner for Refugees (UNHCR). Humanitarian programmes and responses have tended to focus more on food security, nutrition and displacement, in particular.

Figure 31: Total humanitarian funding and funding allocated to the food security sector (USD million, 2012–2022)



Source: Authors' own, based on FTS (n.d.).

Figure 32: Main implementing agencies and main donors of humanitarian assistance to Mali (USD)



Source: Authors' own, based on FTS (n.d.).

The principal contributors to funding the humanitarian appeals are the US, with a focus on food security/nutrition and rapid response, the European Commission (ECHO), Germany, Sweden, the UK and Denmark. As shown in Figure 32, while the contributions of the US and Germany increased over time, the UK's contribution diminished significantly in 2022.

Implementation of financing is guided by the HRP, coordinated by OCHA, and informed by the Cadre Harmonisé in terms of levels of need – meaning that people are generally targeted according to the Household Economy Approach⁸ for lean season assistance programmes. However, targeting for social safety nets or IDP support is not standardised across humanitarian agencies.

OCHA coordinates the Cash Working Group (CWG), which is responsible for coordinating monetary transfers for multiple uses; in June 2023, it comprised 45 organisations and partners, primarily assisting the most vulnerable people in Gao, Mopti and Tombouctou (CWG 2023). During the meeting of the CWG on 1 August 2023, the idea was raised of creating regional CWGs in Gao and

Mopti where 70% of the cash assistance was currently provided, and received great interest (CWG 2023).

In parallel with the UN HRP, the government produces the PNR, which only covers food security needs. The plan, which amounted to between FCFA9 billion (USD 15million) and FCFA16 billion (USD 27million) in 2021–2022, referred to secured state finance as including national cereal stocks and contingency finance such as the FSA, as well as from development insurer African Risk Capacity (ARC)'s insurance scheme payouts. The plan identifies a number of key activities, most notably the purchase and distribution of cereals, and some small-scale distribution of fodder and cash transfers. For example, the 2022 plan indicated that just under a third of the budget for cereal distribution would go to the social safety net programme, but details on this were not clear, nor was it referred to in the community-based targeting methodology outlined in the plan. The plan referred to gap in financing and the needs required from partners (such as the UN Food Security Cluster), but further join-up between the two plans appears to be limited.

8 The Household Economy Approach is a method for assessing groups of households' vulnerabilities to economic shocks and changes over large rural areas.

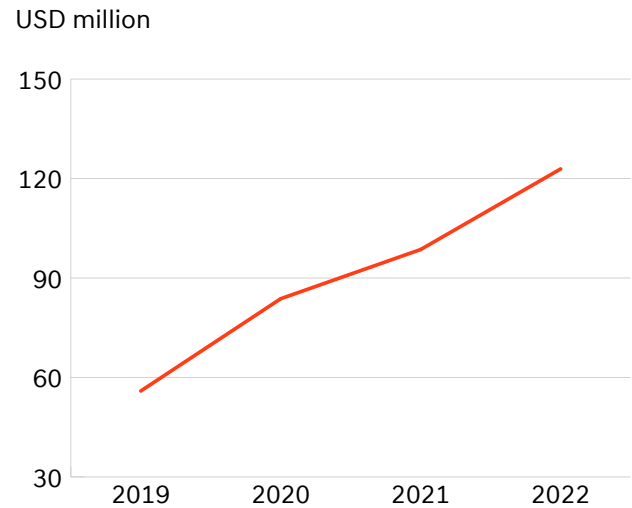
4.2 WFP financing flows

WFP plays a crucial role in providing humanitarian assistance in Mali for immediate and longer-term food security, social protection and nutrition responses. It carries out a range of activities combining unconditional cash transfers, school feeding, nutrition, capacity strengthening and seasonal support.

WFP receives the greatest proportion of humanitarian appeals funding among organisations operating in Mali, with funding volumes increasing steadily to USD123 million in 2022.

Annual reports indicate that the peak number of people WFP operations reached annually in Mali amounted to 2.7 million in 2022, of whom close to 400,000 were displaced people. Funds received were lower in 2023, reported to be USD44 million, although this dip may have been due to delays in reporting to the OCHA FTS.

Figure 33: WFP humanitarian funding volumes in Mali (USD, 2019–2022)



Source: Authors' own, based on WFP annual reports (WFP 2019–2022).

Table 5: Coverage reported by WFP (2019–2022)

Programme participants	2020	2021	2022
By gender			
Male	1,099,387	908,782	1,340,470
Female	1,056,274	743,549	1,452,176
Total	2,155,661	1,652,330	2,792,646
By residence status			
Resident	1,699,554	1,217,330	2,364,180
Refugee	21,532		34,590
IDP	434,575	435,000	393,876
Total	2,155,661	1,652,330	2,792,646
By type of assistance			
Cash transfer	1,820,668	1,500,768	2,498,739
Food distribution	613,275	533,266	970,950
Total	2,433,943	2,034,034	3,469,689

Source: Authors' own, based on WFP annual reports (WFP 2019–2022).

While 90% of all people in 2022 benefitted from unconditional cash transfers, WFP has also scaled up its in-kind food assistance in recent years. The agency furthermore coordinates its responses with the National Platform on DRR (PNRRC), described greater depth in section 4), including in response to the 2022 floods, delivering cash-based assistance to 49,000 flood-affected people. The amount of support WFP provided in in-kind and cash distribution to beneficiaries has increased alongside the scaling-up of its operations since 2020, to an average of USD42 per person. The total value of cash transfers delivered increased by 20% between 2020 and 2022.

In addition to WFP’s annual humanitarian interventions during the lean season, WFP uses macro- and

microinsurance programmes as part of its response programme in Mali. Notably, this includes an ARC Replica programme policy, described in more detail in section 5.2. The ARC Replica policy helps ensure that WFP is resourced with pre-agreed finance to respond with coordinated and complementary actions to those of the government in the event of drought.

WFP is co-leading the CWG alongside OCHA and the Food Security Cluster, providing technical and operational support to the Direction Nationale de la Protection Sociale et de l’Économie Solidaire (DNPSES), which leads the CWG. The name refers to a diverse range of economic activities and practices that prioritise social well-being and community benefits over purely financial profits.

Table 6: Humanitarian interventions reported by WFP (USD, 2020–2022)

Interventions	2020	2021	2022
Total funding received	83,749,055	98,593,286	122,894,402
Total expenditures*	99,153,161	89,462,110	120,207,674
Cash based transfers	57,027,721	41,619,077	68,923,655
of which cash	8,209,582	10,269,389	9,836,398
Value of support per beneficiary (in-kind and cash)	38	45	43

Note: *Monetary value of goods and services received and recorded within the reporting year (including logistics, but excluding any overheads).

Source: Authors’ own, based on WFP annual reports (WFP 2019–2022).

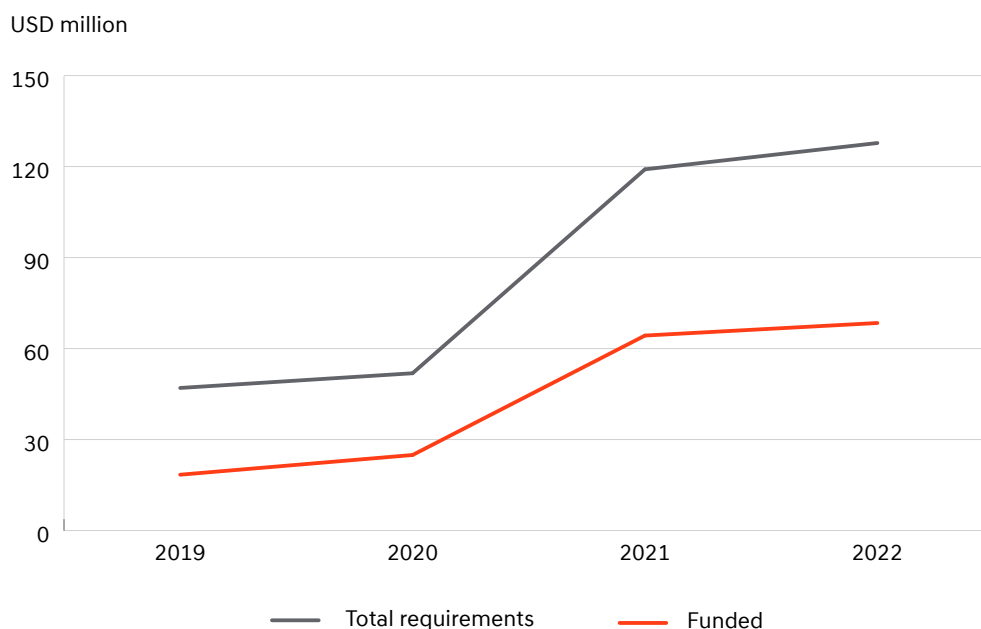
4.3 UNICEF financing flows

UNICEF provides water, sanitation, nutrition, education, health and protection services; it is the second-largest recipient of humanitarian response funding in Mali. UNICEF has received close to USD150 million in funding in recent years.

Few details on the scale and scope of UNICEF’s activities in Mali are publicly available. UNICEF leads the Nutrition Cluster, WASH Cluster and Child Protection Sub-Cluster; and co-leads the Education Cluster, coordinating various humanitarian nutritional interventions. The Nutrition Cluster in 2021 aimed to

improve the efficiency of nutrition interventions by allowing actors to treat and prevent more cases and reach more affected zones. In addition, a vulnerability mapping classifying health districts into high-, medium- and low-priority zones was carried out to identify the most vulnerable zones for interventions. UNICEF provided technical assistance to develop shock-responsive local development plans, known as Economic, Social and Cultural Development Plans (PDSECs) in eight communes in the Mopti region.

Figure 34: UNICEF funding for operations in Mali (USD, 2019–2022)



Source: Authors’ own, based on UNICEF annual reports (n.d.)

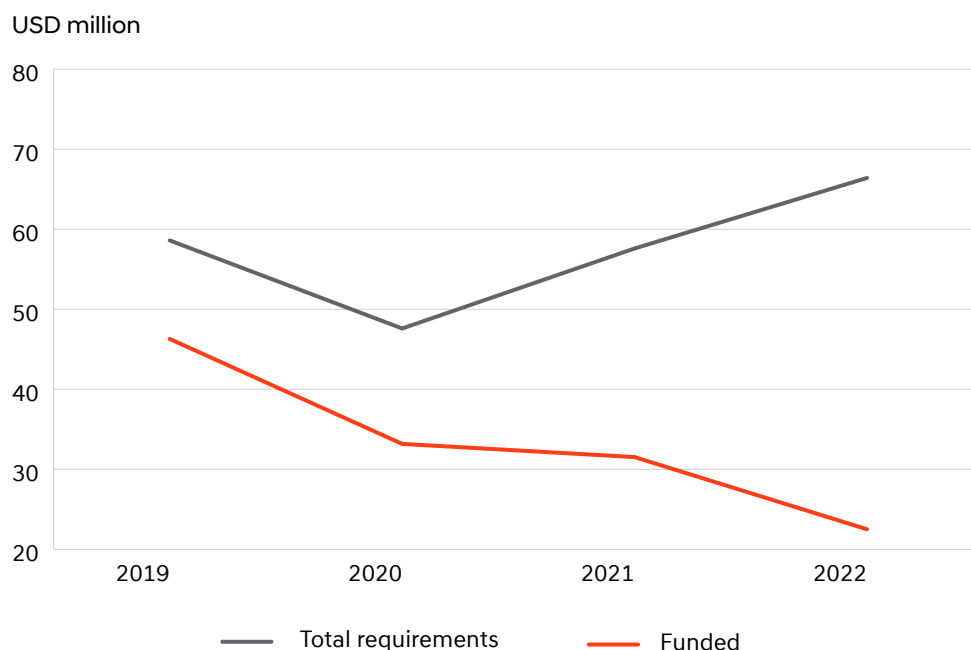
4.4 UNHCR financing flows

UNHCR coordinates responses for all refugees in Mali, alongside the National Commission in Charge of Refugees (CNCR) and its other government partners, UN agencies, and local and international partners.

UNHCR also contributes to the emergency and protection response for IDPs through a number of key activities such as registration, protection monitoring and response to protection cases, including gender-based violence.

UNHCR only distributes a small amount of support in the form of cash-based transfers. In 2022, it provided cash transfers to 221 households (including 108 refugees and 113 IDPs) to cover the needs of their children in 20 education centres in Koro (UNHCR 2022).

Figure 35: UNHCR funding for operations in Mali (USD, 2019–2022)



Source: Based on UNHCR annual reports (2019–2022).

4.5 Implications for ASP programming

Drawing on the data summarised in the sections above, several implications stand out that serve to frame priorities for ASP.

Mali relies heavily on external donor support to respond to new as well as protracted humanitarian emergencies, including rapidly rising internal displacement. Over the past decade, coordinated humanitarian appeal requirements for Mali have fluctuated between USD215 million and USD686 million, with an increasingly upward trend in recent years.

State resources for humanitarian emergencies are limited, but nonetheless efforts are being made at government level to budget and plan for annual responses to food insecurity. The PNRs developed in 2021 and 2022 indicate state resources of between USD15 million and USD25 million, compared with USD222 million and USD299 million in coordinated humanitarian appeal funds received through the UN system. These attempts at government level to budget and plan for responses to food insecurity should be strengthened, taking inspiration from neighbouring countries such as Mauritania where development of the annual PNR is a process of response coordination

between the government and humanitarian actors. The set-up of future ASP systems should aim to strengthen the bridge between government and UN humanitarian planning processes, ensuring greater coordination in identifying overall needs, response actions required and sources of finance available. The challenge will be aligning timelines and institutional processes.

The proportion of humanitarian assistance delivered in the form of cash transfers has increased significantly. In recent years, over 87% of people assisted by WFP (which implements the largest share of humanitarian funding) received cash-based assistance. A large proportion of people receiving cash-based assistance are based in Gao and Mopti, in the centre and north of Mali where access is limited due to insecurity. In contrast, the government’s PNRs for 2021 and 2022 were largely based on food distribution, typically requiring significant logistical capabilities and a presence on the ground. Given its experience in delivering cash transfers, WFP could play a stronger role as a government partner in reinforcing capabilities to reach people, on the one hand ensuring a timelier response and on the other a transition towards greater government ownership of the distribution of cash-based transfers.

Limited detailed information is available on the targeting approach that the major humanitarian agencies use. While the Cadre Harmonisé informs decisions on how humanitarian support is targeted geographically, it is unclear how government systems or registries of community members are used by or reinforced as a result of the annual interventions. Both WFP and UNHCR target and support IDPs and refugees; it is less clear whether and how government social protection programmes reach IDPs. Any new ASP system would need to use a shared social registry owned by the government, which key humanitarian actors would ideally be able to access and have input into it.

Overall, while humanitarian appeal requirements for Mali have increased, most donors have not substantially increased support to Mali with the exception of the

United States Agency for International Development (USAID). The set-up of future ASP systems will require strong multi-year support from core humanitarian donors to Mali including USAID, the European Commission and Germany. ASP systems should be able to accommodate and aggregate funding from donors into a common vehicle, with strong governance and allocation rules to ensure different external sources of finance can be accommodated in a transparent way.



DOMESTIC INSTITUTIONAL ARRANGEMENTS FOR DISASTER RESPONSE AND SOCIAL PROTECTION

This section provides an overview of the relevant public sector institutions and financing arrangements in place for disaster risk preparedness and response through social protection in Mali. This includes domestic policies, strategies, legislation, and institutions of the Government of Mali.

The analysis in this section draws on an assessment framework developed by the World Bank's Disaster Risk Financing and Insurance Program, the Disaster Resilient and Responsive Public Financial Management Assessment tool, which intends to assist stakeholders in identifying opportunities to improve laws, regulations,

policies and systems for managing disaster-related risks (World Bank 2022a). The framework has been modified to align more closely with the scope of this diagnostic.

This section applies a subset of the areas covered in the tool to provide an accessible overview of what tools and capabilities the Government of Mali has in place to prepare for and respond to disasters through social protection programming. Whereas the tool focuses on how institutions support and deliver disaster resilience and response, the application in this section will introduce additional notes on social protection.

5.1 Institutional mandates

Legislative framework for DRM

There is no explicit legislative framework in Mali for defining and managing disasters. Whereas Article 118 of the recently adopted constitution notes that the Cabinet will declare a state of emergency, the text does not explicitly refer to or define the types of disasters that count as emergencies. However, the Government of Mali has in recent years adopted numerous regulations setting out specific institutional arrangements for DRM and disaster risk reduction (DRR).

The National Strategy for DRR (SNRRC) adopted in 2016 provides the current policy framework. The strategy introduced various arrangements for strengthening DRM, most notably the PNRRC established in 2016. The PNRRC serves as the principal coordination body for analysing and advising on government disaster prevention-, preparation-, mitigation- and response-related activities. The PNRRC is seen as a dynamic and active body, supported by a clearly defined mandate in national legislation, serving as a focal point for both national and international actors involved in DRM.

More information, specifically on the legislative framework that could apply to the financing of the response to disasters (e.g. such as legislation to establish funds, allowances for budget reallocations in times of disaster and/or emergency procurement acts) is covered in section 5.1 of this report.

DRM advisory and implementation bodies

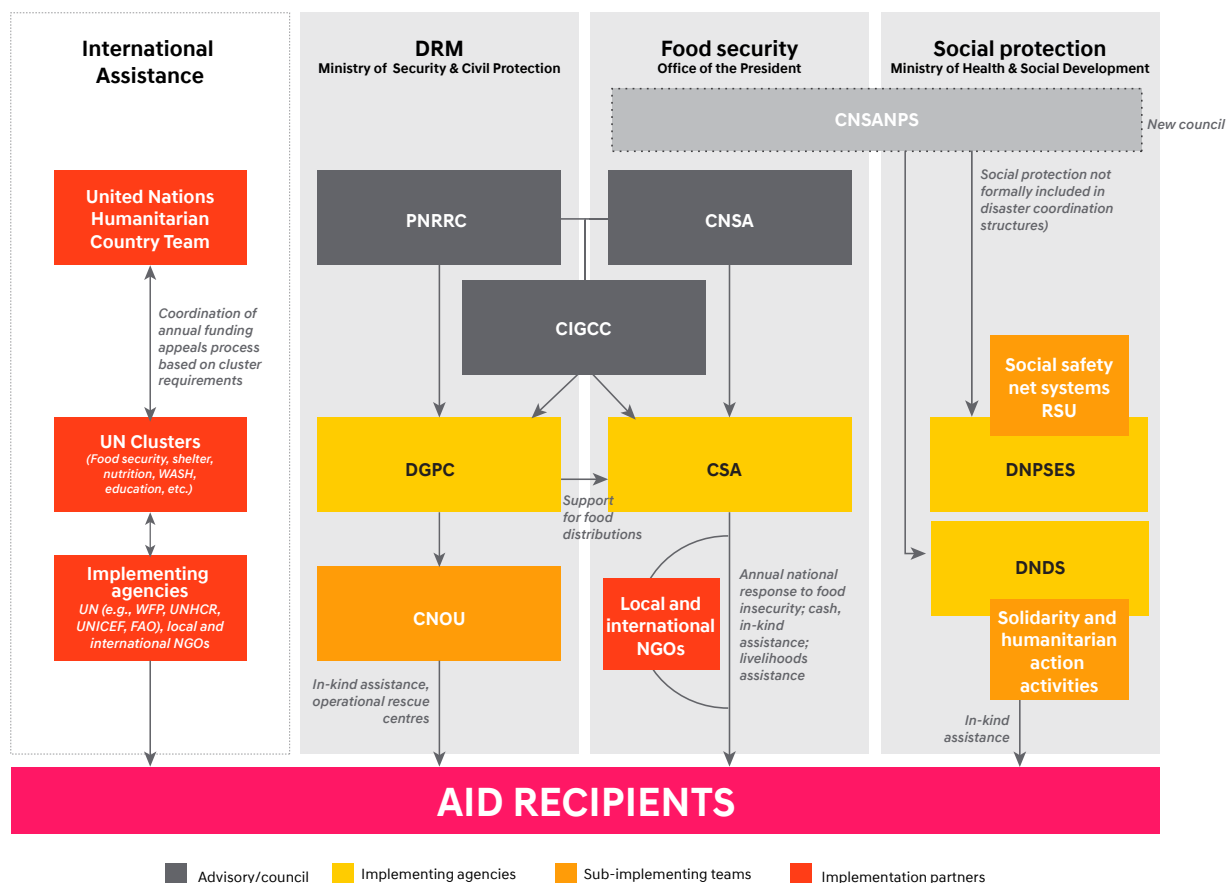
Advisory bodies for DRM have been established but their actions are limited. The Interministerial Committee for Crisis and Disaster Management (CIGCC) was created in 2015 and began operating in 2017. The committee is responsible for organising and coordinating the interministerial management of crises or disasters; for coordinating the declaration of states of crisis or disaster at communal, district, regional and national levels; and for adopting emergency organisation plans

(Plans d'organisation de la réponse de sécurité civile) (Government of Mali 2015).

In addition, a new government body was created to monitor the emergency risk and disaster prevention programme set up in the aftermath of flooding in Bamako in 2019. The Ad hoc Technical Committee (Comité technique ad hoc) (Government of Mali 2019a) includes 12 ministerial departments and representatives from the Office of the Prime Minister (Primature). The committee has developed an emergency programme to address flood risks. However, the actions implemented on the ground were limited due to insufficient funding (GFDRR 2019).

At implementation level, the DGPC is the lead government agency in charge of developing and delivering DRM and DRR plans and initiatives in Mali.

Figure 36: Institutional framework for DRM, food insecurity and social protection in Mali (federal level)



Note: Given limitations in the information available about sub-national institutions that could play a role in DRM, we have focused this figure only to show dependencies at the national level.

Source: Authors' own.

Created by ordinance in 1998 within the Ministry of Security and Civil Protection (MSPC), its institutional framework and operations were strengthened by decree in 2021. The DGPC was also in charge of coordinating the 2019 rapid Post-Disaster Needs Assessment (PDNA)⁹ conducted by the government with technical support from the World Bank, United Nations Development Programme (UNDP) and the EU following the flooding in Bamako in 2019. The National Emergency Operations Centre CNOU) meanwhile serves as the central organisation responsible for coordinating all ongoing relief operations in the country. These include the establishment and operation of rescue centres (centres de secours et postes de secours) established by ministerial decree in 2019 and located across the country.

The DGPC is also playing a role in food crisis management, distributing free food in the event of emergency, working directly with the Mali Office for Agricultural Products (Office des produits agricoles du Mali) at national and regional levels.

Food security legislative framework, policy and implementation

A framework for managing food security has been in place since the major droughts of 1973–1974 and 1984–1985. In 2004, the government established the CSA under the Office of the President with a mandate to promote food security, overseeing the annual national response to food insecurity including the distribution of free food. It also contains the department that handles the ARC insurance scheme (see section 5.2).

The most recent operational framework for food security is the 2021 National Contingency Plan covering the period of 2022–2026, with the overall objective of contributing to the food and nutritional security of vulnerable people and target groups affected by humanitarian risk factors through harmonised food assistance and protection of their livelihoods. Common response strategies were defined and coordinated at national level by the National Council for Food Security (Conseil national à la sécurité alimentaire) through the CSA and DGPC. A national drought plan under the PNR (2021–2025) was also developed.

⁹ Total losses and damages were estimated to reach USD9 million and needs for recovery USD33 million. The PDNA supported the preparation of the USD250 million Bamako Urban Resilience Project financed by the World Bank.

Table 7: Overview of public sector actors and strategies for DRM and social protection

	Disaster response	Disaster risk management	Food security	Social protection
Legal mandate	Ministry of Security and Civil Protection (MSPC)		Office of the President (Présidence)	Ministry of Health and Social Development (MSDS)
Main advisory body	Interministerial Committee for Crisis and Disaster Management (CIGCC)	National DRR Platform (PNRRC)	National Council for Food and Nutrition Security and Social Protection (Conseil national de sécurité alimentaire nutritionnel et de la protection sociale)*	
Main implementing agencies	General Directorate for Civil Protection (Direction générale de la protection civile)		Food Security Commission (CSA)	National Directorate for Social Protection and the Solidarity Economy (DNPSES)
Main strategy/policy document	National Strategy for Disaster Risk Reduction (2016) (Stratégie nationale de réduction des risques de catastrophes)		National Food Security and Nutrition Policy (Politique nationale de sécurité alimentaire et nutritionnelle)(2019)	National Social Protection Policy (Politique nationale de protection sociale) (2016)
Operational plans	Emergency Organisation Plan (Plan d'organisation des secours) (2015)	National Contingency Plan (Plan de contingence national) (2021)	National Response Plan (Plan national de réponse)	Social Protection Action Plan (Plan d'actions national d'extension de la protection sociale)*

Note: * = to be confirmed if operational.

Source: Authors' own.

Social protection legislative framework, policy and implementation

In terms of social protection, the Ministry of Health and Social Development (MSDS) is responsible for implementing Mali's 2016 National Social Protection Policy (Politique nationale de protection sociale), which aims to improve the living conditions of vulnerable populations through various social protection initiatives. The policy introduced new dimensions of social protection, shifting from a simple contributory scheme for public servants and the military to protect all citizens, and disadvantaged people in particular. In addition, the policy also aims to develop mechanisms for the prevention and management of disasters, emergencies and other humanitarian crises, already suggesting that having an ASP system could help the country reduce the population's risk of shocks. The 2016–2018 Action Plan for Social Protection was estimated at FCFA793

billion (USD1.3 billion). Subsequently, the government developed the 2020–2024 Social Protection Action Plan. The policy refers to external partners as vital for resource mobilisation and technical assistance, which may signal a lack of political interest.

The policy refers to IDPs as among people covered by the National Solidarity Fund (FSN) (see section 5.1), but does not provide clarity on how they are included in national social protection programming. Similarly, the policy does not provide any information on how people affected by disasters will benefit from any kind of support.

The National Social Protection Strategy (Stratégie nationale de protection sociale) 2021–2025 lays out the country's vision for social protection. This strategy has four core strategic dimensions: (a) extending the scope of social protection; (b) developing social assistance for vulnerable groups; (c) developing mutuality and

solidarity-based organisations; and (d) developing institutions and strengthening social protection mechanisms. The second strategic dimension (b) focuses on reducing poverty among poor and vulnerable people, particularly in rural areas, including through providing access to food, education, and other basic social goods and services, in the event of a shock.

Implementation of social protection in Mali is conducted by two organisations: the (DNPSES) and the National Directorate for Social Development (Direction nationale du développement social, DNDS). The former has a mandate for social safety nets, and the latter for social assistance, which includes ‘solidarity and humanitarian action’ activities among others. Under this division of responsibilities, the DNDS carries out shock-responsive activities such as provision of in-kind assistance to disaster-affected communities, but it does not have a

formal mandate for ASP, nor is it linked to national disaster coordination structures, such as the CIGCC (World Bank 2022e).

Integrating social protection, food security and nutrition, a National Food Security and Nutrition Policy (Politique nationale de sécurité alimentaire et nutritionnelle) was developed in 2019 for the period 2020–2024. The strategy proposes a new National Council for Food and Nutrition Security and Social Protection (CNSANPS) within the Office of the Prime Minister. It is not yet clear if the CNSANPS has been established. The strategy notes several weaknesses of the social protection tools, including that targeting and intervention methods often do not make it possible to reach the populations truly vulnerable to food and nutritional insecurity, and challenges with strategic alignment with food and nutritional security interventions.

5.2 Institutional arrangements supporting ASP programming

Social protection programming in Mali has evolved over the years, from having an initial focus on food insecure populations to incorporating wider criteria for assistance. To accelerate the implementation of the Millennium Development Goals, the Government of Mali’s Initiative des 166 Communes (i-166) in 2018 identified communes on the basis of the frequency of food crises over the past 20 years. The 166 communes, including 3,052 villages, are located in the regions of Gao, Kayes, Kidal, Koulikoro, Mopti, Ségou and Tombouctou, covering more than 3 million people (Government of Mali 2011). Some government entities such as the CSA still refer in communications to the 166 most vulnerable communes when targeting programme participants.

The Government of Mali adopted a longer-term approach to social protection with the launch of the Jigiséméjiri project in 2013, funded by the World Bank. The government aimed to increase access to targeted cash transfers for poor and vulnerable households, and to build an adaptive national safety net system. According to the 2013 Project Appraisal Document, the cash transfer component targeted households according to their poverty level, needs, characteristics and capabilities, in the five regions in the south (Kayes, Koulikoro, Mopti, Ségou and Sikasso) and in the district

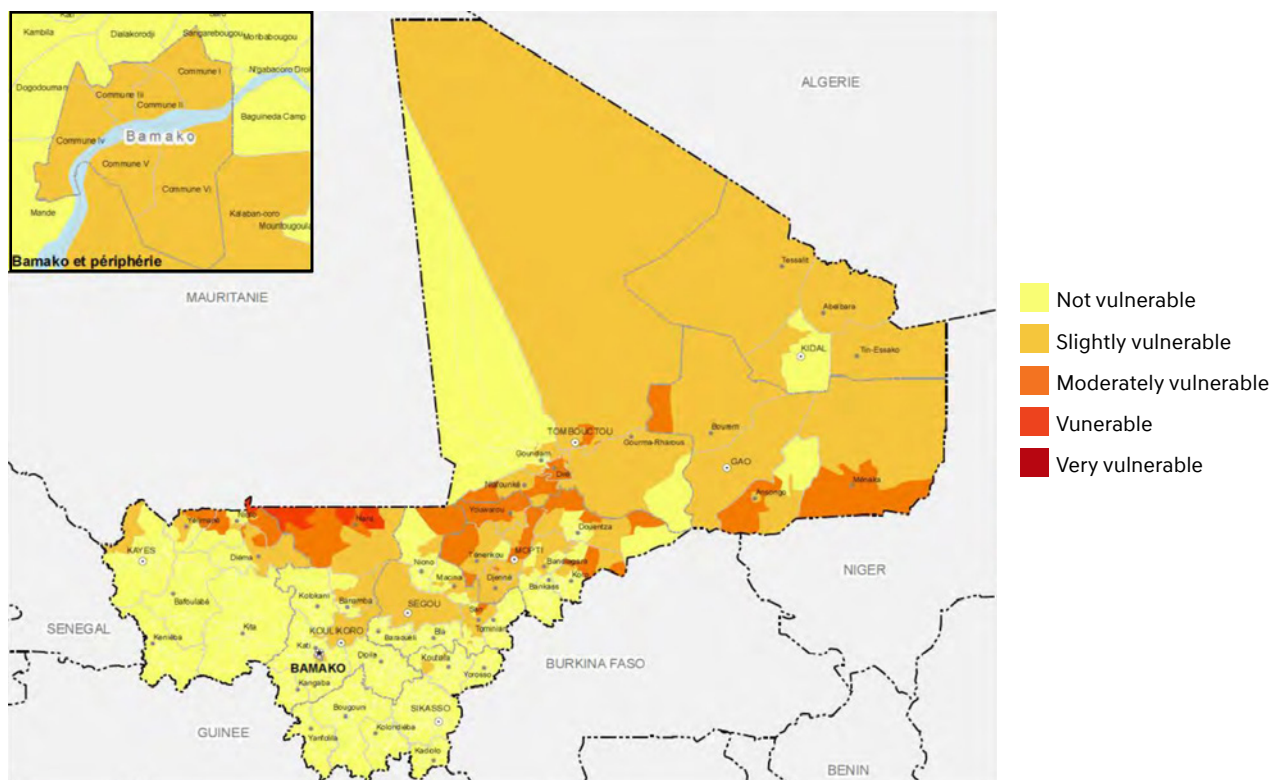
of Bamako, at the request of the government. However, the document does not refer to the i-166 initiative.

The most recent government-led initiative to identify populations most exposed to the risks of recurrent shocks was conducted as part of the Country Resilience Priorities – Strategic Plan 2015–2035 exercise conducted within the Global Alliance for Resilience in the Sahel and West Africa (AGIR) Framework. AGIR’s institutional focal point is the Ministry of Agriculture (Ministère de l’agriculture), which is coordinating with other ministries. A group of geographic information system technical experts from several organisations¹⁰ developed thematic vulnerability maps, such as the multidimensional vulnerability map shown in Figure 37, identifying priority areas of the country down to commune level. The Country Resilience Priorities established clear links between social protection, DRM and emergency response. Despite its technical validation in 2015, it was not validated at ministerial level, which limited its implementation.

Efforts to develop a common database of vulnerable households underpin social protection programmes in Mali. The concept of setting up a common database was developed in early 2012 during the preparation

10 SAP, the Observatory for Sustainable Human Development and the Fight Against Poverty (Observatoire du développement humain durable et de la lutte contre la pauvreté), Jigiséméjiri, WFP, UNICEF, the EU and USAID.

Figure 37: Areas vulnerable to shocks (flood, drought, insect invasion)



Source: AGIR (2015).

of the Jigiséméjiri project. Since its creation, the RSU has received government support, demonstrated by the establishment by ministerial decree in 2016 of a Steering Committee for the RSU. The government in 2017 enforced the use of the RSU. The RSU was formally launched in 2019 and further institutionalised by decree in 2022 (Government of Mali 2022). The decree poses various challenges. The RSU is now housed within the DNPSES under the MSDS, which represents a shift away from Jigiséméjiri, which sits under the MINEFIP. In addition, the decree does not provide sufficient guidance on roles and responsibilities. The legal obligation to use the data for targeting purposes poses risks regarding trust-building and ensuring data quality (Barca 2023).

The RSU benefits from the technical and financial support of partners without a clear plan to shift to domestic financing. Human resources and infrastructure are fully financed by the World Bank, whereas data collection and registration exercises have been co-funded by the government alongside WFP, UNICEF and also the World Bank. For example, WFP in 2022 supported the expansion of the RSU to cover an additional 154,398

people (25,733 households) in 12 communities (WFP 2022).

As of 2023, the RSU listed 1.16 million households (World Bank 2023), which included people directly identified by and registered through project activities, as well as those from other government programmes (e.g. RAMED).

Systematic data sharing between different user programmes is not yet available. Collaboration protocols for data sharing across key actors have been drafted and validated but not signed by users. Despite the relatively high level of development of the RSU, some users do not find the RSU useful for their intended purposes, such as the National Medical Assistance Agency (ANAM), which in 2021 tried to use the RSU to identify 3 million people living in extreme poverty (Miseli 2021).

Efforts to adopt digital payment solutions were tested during the COVID-19 response. However, some payments of targeted cash transfers following the pandemic are still pending. The IMF noted that only around 40% of the intended people had been paid

as of the end of 2022 due to a lack of funding of the government's emergency programme (IMF 2023a).

In 2021, mobile money cash transfers were piloted in Mopti, reaching 3,000 households. A qualitative evaluation (World Bank 2019c) showed that payments through mobile phones gave recipients greater cash-out flexibility, reducing people's travel time to and waiting time at payment sites. E-transfers, however, suffered two main drawbacks. The first was network availability

in remote areas, which forced some people to use several different SIM cards. The second related to low literacy rates among programme participants, which limited the effective use of SMS (text messages) for communication. The evaluation recommended offering participants a greater choice of payment methods and collection points; improving communication/dissemination of information; ensuring the functionality of collection points; and educating people about the safe and secure use of mobile money.

5.3 Early warning systems, data collection and analysis

The National Meteorology Agency (Agence nationale de la météorologie du Mali – Mali-Météo), the National Directorate for Water Resources (DNH), the DGPC and SAP are the four key agencies responsible for weather and climate services in Mali, including early warning and DRM.

Established in 2012, Mali Météo is an autonomous agency under the Ministry of Infrastructure and Transport (Ministère de l'équipement et des transports) responsible for providing reliable and timely weather and climate information, as well as appropriate services to public and private users from various socioeconomic sectors. It provides three types of products: (1) forecasts of rain, as well as very short-term (less than 12 hours) and short-term (12 to 48 hours) alerts; (2) forecast bulletins (10-day agro-hydro-meteorological, monthly agro-meteorological, special and irregular, and by agro-climatological zone); and (3) agro-meteorological warnings and advice. The 2017 National Communication on Climate Change (Troisième communication nationale du Mali à la Convention-cadre des Nations Unies sur les changements climatiques) highlights the precarious financial and staffing situation of Mali-Météo, as well as the insufficient network coverage of the meteorological and agro-climatological stations, leading to inadequate services for weather-dependent sectors, mainly the agriculture sector, and communities. The 2015 Capacity for Disaster Reduction Initiative (CADRI) notes that Mali-Météo charges fees to share its data, implying difficulties in data sharing with other institutions such as the DNH. Nonetheless, in recent years, Mali-

Météo has received technical and financial support from numerous partners to improve its climate data and rainfall prediction capacity. In 2017, Mali-Météo developed its 2018–2027 Strategic Development Plan (Plan stratégique de développement de la météorologie à l'horizon 2027) (Karamoko Koné 2017).

The DNH within the Ministry of Energy and Water (Ministère de l'énergie et de l'eau) is responsible for water resource management and regulation in Mali. Its responsibilities include inventorying and evaluation of potential water resource development at national level; oversight of studies for, and supervision of, the construction of hydraulic works and their subsequent proper operation and management; evaluation of development projects in the water sector; and participation in subregional bodies and initiatives to manage water resources. The hydrological network includes 140 monitoring stations, but only 103 are operational. Apart from the Niger- and Volta-HYCOS stations,¹¹ only one station in Mali is equipped with a water-level recorder (Hyrdomet Mali 2022). Furthermore, the majority of stations have not undergone calibration in more than a decade, resulting in the collection of sparse data that is of uncertain reliability. Since 2013, DNH has used the Inner Niger Delta flood forecast tool (Outil de prediction des inondations dans le Delta Intérieur du Niger, OPIDIN), developed for the to predict the level and timing of peak flooding, as well as the maximum extent of flooding (OPIDIN n.d.).

11 The objective of the Niger-HYCOS project was to establish a system of useful information on water resources at basin level, based on recent, high-quality data that was easily accessible to all user groups, with a particular emphasis on using the newest communication tools provided by emerging internet technology. The project aimed to strengthen technical and institutional capacity within the national meteorological and hydrological services of partner countries; enhance hydrological observation networks, in particular by making use of a range of telemetering technology; encourage the development of national and regional databases and data exchange; promote regional cooperation; and organise appropriate professional training programmes.

Food security and nutrition monitoring throughout the agricultural season is carried out by the SAP, implemented by the CSA, under the Office of the President. Established in 1986, the SAP is responsible for continuous monitoring of food production and availability, identifying areas at risk and vulnerable populations, and providing geographical targeting for food distribution down to commune level. The SAP centralises meteorological and civil society-produced data coordinating information obtained from over 20 members of its network, including regional agencies, international organisations and NGOs.

A recent assessment of DRR in West Africa including Mali notes significant capacity gaps and recommends focusing on reinforcing the SAP's vulnerability assessment system, its decentralised capacities and data collection tools, and boosting its workforce in a sustainable way (AU et al. 2023). The ARC Operations Plan (Plan opérationnel) notes that the National Food Security and Nutrition Survey (Enquête nationale sur la sécurité alimentaire et nutritionnelle) and other household surveys (EAC, SMART) that form the basis of SAP monitoring are costly, and often delayed while the CSA seeks funds to facilitate their implementation. Nonetheless, the SAP remains an important source of evidence in the Cadre Harmonisé framework.

In addition, a number of projects and programmes addressing various aspects of climate and disaster risks are ongoing. The Permanent Inter-State Committee for Drought Control in the Sahel (CILSS) and the Famine Early Warning Systems Network (FEWS NET) also play significant roles in monitoring food security and providing early warnings of food crises in the country. The AGRHYMET (agriculture, hydrology and meteorology) regional research centre is part of the CILSS and is mandated to provide early warning information on a regular basis to support governments in managing droughts. It provides regular food security bulletins following the IPC approach.

The DGPC has a mandate for multi-hazard risk monitoring and early warning under its broader primary mandate of formulating action plans aligned with the National Civil Protection Policy (Politique nationale de protection civile) and overseeing their execution. Specific early warning capabilities are lacking, although investments are being made in improvements. Since 2018, the World Bank in collaboration with the World Meteorological Organization (WMO) has provided technical assistance for strengthening climate resilience in Mali funded by the Climate Risk and Early Warning Systems (CREWS) initiative for an amount of USD3.3 million to strengthen the flood warning system along the Niger river, with improved flood bulletins based on precipitation forecasts. According to the most recent progress report available, the delivery rate of activities has been low due to socio-political crisis and the COVID-19 pandemic (CREWS 2022). In addition, the Hydromet project is strengthening end-to-end connectivity in hydro-meteorological information, forecasting and an early warning system through a USD31 million investment by the World Bank,¹² Green Climate Fund and WMO. Through this partnership, the Government of Mali aims to establish a functioning system to systematically channel data and alerts to the CNOU. The launch of the project during COVID-19 restrictions delayed the implementation of activities.

Despite these initiatives, the coverage and accuracy of early warning systems in Mali remain limited, are largely due to a lack of financial resources and weak institutional capacity of the four key agencies. Planning for food insecurity is more advanced than for other risk drivers, with regular, decentralised monitoring activities translating into annual or biannual projections of food insecurity, which inform planning such as the PNR and the activities of the Food Security Cluster. However, such efforts remain under-resourced and require strengthening. For wider hazards such as flooding, the availability and quality of risk information is weak. This has made it more challenging for the government and humanitarian partners to leverage risk modelling and forecasting to pre-arrange and/or activate resources ahead of predicted hazards.

12 The World Bank in 2019 approved the Strengthening Climate Resilience in Mali Project at a cost of USD8.25 million.

5.4 Social inclusion

Most policy frameworks and strategies related to DRM and DRR as well as social protection in Mali reflect awareness of and efforts to promote the needs of specific vulnerable groups and populations.

The National Social Protection Policy notably emphasises gender equity as a guiding principle, and highlights specific vulnerable groups including older people, people with disabilities, children and women, unemployed people and people with HIV. Meanwhile, the National Food Security and Nutrition Policy (Politique nationale de sécurité alimentaire et nutritionnelle au Mali) notes the need to extend coverage to women, young people and people with disabilities. The Strategic Framework for Economic Recovery and Sustainable Development (Cadre stratégique pour la relance économique et le développement durable) highlights social protection and gender equity as important principles and components for poverty alleviation for the Government of Mali.

Most recently, the 2021 National Contingency Plan indicates that data on gender and age should be collected on populations affected by crises and disasters, listing specific indicators including numbers of food-insecure women and malnourished children; the amount of hectares of crop-land affected or damaged by a disaster that is owned by women or women's groups; and the numbers of young people leaving rural areas following crises or disasters. Moreover, the plan promotes

activities to support women in disaster situations – such as implementing income-generating activities for women in areas at risk of disasters; and protecting and rehabilitating livelihoods for vulnerable people and households in such areas.

Whereas gender equity and social inclusion appear widely across key policy documents, distinct vulnerabilities affecting women and other groups have not been explicitly defined, nor are government entities responsible for promoting the rights and livelihoods of such groups in all cases actively implicated in implementing these policies and strategies (e.g. the Ministry for the Promotion of Women, Children and the Family – Ministère pour la promotion de la femme, de l'enfant et de la famille). Some measures have been put in place to operationalise commitments to enhance the participation of women; notably, these include the establishment of the Women's Empowerment and Children's Development Support Fund (Fonds d'appui à l'autonomisation de la femme et à l'épanouissement de l'enfant). The National Agriculture Support Fund (Fonds national d'appui à l'agriculture, FNAA) also established a quota of 15% of its resources to be allocated to women and young or vulnerable groups (see section 5). These funds and comparable programmes, however, have scarce resources and provide assistance to only a small number of people.

5.5 Planning and budgeting for DRM

Fiscal risk assessment

There have been some attempts to develop and publish fiscal risk assessments specific to climate-related disasters and natural hazards. Since 2020, the government has begun to identify and quantify the main risks affecting public finances by adding a budgetary risk statement (Déclaration des risques budgétaires) to its finance laws. The macro-fiscal effects of key risks are based on internal modelling conducted by the Forecasting and Economic Analysis Division (DPAE) of the MINEFIP. Risks are analysed according

to four dimensions, including among others those related to disasters. Among the disaster risks identified are droughts, floods and locust outbreaks, which are estimated to primarily affect the agriculture sector and have an 80% probability of occurring each year. Despite being identified as the highest-probability budgetary risk, disasters are estimated to have only a minimal effect on GDP at 0.2% (see Table 8). This could be explained by the low contribution to the economy of the people most affected and/or reliance on international assistance for emergency relief efforts.

Table 8: Risk matrix (2021)

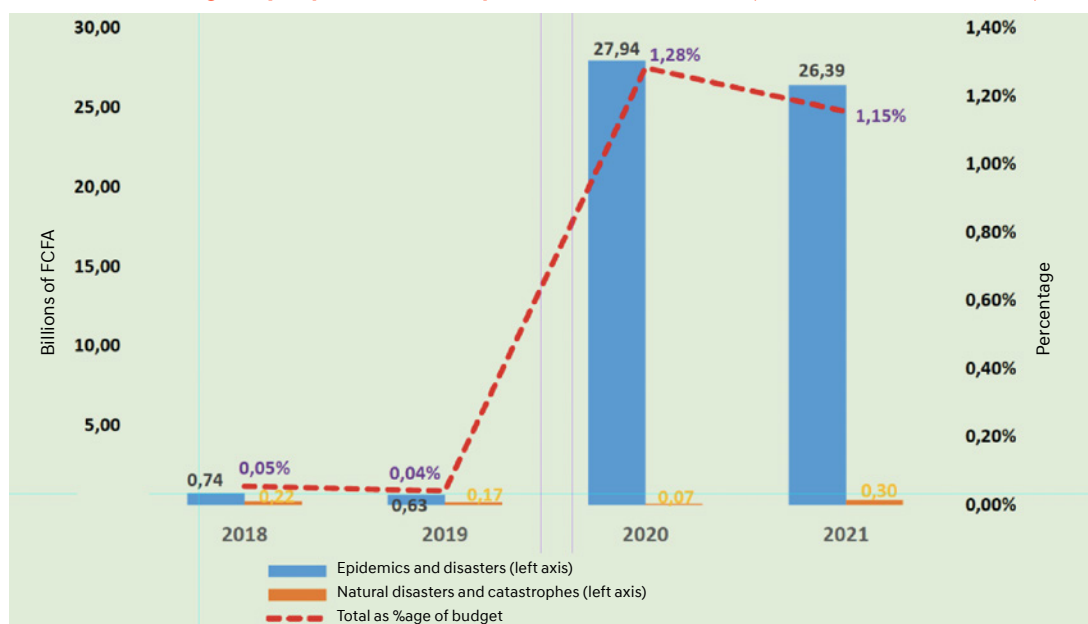
Risk identification	Probability (%)	Impact (% of GDP)
Risk 1: State exposure to non-financial public sector liabilities		
The financial equilibrium of some public-sector companies is fragile. The State is likely to subsidize or even recapitalize certain companies.	8	2.3
Risk 2: State exposure to the financial sector		
The financial sector is highly concentrated, making it fragile. A number of microfinance or social insurance credit institutions could require liability write-offs, recapitalizations and/or a government guarantee for savers' deposits.	2.4	2.7
Risk 3: Natural disasters		
The main risks are drought, floods and locust invasions, which directly affect the agricultural sector, which accounts for around a third of GDP.	80	0.2
Risks 4: External macroeconomic shocks		
The country is exposed to fluctuations in the world prices of the main raw materials it exports (cotton, gold) and imports (hydrocarbons, etc.).	7	4.2

Source: Government of Mali (2023).

Recent efforts to include a more detailed budget risk analysis report have been undertaken as part of the 2023 Finance Law, noting as shown in Figure 38 those expenditures related to epidemics and disasters increased to just over 1% of total expenditures in 2020 and 2021 (equivalent to 0.3% of GDP) as a result of the

COVID-19 pandemic; whereas spending on climate-related and other disasters was significantly lower as a subset (peaking at FCFA0.3 billion (USD 0.5million) compared with about FCFA28 billion (USD 47million) for all epidemics and disasters, respectively).

Figure 38: Evolution of budgetary expenditure for epidemics and disasters (FCFA billion, 2018–2021)



Source: Government of Mali (2023).

There appears to be a gap in concrete budget risk analysis on climate-related and other disasters – in particular, data on spending on such disasters. For instance, the rapid PDNA following the 2019 flooding in Bamako reported losses and damages amounting to FCFA4 billion (USD7 million), which are not reflected in the evaluation of the budgetary expenditure shown in Figure 38.

The budgetary risk statement lists what overall cost estimates for previous climate disaster risk response and mitigation plans and initiatives have been – but contains limited information on actual expenditure, and there are no current estimates of contingent liabilities. In addition, there is no explicit linkage between estimated costs of disaster exposure and loss, and annual budget programming. These costs are also not reflected in the 2023–2025 Multi-year Budgetary and Economic Programming Document (Document de programmation budgétaire et économique pluriannuelle). There is no evidence that government agencies are expected to take into account environmental effects (including hazards) in developing their programme budgets, with no specific tools or indicators provided for this as part of budget planning and preparation.

Expenditure planning for disaster and social protection

The budget allocated to agencies in charge of DRM, food security and social protection in Mali is volatile. Between 2004 and 2017, the average annual budget the DGPC spent at central level reached FCFA2.3 billion (USD3.9 million), 69% of which was allocated to personnel costs (World Bank 2020b). This limited annual budget covered preparedness and emergency response activities across the entire country. In addition, between 2004 and 2014, the DGPC had a budget line titled ‘Autres dépenses’ (‘Other spending’), with an average of FCFA21 million (USD 35 thousand) per year executed.

The National Directorate for Social Protection and the Solidarity Economy also experienced an increase in budget from FCFA93 million (USD 157 thousand) in 2004 to FCFA352 million (USD 600 thousand) in 2017.

Table 9 lists the ongoing core budget programmes for DRM, food security and social protection included in the national budget. Additional information on DRF instruments is included in section 5.

Table 9: Overview of ongoing DRM and DRR included in the national budget ('000, 2018–2021)

Agency	Programme	Average annual budget allocation
MSPC	2.022 Prevention of Risks and Disasters and Organization of Emergency Services	16,279,669
MSDS	2.054 Primary Healthcare and Disease Control	37,708,071
MSDS	2.057 Hospital Care and Research	44,138,796
MSDS	2.061 Strengthening Solidarity and Fighting Exclusion	2,598,732
MSDS	2.062 Strengthening Social Protection and Solidarity Economy	23,144,234
MSDS	2.063 Poverty Reduction	2,066,342
CSA	2.093 Food Security	9,927,798

Note: detailed data was not available to carry out further disaggregation of the annual budget allocation and expenditure by economic classification. Furthermore, the World Bank BOOST database (World Bank 2020b) does not contain information for Mali after 2017.

Source: Authors' own, based on Government of Mali (2021b).

Despite a multitude of existing programmes, no programme captures both DRM and social protection. However, the programme titled 'Strengthening solidarity and the fight against exclusion' (2.061 *Renforcement de la solidarité et de la lutte contre l'exclusion*) includes as one of its actions the management of vulnerable groups, and populations affected by emergencies or disasters. It does not provide any information on whether the programme covers the food security response sector. Most of the funds are largely invested in transfers and subsidies.

The programme specific to disaster response is titled 'Disaster risk prevention and rescue organisation' (2.022 *Prévention des risques et calamités et organisation des secours*). It is implemented by the DGPC, aiming to prevent risks and disasters, and provide rescue services in case of fire, flood or disaster across the country. The programme has two specific objectives: (1) to prevent disasters and reduce their harmful effects on the population; and (2) to rescue victims. The budget allocated to the programme has gradually increased since 2018–2021; according to the multi-year expenditure programming documents, 60% of the budget in 2022 was allocated to personnel costs.

At present, there are no programmes addressing ASP or shock response, although two programmes focus on

social protection. One such programme is 'Strengthening solidarity and the fight against exclusion', implemented by the DNDS within the Ministry of Health and Social Development. Its strategy is to protect and promote socially vulnerable communities, social mobilisation of communities and humanitarian actions. Among its objectives is the promotion of socioeconomic integration and vulnerable social categories. The first action item of this programme is the management of vulnerable groups and populations affected by emergencies and/or disasters, and strengthening the self-promotion of communities, which received 70% of the total programme budget allocated in 2021.

The second programme, 'Strengthening social protection and social economy' (2.062 *Renforcement de la protection sociale et de l'économie solidaire*) aims to gradually extend the collective coverage of social risks to the entire population through various mechanisms, to improve financial accessibility to care and to strengthen the solidarity economy sector. The programme is implemented by the National Directorate for Social Protection and the Solidarity Economy. The second action item of the programme is the provision of social services (*Fourniture de prestations sociales*), which received 75% of the total programme budget allocated in 2021, and includes only transfers and subsidies.

Table 10: Expenses allocated for principal programmes (billions of FCFA (2021-2023))

Programme	Allocation type	2021	2022	2023
2.022 Risk and disaster prevention and organisation of help	Commitment authorisations	5,051,037	5,051,037	2,021,036
	Payment credits	19,080,568	22,569,293	28,361,819
2.061 Reinforcement of solidarity and anti-exclusion measures	Commitment authorisations	3,349,182	879,182	879,182
	Payment credits	4,401	3,785,190	3,958,382
2.062 Reinforcement of social protection and consolidated economy	Commitment authorisations	21,000	771,000	1,071,000
	Payment credits	14,101,242	15,308,953	16,037,177

* Exchange rate of 1 XOF = 0.00169 USD

Source: Government of Mali (2023).

Beyond committed funds in the budget outlined in section 5 below, the MINEFIP can leverage various budgetary instruments in preparation for and response to crises and disasters as part of the provisions in the public finance legislation (Loi No. 2013-028 of July 11 2013 relative aux Lois de finances), notably:

- The allocation of global appropriations for accidental and unforeseeable expenditure ('dépenses imprévues') to programmes is done by decree of the prime minister. Between 2018 and 2021, unforeseen expenditures represented 1.6% of initial appropriations (PEFA 2021), it is unclear what proportion of this was due to disasters or food security responses.
- In the case of emergencies and cases 'imperative to the national interest' ('nécessité impérieuse d'intérêt national'), the Council of Ministers can approve additional funds for existing programmes. Parliament needs to be informed of and needs to ratify these changes at its next session. It is not specified whether the government can spend these funds in the meantime, although in practice the executive will begin to commit expenditure ahead of approvals.
- In the event that changes are made to annual appropriations (e.g. by the Council of Ministers),

the MINEFIP is mandated to define and launch a supplementary budget process. Such supplementary or adjustment budgets (Loi de finances rectificatives) have to be developed and presented by the government if the budget is no longer tenable – particularly if appropriations need to be advanced or cancelled, as would be typical for most disasters. In 2020, there were significant budgetary adjustments due to the impact of COVID-19 on the state's fiscal resources.

- Ministries can modify the distribution of budgetary appropriations between programmes under their remit. If the nature of the expenditure remains unchanged, an interministerial order is signed between the relevant ministry and the MINEFIP. Otherwise, they are authorised by prime ministerial decree, with joint input from the minister responsible for finance and the minister concerned. The cumulative annual amount of adjustments affecting a programme is limited to 10% of the programme's allocation. There is no publicly available information on the extent to which these rules are commonly applied.
- Regulation related to public procurements introduces important simplifications to the procurement process. Decree No. 2015-0604/P-RM of September 2015, notes that the publication

timeframe for public competitive tenders in case of emergencies can be reduced from 30–45 to 15 days, and that direct procurement and delegation of public services to (pre)approved contractors is possible in the event of disasters or emergencies. Such measures need to provide information to and obtain approval from the MINEFIP and/or the Court of Auditors.

Tracking budget allocations to and expenditures on disaster preparedness and response, or indeed on social protection, is possible at a relatively high level. However, there are weaknesses in accounting for and tracking such expenditures. Expenditures are not earmarked by disaster phase, type of hazard or event, or group of

people, except to the extent that budget sub-programmes or on-budget donor projects target specific categories.

Defining and monitoring performance indicators still needs strengthening, meaning little information is available on the return on investment of public expenditures. National funds – including the FNS and funds for specific social protection programmes – are subject to standard internal audit procedures, as are all agencies responsible for disaster preparedness and response, although no specific post-disaster audit procedures are in place.

5.7 Implications for ASP programming

Drawing on the information summarised in the sections above, several implications stand out for ASP programming.

Institutional arrangements and capabilities for disaster response and food insecurity have been established, despite institutional shifts due to fragile governance.

The DGPC leads the development and implementation of DRM plans and response for both rapid- and slow-onset crises, working alongside its counterpart the CSA, which leads the annual national responses to food insecurity. The two are formally coordinated through the CIGCC as well as through more ad hoc arrangements, although there are areas where mandates overlap.

Social protection is not formally integrated into coordination structures on DRM and food insecurity.

A new structure has been proposed to resolve this, the CNSANPS, but it is unclear if this is operational. The area where DRM and social protection intersect is mostly on food security linked to drought events, where preparedness strategies and contingency plans exist at central and decentralised levels, but they are not adequately funded and supported. The DNDS carries out shock-responsive activities such as provision of in-kind assistance to disaster-affected communities. However, it does not have a formal mandate for ASP.

The risk data and knowledge required for robust geographical targeting of social protection are scarce and often out of date. Substantial efforts have been made to identify the areas that are most vulnerable to disasters (e.g. country resilience priorities, land use

maps) but these have not been finalised nor are they being formally used. Investment is required in more up-to-date risk data to inform decision-making on where ASP systems should be prioritised and for whom.

The RSU benefits from strong government support but its coverage is limited. As of 2023, the RSU, which was formally launched in 2019, covered 1.16 million households out of a population of 22 million people. Other institutions such as WFP have started to use the RSU to target programme participants. There is scope to expand its coverage to integrate lessons learnt from its users, including adopting data sharing protocols. Furthermore, digital payment solutions have been tested, particularly during COVID-19. However, challenges such as network problems in remote areas and low literacy rates among participants have been identified.

Multi-hazard risk monitoring and early warning systems are not fully operational in Mali. Mali's food security SAP, delivered by the CSA, has been established and is informing response planning (through the Cadre Harmonisé) but is limited by significant financial and capacity gaps. For hazards such as floods, disaster management authorities have access to individual hazard-specific forecasts and projections, but poor infrastructure means these may be poorly calibrated and are not comprehensively linked to response decision-making frameworks. Insufficient risk information may pose a challenge for ASP systems, therefore there could be value in piggybacking on existing projects working on risk monitoring improvements such as the World Bank, WMO and CREWS initiative.

DRM policy frameworks and strategies reflect awareness of and efforts to promote social inclusion.

For example, the National Social Protection Policy reflects gender equity as a guiding principle. In addition, the National Contingency Plan states that data on gender and age should be collected on populations affected by crises and disasters and promotes activities to support women in disaster situations. Mali has gone as far as establishing funds for the implementation of social inclusion activities, but these are limited in volume.

Government-led efforts on budgetary risk assessments currently present little evidence of the impact of disasters on expenditures and more widely on the economy, thereby potentially undermining the impetus to invest in shock-responsive systems.

There is a significant gap between reports from previous crises on financing requirements compared with reported expenditure on such crises, and effects on the economy (estimated at less than 0.2%). This is not the case for expenditure on epidemics, which saw a marked spike associated with pandemic spending. Understanding the economic costs of disasters is typically a key motivator for entities such as the MINEFIP to engage in mechanisms such as the ASP, and therefore presents a potential challenge for Mali unless resolved through further and more extensive analysis. Improving disaster damage and loss assessment should be explored jointly between the DPAE and the MINEFIP's Directorate-General for Budget (Direction Générale du Budget).

Public finance legislation and regulation offer a variety of budgetary instruments for rapidly mobilising funds in response to crises.

These include the approval of additional funds by the Council of Ministers in case of emergency, the ability to define and launch a supplementary budget process, and the use of virements (transfers) to reallocate funds between programmes. While budget allocations for disaster preparedness and response, and social protection, are trackable at high level, establishing and implementing a methodology for budget tracking could increase the efficiency and transparency of disaster-related expenditures.

6

FINANCING ARRANGEMENTS FOR DISASTER RESPONSE AND SOCIAL PROTECTION

The introduction to this report outlines how DRF can help to ensure that the right amount of funds is made available at the right time; for example, when cash transfer programmes need to be able to scale up in response to disasters and other climate-related shocks. It outlines the set of instruments that can be used to pre-arrange financing for such scaling-up as part of a DRF strategy.

The Government of Mali currently has no comprehensive government DRF strategy in place, although the public sector has in recent years built up experience working with various DRF instruments. These have largely tended to be instruments that facilitate timely reaction to climate-related disasters or other crises – some of which are

described in section 4.3 – although there have been efforts to add risk transfer instruments to the range of DRF tools. This section describes the experience of those instruments.

Table 11 summarises the instruments currently available in Mali to respond to disasters and food insecurity events. The amounts available are notably low, especially compared with the USD200–300 million in annual humanitarian financing secured through the UN appeals system in recent years. Risk retention instruments are considerably larger than those for risk transfer, which at present amount to approximately USD30 million annually.

Table 11: Summary of existing DRF instruments (USD million, 2024)

Risk retention (annual spending)				Risk transfer (annual coverage)			
National Solidarity Fund (FSN)	National Agriculture Support Fund (FNAA)	Food Security Fund (FSA)	Earmarked contingency funds or loans	Sovereign risk transfer (ARC)	ARC Replica	Agricultural insurance	Anticipatory action
<1	<7	Not enough information from stakeholder to assess	None at present	15	15	Approx. 2	<1

Source: Authors' own, based on various sources.

Aside from the financial instruments available, Mali also holds strategic grain reserves that are either co-funded by and co-managed with donors (stocks nationaux de sécurité, SNS), or managed by the government only (stocks d'intervention, SIs). In the case of SNS, food stocks can only be disbursed after an early warning system alert and with the agreement of both the government and donors. The SNS are composed of a physical and a financial reserve, while SI are only

composed of physical grain reserves. Just under 80% of the target for physical stocks in Mali had been met in 2015, while the financial reserve component of the SNS had not been made operational. On top of national reserves, Mali has local-level stocks that are managed by communities and are also called 'cereal banks'. All 700 communities in 2015 had one such cereal bank (World Bank 2021a).

6.1 Risk retention instruments

The government has several risk retention instruments in place that complement and enhance funding allocated specifically for DRR and DRM. A total of 11 special purpose treasury accounts (comptes spéciaux du trésor), drawing on dedicated revenues streams are listed in the finance laws. Three of these special purpose accounts have among their objectives financing activities to prepare for and respond to climate-related disasters, including through social protection measures. However, funding allocation and execution are limited. Notable instruments are summarised in Box 1.

None of these funds appear to be immediately suitable for delivering and rapidly scaling up cash transfers to targeted vulnerable people. The FNS is the only fund that has repeated experience of delivering support to specific vulnerable people. Although its channels for delivering funds and other support could be scaled up (given existing agreements and established contracts), targeting efforts and the size of contributions appear to have been limited and largely ad hoc.

Other funds, meanwhile, are untested in their capacity to deliver scalable forms of support in response to shocks; although the FNAA could facilitate such support, its expenditure tends towards incidental payments and procurements rather than routine and scalable transfers. Limited reporting suggests that the funds lack the necessary resources and/or thematic focus. The government otherwise has no dedicated contingency or reserve fund that can be quickly mobilised specifically for disaster response and recovery (Government of Mali 2019a). The PNRs for 2021 and 2022 refer to funds that were mobilised through the state budget, but the source of these funds is unclear. The Bamako Flood Recovery Framework (Cadre de relèvement inondations Bamako), developed following the flooding in 2019, suggests that a draft decree was in preparation for the creation of an emergency fund. In the national budget, there are otherwise few dedicated funding lines for response and reconstruction, whose use levels are lower than the funds listed here.

BOX 1: KEY RISK RETENTION INSTRUMENTS FUNDED THROUGH THE BUDGET

The **National Solidarity Fund (FSN)** was established in 2001 to reduce inequalities and poverty in Mali. It is outlined in the 2015 National Social Protection Policy as one of the tools in place to help reduce inequality and poverty. It has a broad remit for financing various sorts of social development and poverty reduction programmes in thematic areas ranging from social action to health, hydraulics, sanitation and agriculture. Emergency actions or responses to crises are noted among the eligible types of expenditure for the fund. Between 2004 and 2017, government contributions to the fund were at FCFA590 million (USD1million) per year on average and overall expenditure of FCFA540 million (USD912,000) per year on average (World Bank 2020b).

Reports indicate that the FSN facilitated funds reaching northern regions of the country in 2012 amid political crisis. It financed in-kind support in 2016 totalling FCFA7 million (approx. USD12,000) to four municipalities, as well as grants to NGOs in various municipalities totalling USD144,000 and USD196,000 in 2017 and 2018, respectively. Additionally, the FSN in 2017 implemented the Socio-economic Reintegration Support Project for the Population of Northern Mali (PARSEP-NM), with a total investment of USD13.6 million, to ensure the socioeconomic reintegration of the population of the north and centre by restoring basic social services, while building capacity and boosting socioeconomic activities. There is, however, no evidence that the FSN has delivered cash assistance to vulnerable households or provided a targeted response to instances of drought.

The **National Agriculture Support Fund (FNAA)** was established in 2010 as part of the Ministry of Agriculture, to support and catalyse climate change adaptation and mitigation. The fund has three response windows, including one on risks and disasters, which intends to finance prevention activities in the event of major risks or declared disasters, providing support to the victims of agricultural disasters, and to provide compensation to seed producers who are affected by disasters. Its activities are guided by rainfall data (Ancy et al. 2010) and decisions are taken by a Steering Committee managed by the Ministry of Agriculture.

The FNAA is funded through subsidies from national and local governments, and contributions from agricultural organisations, as well as a share of fees collected by rural development committees, and various other donations and contributions (Government of Mali 2010). The fund received a total of FCFA6.6 billion (USD 11.2million) in funding allocations from the national government between 2011 and 2014; it has since received an annual budget allocation of FCFA5 billion (approx. USD8.5 million). Whereas the majority of these funds are disbursed in typical years, the risk and disasters response window has typically received only a small portion of the fund's total financing (approx. USD84,000); in practice, it is reported not to be fully operational. Operational guidelines also do not outline clearly what risks and disasters the fund covers. Discussions were ongoing in the Ministry of Agriculture as to whether publicly subsidised agricultural insurance could be included as a type of intervention.

The **Food Security Fund (FSA)** is documented in the National Response Plan (PNR) as a financial reserve funded by the joint participation of the Government of Mali and its technical and financial partners. Further information detailing the scope of this fund was not available.

Source: Authors' own, based on various publicly available documents online.

6.2 Risk transfer instruments

The insurance industry in Mali is governed by the Code des Assurances, known as the CIMA Code, the regional insurance law imposed by the Inter-African Conference on Insurance Markets (CIMA). Insurance supervision in Mali is provided by the MINEFIP insurance department (Division des assurances de la direction nationale du trésor et de la comptabilité publique). The insurance department acts as the secretariat of the Steering Committee responsible for setting up agricultural insurance in Mali (Comité de pilotage chargé de la mise en place d'une assurance agricole au Mali) established by ministerial order in 2019.

Agricultural insurance

Article 60 of the Agriculture Law (Loi d'orientation Agricole) No. 06-40/AN-RM makes specific reference to the launch of an agricultural insurance scheme responding to the specific needs of family farms, which was echoed in the 2013 Agricultural Development Policy (Politique de développement agricole) (draft version). The Ministry of Rural Development (Ministère du développement rural) is leading work on the institutionalisation of agricultural insurance through the 2014 'Projet Inclusif' (the 'Inclusive Project').

The implementation of agriculture index insurance has been limited in Mali. Insurance products piloted in Mali have covered the impacts of both drought and flood risks, limited to the southern regions of the country.

The first agriculture index insurance policies in Mali were commercialised by insurance provider Inclusive Guarantee and first sold in 2011. Uptake grew rapidly to 17,481 farmers in 2014, but fluctuating political unrest disrupted operations by financial institutions that lend to farmers and associated insurance sales (Global Index Insurance Facility 2014). Insurance brokers complain about the absence of grant funding for agricultural insurance premiums and the high level of taxes applied to insurance premiums (20%).

Three agricultural insurance schemes currently operate in Mali, as shown in Table 12. They all operate in the same southern regions of Bamako, Kayes, Kolikoro, Ségou and Sikasso.

Table 12: Main agriculture index insurance schemes in Mali

Insurance provider	Underwriter	Other partners	Type of insurance	Crops and regions covered	Hazards	Distribution strategy	Number of farmers insured	Current status
OKO Finance Limited	SUNU Assurances and Allianz (Reinsurance)	Orange Mali	Weather index insurance (WII)	Maize, cotton, sesame, millet, peanuts	Droughts and floods	Field agents, regional managers, agricultural input sellers	25,500 (2024)	Ongoing
Inclusive Guarantee	Allianz Mali-Météo Sum Africa	Swiss Re, CICA Re, Africa RE, Allianz EARS, Oxfam, farmers' associations, cooperatives and microfinance institutions	WII	Maize, cotton	Droughts	Farmers' associations, cooperatives, microfinance institutions	17,481 (2014)	Closed
Développement International Desjardins	SUNU Assurances	WFP MINEFIP	WII Area yield index insurance (AYII)	Rice, maize, onions In Bamako, Koulikoro, Ségou and Sikasso	Droughts	AYII	3,599 (2022)	Ongoing
Pula	-	MyAgro	AYII	Maize, rice, sorghum, peanuts	-	-	170,000 (2019-2022)	Ongoing

Source: Authors' own.

OKO Finance launched its **weather index insurance (WII)** in 2020, focusing only on maize sold in southern Mali regions, namely Bamako, Kayes, Kolikoro, Ségou and Sikasso. OKO insures against droughts and floods based on revised satellite precipitation data.

OKO broadened its product range in 2021 to include cotton, sesame and millet. A customer survey with a sample of 847 customers was conducted in late 2021 in collaboration with ADA Microfinance and the University of Göttingen, Germany, aiming to understand how OKO's services were perceived and improve them to better meet customers' needs (Kirchner and Musshoff 2022). According to the survey results, the insurance was seen as relevant because: (1) maize production

constitutes a major part of farmers' income in the areas concerned; (2) for 98% of customers, OKO's insurance was the first agricultural insurance they had taken out; and (3) customers perceived the two risks (drought and flood) OKO's insurance covered as the most important in relation to maize production.

OKO's strategy is based on using a digital distribution channel to reduce costs and make its insurance product accessible to remote and unbanked populations. However, through the survey, customers expressed the need for more regular communication with OKO agents to build trust. In partnership with UN Women and the UN Capital Development Fund, and with funding from Innovation Norway's Humanitarian Innovation

Programme, OKO took a gender-sensitive approach, building a team of female agents and designing an insurance product for peanuts, which are mainly grown by women (Microinsurance Network 2022). Through these innovations, the share of women customers increased from 18% to 25%. The project ran for eight months from December 2021 to July 2022 in Koulikoro, Ségou and Sikasso.

As of February 2024, OKO indicated that it had insured more than 24,500 farmers, paid FCFA160 million (USD 270,000) in compensation and compensated more than 4,000 producers.¹³ To reach the farmers of the northern regions of Gao and Tombouctou, OKO is building a partnership with Care International Mali to insure the producers involved in the ongoing Sugu Yiriwa project.¹⁴

An **area yield index insurance** programme for maize, rice and onions in Bamako, Koulikoro, Ségou and Sikasso has been implemented by the Agriculture and Rural Financing Project in Mali (Projet Financement Agricole et Rural au Mali) in partnership with Canada-

based development organisations Développement International Desjardins and SOCODEVI, and with funding from the Government of Canada.¹⁵ The project set up a crop insurance programme to help farmers and financial institutions better cope with climate risks and thus protect their assets. Since the beginning of activities in March 2021, insurance products for the three crops have covered 3,599 farmers (SOCODEVI 2023). FCFA674 million (USD 1.1million). A cumulative total of FCFA15.7 million (USD 27,000) in compensation was paid for cumulative premiums of FCFA18.9 million (USD 31,000) as shown in Table 13.

In addition, agricultural insurance and technology company Pula, through partner NGO MyAgro in Mali, insured 170,000 farmers in 2019–2020 for an amount of USD6.3 million. Three payments were triggered. Crops insured included maize, rice, sorghum and peanuts in the regions of Kayes, Koulikoro, Ségou and Sikasso. Pula is exploring the possibility of expanding the geographical distribution to farmers located in the northern regions.

Table 13: Main crop insurance statistics by production (FCFA million, 2021–2023)

Production	Number of insured farms	Premiums (M FCFA)	Insured production (Tons)	Valeur Assurée (Tonnes)	Insured area (ha)	Compensation paid (M FCFA)
Onion	2,379	5.7	247.2	4,474	282	3.3
Rice	585	6.1	231	3,624	629	9.1
Corn	635	7.1	196	3,063	1,188	3.3
Total	3,599	18.9	674.2	11,161	2,099	15.7

Source: SOCODEVI (2023)

13 Interview with OKO Finance (21 February 2024).

14 Feed the Future Mali Sugu Yiriwa (Sugu Yiriwa – ‘prosperous market’) is a programme working in 80 communities to strengthen agricultural market systems in the Inner Niger Delta.

15 The programme was expected to end in 2023.

Macro-level sovereign insurance

Since 2015, the Government of Mali has taken out five sovereign drought insurance policies from ARC Insurance and benefited from one payout. The annual sums insured were about USD15 million, representing 5–7% of the USD200–300 in annual humanitarian financing secured through the UN appeals system in recent years.

To complement the sovereign drought insurance, WFP since 2018 has been subscribing to the ARC Replica product in Mali; it has taken out four policies and benefited from two payouts. There have been more ARC Replica payouts than government payouts as in recent years the government has at times been prevented from taking out an insurance policy, which has coincided with years of drought. For example, during the most recent season (2022/2023) the government was blocked from taking out insurance cover due to ECOWAS sanctions. WFP was nonetheless able to take out a policy ensuring some continuity of cover on behalf of at-risk communities. The sums insured under the policies taken out by WFP have varied between USD7 million and USD15 million.

As a pre-condition of the purchase of an ARC policy, the Government of Mali and the WFP, its ARC Replica partner, establish a joint contingency plan – the Operations Plan – that indicates how payouts will be used to manage and prevent food insecurity and malnutrition. The 2021–2023 Operations Plan lists four key activities: (1) food distribution; (2) purchase, distribution and subsidised sale of livestock feed; (3) cash transfers; and (4) short-term asset creation (such as provision of agricultural inputs).

The most recent payout the government received was in 2021, for USD14.4 million; this was complicated by the sanctions against Mali, which delayed the payout, which was eventually channelled through a dual-signature fund, the Pooled Fund of Partners (Fonds commun des partenaires, FCP). ARC's Final Implementation Plan (Plan définitif de mise en oeuvre) indicates that the funds were intended to be used for cash transfers, food distributions and livestock assistance. The cash transfers and food distributions appear to be country-wide, whereas the livestock assistance (a smaller component) was focused on the north. Cash values were indicated at FCFA10,000 per household (USD 17), to be accompanied

Table 14: Overview of ARC policies and payouts in Mali (USD million, 2015/2016–2022/2023)

Risk pool	Policy holder	Coverage	Payouts
Pool 2 (15/16)	Government	15M	
	Replica (WFP)	N/A	
Pool 3 (16/17)	Government	15M	
	Replica (WFP)	N/A	
Pool 4 (17/18)	Government	13M	
	Replica (WFP)	N/A	
Pool 5 (18/19)	Government	N/A	
	Replica (WFP)	N/A	
Pool 6 (19/20)	Government	15M	
	Replica (WFP)	13M	
Pool 7 (20/21)	Government	N/A	
	Replica (WFP)	15M	
Pool 8 (21/22)	Government	15M	14.5M
	Replica (WFP)	7.4M	7.2M
Pool 9 (22/23)	Government	N/A	
	Replica (WFP)	15M	8M

Source: Authors' own, based on African Risk Capacity Group (n.d.)

with food rations equivalent to FCFA20,000 per month (USD 33) (FCFA30,000 (USD 50) per household in total). Targeting was planned to be done through identified NGOs, using harmonised methodologies; social protection systems are not directly mentioned nor were cash values seemingly aligned with social protection programmes.

The most recent WFP replica payout was for the 2022/2023 agricultural season (USD8.05 million, targeting 781,666 programme participants). The Final Implementation Plan indicated that the payout would be used to support participants with cash transfers during the pre-lean season of March–May 2023. This was envisaged as a horizontal scale-up of the Jigiséméjiri social protection project, with aligned cash transfers of FCFA15,000 (USD 25). The plan was to use the RSU to target people, complemented by community validation of

the list of participants. In areas where the RSU had not yet been deployed, a survey was conducted based on the RSU questionnaire. This experience showed a positive attempt to align interventions between the Jigiséméjiri project and humanitarian-led interventions. However, detailed evaluation of the response, although planned, has not been made publicly available to document the implementation and impact of the response.

Although risk transfer instruments have improved the country's disaster response and recovery capacity, Mali is still significantly underfunded in terms of a state budget for crisis preparedness and response compared to other African nations and given its significant needs. In addition, the ARC products are tailored to the impacts of drought on crop production; there are no rangeland products orientated towards pastoralists or flood insurance products.

6.3 Other DRF initiatives: anticipatory action

In addition to the above, other initiatives seek to complement existing insurance products. These include pilots in forecast-based financing and anticipatory action implemented by the International Federation of the Red Cross and Red Crescent Societies (IFRC), Start Network and FAO.

The Malian Red Cross started to work on forest-based financing in 2017 to develop an Early Action Protocol (EAP) for riverine floods. In September 2020, the EAP had been validated by IFRC and addressed three impacts: (1) loss of life; (2) destruction of houses and public infrastructure; and (3) the emergence of waterborne diseases. The trigger model adopted is based on river levels, which are monitored by the DNH at 26 measuring stations across the country. The EAP is reportedly activated once the downstream water level has been forecast to exceed the five-year return period, calculated by assessing daily water levels upstream and using historic analysis to forecast the likely implications on downstream water levels (during the period August–September). The trigger provides a lead time of four days for early action ahead of peak flooding.

In September 2022 the Malian Red Cross system triggered an allocation of USD234,000, which was used for shelter, water, sanitation and hygiene, and DRR. An end of project report suggested that the implementation was successful and made an impact on mitigating the effects of the flood on at-risk communities, although it was a challenge to meet the four-day timeline (IFRC 2024).

The Start Network in 2016 provided £304,000 in anticipatory action funds for Catholic Relief Services and Action Against Hunger to create or strengthen community early warning systems and reduce impacts in anticipation of flooding along the Niger river. No further recent Start Network anticipatory financing has been activated in Mali.

Following severe flooding that damaged crops and affected vulnerable populations' livelihoods, FAO in 2022 implemented a series of anticipatory actions on the irrigated plains of the Tombouctou district. Cash-for-work activities to rehabilitate dikes, disaster risk awareness and veterinary services were provided to rural households and agricultural cooperatives, to ensure harvests for the 2023/2024 agricultural season. Funding was provided by the German government, but transfer values are unknown.

6.4 Implications for ASP programming

Domestic financing instruments included in the national budget have the potential to deliver shock-responsive assistance through targeted cash transfers but are not fully operational due to limited resources and delays in mobilising funds. Individual instruments would need to be strengthened to improve shock responsiveness. For example, the FNAA has a functioning governance structure involving regional governors in resource allocation but does not currently facilitate rapid decision-making. Targeted support has been provided to northern regions through the FSN, but it has limited resourcing and operational capabilities. Efforts should be made to draw on the lessons from the recent use of the FCP to channel ARC payouts, while strengthening existing funds such as these and the FSA with clear and transparent procedures.

The agriculture (micro-)insurance market is small scale, challenged by poor insurance-related infrastructure and issues of access related to the ongoing security situation across the centre and north of the country.

Insurance products have been tested over the past decade covering mainly the same southern regions of the country. Crops covered have included cotton (as a cash crop), and maize and millet, which have strong links to food security. More discussions and evidence are needed to understand what helped some insurance providers to keep doing business in Mali (OKO, Pula), while others have had to pull back due to the ongoing security situation. For the insurance policies still in place, an expansion from the current southern regions into central and central-northern regions that have never been covered by agricultural insurance product is needed.

Use of pre-arranged financing for shock response in Mali has been limited, with few targeted uses of risk transfer instruments. When used at scale and sustainably, such instruments have been shown to effectively and efficiently manage and finance disaster risk response in other contexts. However, given uncertainties in the security and governance context in Mali, a high degree of dependency on ad hoc external funding, as well as lack of awareness among stakeholders (programme participants), most risk transfer instruments are small in scale and deployed in isolation. More could be done to scale up the range of products on offer; for example, by expanding ARC policies to also include flooding.

Where government pre-arranged financing exists, there is little evidence of this being deployed through social protection systems. For example, the government ARC payout in 2021 was in part deployed through cash assistance, but plans did not mention the connection to social protection and cash values did not appear to be aligned. In contrast, a year later WFP attempted to implement an ARC payout using the targeting and payment modalities of the Jigiséméjiri national social protection project. Attention is needed not just on the instruments themselves, but also on joining up efforts across different parts of government so that improved pre-arranged financing can strengthen concurrent efforts to improve the shock-responsiveness of social protection systems. Impact studies are also lacking in Mali and are required to understand how government or humanitarian pre-arranged financing is or could contribute to improving outcomes at household level.

With targeted improvement, individual instruments could be part of approaches to more effectively pre-arrange financing for specific aspects of ASP. The types of disasters Mali is most exposed to – frequent low-severity shocks – suggest that improvements in risk retention instruments and PFM practices in general are an equally relevant and pressing area for further investment. These will notably be relevant for responding to recurrent shocks such as pockets of drought and localised flooding that are not generally captured in national-level disaster reporting.

Given Mali's high dependency on external donor-supported humanitarian aid, it is likely that funding for ASP will require a twin-track approach. First, strengthening domestic financing instruments included in the national budget, in particular those that hold the potential to deliver targeted cash transfers, either funded through public resources or external aid. Second, encouraging humanitarian partners to scale up their pre-arranged/anticipatory action finance, and deploy these resources and assistance in ways that leverage social protection systems in whole or in part (such as aligned targeting, cash transfer values, etc). Such efforts are potentially a more productive starting point for working towards a more comprehensive government-led approach to DRF in the short term. Further, new instruments that are developed in the future to complement such funds will need to account for the fragile context and instability, as well as chronic food insecurity and displacement.



RECOMMENDATIONS

This section concludes the report by proposing a series of measures that would enhance domestic capabilities to better anticipate, plan for and finance social protection responses to disaster risk, particularly for increasingly severe droughts. The analysis presented in this report demonstrates that the existing national social safety net programme in Mali is already being used in whole or in part (e.g. just RSU) to respond to disaster risks, but needs to be further strengthened to respond predictably and at scale to climate-related disasters and other shocks.

Recommendations have been formulated with a view to improving shock-responsive and adaptive capabilities

of the social protection system. These recommendations draw on the analysis presented above, and discussions with stakeholders working in and on Mali, as well as previous analysis conducted by the World Bank and others.

The recommendations are grouped into two categories. First, this section notes general recommendations to improve government capabilities to respond to climate-related disasters and compounding shocks through social protection in the medium term. Second, it provides a set of recommendations for the next phase of World Bank support to strengthen ASP in the social protection programming.

Recommendations to improve government capabilities

1. **Strengthen government capabilities to estimate the macro-fiscal implications of disaster risks, and risk-based approaches to budgeting.** For example, considering disaster risks in medium-term forecasts and annual budgets creates greater certainty on how to finance unexpected costs and manage risks. To further enhance risk-based budgeting, improving current tracking of budget allocations to and expenditures on disaster preparedness and response, as well as on social protection programmes, is required.

Public sector data on the measured impacts of hazards such as droughts and floods is very limited

in Mali; impact assessments typically rely on figures generated before or shortly after the 2012 political crisis, which are unlikely to reflect the current or projected situation. This creates a challenge for Mali as lack of understanding and planning for the economic costs of disasters can restrain the ability of entities such as the MINEFIP to engage in disaster risk layering strategies and combine in a cost-effective way different sources of finance and mechanisms such as ASP, which are key to financial resilience.

Therefore, improving disaster damage and loss assessment in Mali is important not only to build the

case for more effective financing of crisis response, but also to contribute to discussions on where and how finance should be targeted in ways that can mitigate the worst effects of crises on households and the economy. The inclusion of some information in the 2023 Finance Law (Government of Mali 2023) is a positive first step that could be further developed and enhanced (e.g. by capturing and analysing more disaggregated data).

2. **Strengthen and expand the RSU.** In recent years, substantial effort and investment has been made on behalf of the government and development partners (particularly the World Bank) to develop a registry of vulnerable households that can be used to target social assistance-type programmes. The potential of such a registry for ASP is substantial, offering a way to rapidly and transparently identify households in need of assistance ahead of or at the moment of crisis shocks. It also allows for coordination between social protection and humanitarian actors, which we have already seen as other institutions such as WFP have started to use the RSU to target programme participants.

However, coverage of the RSU is currently limited to around 5% of the population. There is significant scope to expand its coverage and integrate lessons learnt from its users, including adopting data sharing protocols. As with all social registries, keeping it up to date will be a challenge; lessons should be taken from other fragile and conflict-affected countries in deploying innovative and cost-effective approaches to maintenance.

3. **Identify and quantify contingent liabilities to strengthen the planning and budgeting of disaster preparedness and response.** Managing disaster-related contingent liabilities requires sound risk information and analysis of how disasters affect key fiscal indicators such as fiscal balances, public debt and debt sustainability. To improve understanding of gaps and needs, Mali could assess its financial exposure and available resources in detail, incorporating the results into its future fiscal and budgetary strategies. The production of a fiscal risk assessment specific to climate-related disasters and hazards is a positive step, which could be built on. The findings could then inform the development of a comprehensive DRF strategy to establish the overarching principles, objectives and methods for financing the response and recovery costs associated with damage-causing events.
4. **Strengthen domestic financing instruments that have the potential to facilitate ASP.** In addition to improved risk-based budgeting (see recommendation 1), attention is also needed on the range of instruments available to deliver shock-responsive assistance. Several domestic financing instruments included in the national budget have the potential to deliver shock-responsive assistance through targeted cash transfers but are not fully operational due to limited resources and delays in mobilising finance. Funds such as the FSA already benefit from contributions from both government and international partners; they could be strengthened through much clearer and more transparent procedures.

Specific recommendations for the next phase of the Safety Nets Programme

1. **Secure the future of the Emergency Social Safety Net (Jigisémejiri) project and coverage of the most vulnerable regions.** The anticipated impacts of climate change over the next decade point towards increasing occurrence of droughts, potentially exacerbating north-south inequalities in agricultural production capacity, which could inflame the current political and security crisis in Mali, driven in part by conflict over access to natural resources. Social protection offers a channel to bolster resilience, but also to de-escalate and mitigate potential compounding effects between crises. Providing

well-targeted, timely and sufficient assistance to crisis-affected households could potentially reduce tensions over natural resources in periods of water scarcity, support producers unable to access their lands due to upticks in violence and assist communities experiencing influxes of IDPs.

However, few Malians at present have access to social protection, with most programmes concentrated in the more populous south. A conflict-sensitive approach towards the expansion of the Jigisémejiri project to the populations most at

risk of climate-induced disasters (in the centre and north-east of the country) is required to leverage the maximum benefits of ASP within a highly fragile and dynamic risk environment.

2. **Consider an innovative multi-hazard trigger design.**

Mali presents a complex picture of interconnected drivers of risk, with drought, insecurity and displacement happening in parallel, fuelling crisis levels of food insecurity (escalating to famine levels in one north-eastern district in 2023). The relationships and direction of causality between these multiple risk drivers is complex, and likely to vary across time and geographical area. This complexity poses a challenge to trigger-based ASP systems, which are often linked to a single key hazard or risk driver.

Innovative approaches to trigger design should be considered, such as deploying ‘soft’ trigger systems that combine multiple sources of information within a clear protocol for decision-making. The advantage of such an approach is that it could interconnect with existing governance structures and decision-making protocols for response planning (see recommendation 7), but financing options for soft trigger systems are more limited. Other options may be to explore decentralised trigger structures that account for variations in priority risks across different areas; these may be particularly relevant to Mali given its distinct differences in north-south agro-ecological zones and exposure to hazards such as droughts versus floods.

3. **Strengthen risk financing instruments that have the potential to facilitate resilience-building and ASP.**

In recent years, ARC and ARC Replica insurance policies have played an important role in facilitating the availability of early financing for drought-induced food crises. Nonetheless, their levels of coverage remain conservative (peaking at USD30 million coverage compared with funds secured through humanitarian response appeals of up to USD600 million) and limited to droughts, with no policy for floods. There is a case for scaling up ARC policies to cover a more representative proportion of anticipated humanitarian needs, but only in the context of a lessons learnt exercise and evaluation of the impact of recent payouts in terms of preventing negative coping strategies or worsening vulnerabilities.

Finally, use of insurance products targeted at households and farmers has been characterised by pilot, small-scale initiatives mainly covering the southern regions of the country. There is a need for research and investment into building a more sustainable environment for the insurance market, particularly to facilitate coverage of key cash crops.

4. **Leverage the capacities of humanitarian partners for ASP.**

Mali relies heavily on external donor support, and a network of UN organisations and civil society, to respond to the protracted humanitarian emergency as well as new crises and will continue to do so in the medium term. The experiences of ARC and ARC Replica have shown the complexities of a dynamic political environment including sanctions and varying donor support, and the stability that humanitarian organisations can offer as a complementary channel of assistance. Recognising that strengthening government systems is the first priority for ASP, international assistance should also be financed and delivered in ways that also strengthen ASP. For example, encouraging humanitarian partners to scale up their pre-arranged/anticipatory action finance, and deploy these resources and assistance in ways that leverage social protection systems in whole or in part (such as aligned targeting, cash transfer values, etc.).

5. **Connect ASP with ongoing and well-developed government efforts in emergency planning and preparedness for food crises.**

Under the CSA, the PNR for food insecurity is developed on an annual basis ahead of the lean season, presenting a positive attempt at government level to plan and budget for food crises. For example, the 2021 PNR detailed how the Government of Mali’s ARC payout would be used in the broader context of the national response. However, the PNR currently presents little evidence of connection with social protection systems (these were not used for the ARC payout response) and also little interconnection with broader needs identified through the humanitarian appeals process. The set-up of future ASP systems should aim to strengthen and leverage current efforts to budget and plan for food crises and social protection more broadly.

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Cover image: The hand of a woman of the association removing waste around vegetables planting in the field at the village of Djidara in Gao

Credit: Getty/john images

