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# Establishing an Adaptive Social Protection System in Angola

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# Acknowledgement

This report was developed in response to the interest expressed by the Government of Angola during the dissemination phase of the Angola Country Climate Development Report 2022 (CCDR) to understand what it would take to establish an adaptive social safety net system, building on its flagship program, Kwenda. The report was developed by bringing together a group of experts from different fields, including social protection systems, poverty analysis, urban housing, food insecurity monitoring, and climate risk modelling.

On the part of the World Bank, this work was led by Boban Varghese Paul (Senior Social Protection Specialist) and Alejandra Campero Peredo (Disaster Risk Financing Consultant). The team also included Edward Archibald (Senior Social Protection Consultant), Helly Dharmesh Mehta (Social Protection Consultant), Liliana D. Sousa (Senior Economist), Giulia Zane (Extended Term Consultant for Poverty), Rahel Diro (Associate at Tetra Tech), Krishna Krishnamurthy (Meru Labs), Lauren Allognon (Associate at Tetra Tech), Sarah Elizabeth Antos (Senior Land Administration Specialist), and Nelson Hernandez (Land Administration Consultant).

From Angola, the team was headed by the Director General of FAS, Belarmino Jelembi. It included Aldemiro Nzele (Head of Registrations and Payments) Carlos Barbosa (Head of Monitoring and Evaluation), Josué Chilundolo, Custódio Satiaca and Abel Chiena (Specialists in Productive Inclusion), Helena Farinha (Head of Social Safeguards), Frederico Sanumbuteu (FAS Provincial Director in Huila), Félix Abias (Head of Communications), Feliciano Chenda (Local Technician in Huila)and , Pedro Afonso (IT Technician). FAS's interest in having an instrument to help respond to shocks that could affect the social well-being of communities, especially those caused by climate change or fluctuating food prices, is underpinned by its almost three decades of work, especially activities carried out under the Kwenda program. For this reason, the government has begun to build the path towards institutionalizing Kwenda, with a view to having a mechanism not just for one-off assistance, but for permanent social protection for the most disadvantaged. Combining this challenging scenario with the impact of climate change and rising food prices in the country, FAS believes that it would be appropriate to adjust the current Kwenda framework, broadening its scope as a tool that simultaneously guarantees assistance in the event of a natural disaster or unexpected change in food prices.

Overall guidance and strategic insights for this report were provided by Albert Zeufack (Country Director), Juan Carlos Alvarez (Country Manager), Paolo Belli (Practice Manager, Social Protection and Jobs), and Ana Maria Carvalho (Senior Operations Officer). Excellent comments were received during the peer review process from Barry Maher (Senior Financial Sector Specialist) at the concept note and the decision stage, Sarah Coll-Black (Senior Economist) and Mira Saidi (Social Protection Specialist) at the decision stage, and Frederico Gil Sander (Practice Manager, Global Macro and Debt) and Junko Onishi (Lead Social Protection Specialist) at the concept note stage. Additional inputs were received from Emma Monsalve Montiel (Social Protection Specialist), Puja Vasudeva Dutta (Senior Social Protection and Economic Inclusion Consultant), Alvaro Andre (Health Consultant), Ainid Clelia (Operations Consultant), Qhelile Ndlovu (Financial Sector Specialist), and Delfim Mawete (Financial Sector Specialist). Fernando Simao Baptista (Team Assistant), Amada De Jesus Lourenco Rodrigues (Program Assistant), and Hajalalaina Consuella Rabearivony Andrianjakanava (Program Assistant) provided excellent administrative support.

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# Abbreviations

| | |
|---|---|
| ADECOS | Senior Health and Community Development Agents (Agentes Seniores de Saúde e Desenvolvimento Comunitário) |
| ASP | Adaptive Social Protection |
| ASSN | Adaptive Social Safety Nets |
| ATM | Automated Teller Machines |
| CASI | Integrated Social Action Center (Centro de Acção Social Integrado) |
| CCDR | Country Climate Development Report |
| CERC | Contingent Emergency Component |
| CHIRPS | Climate Hazards Group InfraRed Precipitation with Station data |
| CNAS | National Civil Protection Commission |
| CNPC | National Civil Protection Commission (Comissão Nacional de Protecção Civil) |
| COVID-19 | Coronavirus Disease 2019 |
| CSU | Cadastro Social Único (a mandate of MASFAMU by law) |
| CUCI | COVID-19 Urban Cash Intervention (in Malawi) |
| DRC | Democratic Republic Congo |
| DRF | Disaster Risk Financing |
| DRM | Disaster Risk Management |
| EM-DAT | Emergency Events Database (launched by Centre for Research on the Epidemiology of Disasters) |
| EWS | Early Warning System |
| FAO | Food and Agriculture Organisation of the United Nations |
| FAS-IDL | FAS-Local Development Institute |
| FCDO | Foreign, Commonwealth, and Development Office |
| FEWS NET | Famines Early Warning Systems Network |
| GDP | Gross Domestic Product |
| GFDRR | Global Facility for Disaster Reduction and Recovery |
| GoA | Government of Angola |

| | |
|---|---|
| GRM | Grievance Redress Mechanism |
| HE | Horizontal Expansion |
| HSNP | Hunger Safety Net Programme (in Kenya) |
| IDREA | Survey of Expenditure, Income, and Employment in Angola |
| ILO | International Labor Organisation |
| INAMET | National institute of Meteorology and Geophysics |
| ITCZ | Inter-tropical Convergence Zone |
| KYC | know-Your-Customer |
| LPG | Liquefied petroleum gas |
| MASFAMU | Minister of Social Action, Family, and Women's Empowerment (Ministério da Acção Social, Família e Promoção da Mulher) |
| MAT | Ministry of Territorial Administration (Ministério da Administração do Território) |
| MINAGRIF | Ministry of Agriculture and Fisheries (Ministério da Agricultura e Pescas) |
| MINFIN | Ministry of Finance (Ministério das Finanças) |
| MININT | Ministry of Interior |
| MINSA | Ministry of Health (Ministério da Saúde) |
| MNO | Mobile Network Operators |
| MNSSP | Malawi National Social Support Programme |
| MODIS | Moderate Resolution Imaging Spectroradiometer (data by NASA) |
| mVAM | mobile Vulnerability Assessment Monitoring |
| NDVI | Normalized Difference Vegetation Index |
| NGO | Non-Governmental Organisation |
| NRT | Near Real-Time |
| NUPRP | National Urban Poverty Reduction Programme (in Bangladesh) |
| PMT | Proxy-Means Testing |
| PNAS | National Policy on Social Action *(Política Nacional da Acção Social)* |
| POS | Point of Sales |
| PWD | Persons With Disabilities |

| | |
|---|---|
| ReDIV | Individual Digital Registration for Vaccination against COVID-19 (Registo Digital Individual para a Vacinação contra a COVID-19) |
| RRR | Rapid Response Register |
| SEWA | Self-Employed Women's Association |
| SIGAS | Information System and Social Action Management (Sistema de Informação e Gestão da Acção Social) |
| SIIPS | Integrated Cash Transfer Project Management Information System (*Sistema Integrado de Informação de Gestão do Projecto de Transferência Monetária)* |
| SMAP | Soil Moisture Active Passive (data by NASA) |
| SMEB | Survival Minimum Expenditure Basket |
| SPCB | Civil Protection and Fire-Fighter Service (Serviço de Protecção Civil e Bombeiros) |
| SPSTT | Social Protection Stress Test Tool |
| UNDMT | United Nations Disaster Management Team |
| UNDP | United Nations Development Programme |
| UNFP | United Nations Population Fund |
| UNICEF | United Nations Children's Fund |
| VE | Vertical Expansion |
| WB | World Bank |
| WFP | World Food Programme |

# Executive Summary

***Angola is a resource-rich country with high poverty and vulnerability levels, which are further aggravated by recurrent climatic and price shocks.***

**Angola is a middle-income country, but it has high poverty and vulnerability levels.** In 2019, Angola had a total population of about 30.8 million people, of whom 32 percent (9.8 million people) lived below the national poverty line. Another 5.8 million people were vulnerable to poverty – meaning that they lived above the poverty line but were at high risk of falling below it in the event of a shock. Poverty rates were significantly higher in rural areas – 55 percent compared to 18 percent in urban areas. Yet, with rapid urbanization, the number of urban poor is significant: 3.2 million people in urban areas were living in poverty compared to 6.3 million in rural areas.

**Furthermore, the people face high rates of food insecurity.** According to the 2018/19 Survey of Expenditure, Income, and Employment in Angola (IDREA), more than half of all households reported insufficient access to food during the last 12 months, and over two-thirds expressed concerns about food shortages in the seven days leading up to the survey. In rural areas, close to 55 percent of households living in poverty experienced a lack of food. In urban areas, close to 70 percent of Angolans living in poverty reported experiencing lack of food in the past 12 months, and almost 80 percent reported worrying about food in the past 7 days. Nearly as many urban (2.7 million) as rural Angolans (3.0 million) are food poor.

**In urban areas, households living in poverty or vulnerable to poverty are significantly more likely to be women-headed households, less likely to have access to adequate housing, and rely on self-employment.** Women-headed households are overrepresented among urban households living in poverty, more so if children are present. In urban areas, over one third of poor or vulnerable households are women-headed. Poor and vulnerable households in urban areas also have a larger presence of children. Housing characteristics are also worse for urban poor. Poor and vulnerable households are less likely to use improved cooking fuels, and less likely to have adequate walls and floor. Access to electricity and improved waste management are also significantly lower. Poor households are significantly more likely to live in crowded spaces (more than 3 people per room). Finally, there is a strong reliance on self-employment among urban Angolans living in poverty, especially among women. Urban women living in poverty or vulnerable to poverty are over-represented in the group of the 'self-employed without worker's, which includes most informal jobs such as street vendors.

**The country is affected by significant climate-related and price shocks.** The frequency of climate linked shocks has been increasing rapidly over the last two decades. While floods are the most recurrent, droughts affect the greatest number of people. Between 2005 and 2017, the country economic losses from climate-related disasters such as floods, droughts and storms amounted to nearly US$ 1.2 billion (World Bank Angola Country Climate Development Report or CCDR, 2022). These losses are expected to increase in the future as climate change makes these incidents more frequent. In addition, food price inflation has surpassed the already high inflation in Angola over the last three years, with likely significant challenges for poor and vulnerable households. This suggests that urban households in Angola were particularly exposed to hardship due to their reliance on food purchased in the market. Progress in poverty reduction and shared prosperity may be undermined by the high vulnerability to both climatic and price shocks.

**These shocks cause further food shortages in both rural and urban areas.** In rural areas, where more than 85-90 percent of the population relies on subsistence agriculture as the primary source of

livelihood, shocks to agricultural productivity from climate events seem to be a key cause of food insecurity. In contrast, in urban areas, where households rely more on markets to access food, increases in food prices are the main cause of food insecurity. Over 45 percent of maize needs, 80 percent of rice and 90 percent of wheat needs are met through imports, predominantly from Southern Africa and Portugal. Thus, national food prices in Angola, and particularly in the Luanda market, are highly exposed to shocks in the countries that export grains to Angola. This suggests that shocks to food prices should be monitored nationally as they are likely to push households deeper into poverty in urban areas in Angola.

**An analysis of drought hotspots indicates that the south and southwest regions of Angola are highly vulnerable to droughts, which have recently become more prolonged and persistent.** The most drought-prone areas of Angola include the southern pastoralist areas and two key agricultural areas: the central highlands, where maize and beans are produced, and the transitional regions known for maize and cassava production. The south and southwest regions of Angola also have high poverty and food insecurity levels, making their populations particularly vulnerable to droughts. Furthermore, data shows that droughts have been becoming longer in the southern provinces of Angola since 2010. There is also a drying trend in central Angola's maize, bean, and cassava-producing areas, which could have a significant impact on food production and, therefore, on people's livelihoods. Consequently, in addition to establishing adaptive safety nets, efforts are critical to successfully adapt the livelihoods of households in these regions over a longer-term horizon in order to improve their overall resilience to shocks.

**Analysis also indicates that the most significant human impacts of flooding in Angola are associated with riverine flooding in socioeconomically vulnerable areas in Cunene, Namibe, Moxico and Benguela provinces**. The highest number of historically reported flood events are in Luanda, Benguela, and Cuanza Norte. However, this may reflect a bias toward urban areas in the underlying reporting mechanisms. The most significant human impacts of flooding in Angola appears to be associated with riverine flooding in socioeconomically vulnerable areas around the Cunene River in Cunene and Namibe provinces, the Coporolo River in Benguela province, and the Zambezi River in Moxico province. It is in these areas where the analysis finds the biggest overlap between flood hazard and food insecurity. However, a more localized and in-depth analysis is needed to better understand the incidence, intensity, and duration of floods, as they result from the interaction of several factors, including water movement, topography, soil moisture content, and land use.

**In addition to climate-related shocks, the population in Angola is also affected by price shocks caused by a range of local and global factors.** Price shocks are associated with economic cycles that affect Angola due to either domestic or global conditions. Locally, price shocks could be driven by reforms such as removing subsidies on key commodities. International conflicts might also lead to price shocks. For example, the current Russia-Ukraine war has led to increases in food prices globally. Historical food price inflation data suggests[1] that in 2003, 2004, 2016, and 2021, Angolan households were affected by price shocks – defined as a yearly average food inflation above 30 percent with respect to the previous year – exposing particularly those living in poverty to food shortages.

***Globally, safety net programs have proven to be highly effective at responding to the needs arising from these shocks.***

**By providing additional income, safety net programs help poor households prepare for and cope with shocks.** Evidence shows that the poor tend to be disproportionately exposed to climate and price

[1] Price shocks can be defined in different ways, and more analysis is needed to better understand local dynamics between price increases and food insecurity in Angola. In this report, price shocks are analyzed using historical data on food prices at the national level in Angola.

shocks and have the least means to respond to them. Social safety net programs, such as cash transfers, serve the purpose of redistribution and poverty alleviation and are used in various countries worldwide (del Ninno & Mills, 2015[2]). Assistance delivered to poor or vulnerable households through safety nets can help increase their resilience in different ways. *Pre-shock*, cash transfers provide an additional source of income that can enable beneficiary households to undertake preparedness measures (such as increased savings). *Post-shock*, the cash provided through a safety net program can help households better cope with shocks, smooth their consumption, and avoid negative coping strategies. Finally, safety nets can help households make long-term investments with higher-returns to improve their livelihoods (e.g., adjusting assets or migrating away from highly shock-exposed areas), supporting adaptation to shocks.

**Additionally, existing safety net systems or programs can be further adapted to help poor and vulnerable households cope with and respond to shocks.** Adaptive social protection systems respond to shocks by combining the regular safety net programs with a mechanism that allows its expansion primarily in two ways:

1. **Vertical expansion** of an existing program involves providing existing beneficiaries with a temporary additional grant to existing beneficiaries or an extension of the program's duration for beneficiaries that were expected to exit the program around the time the shock occurred.
2. **Horizontal expansion** of an existing program involves the temporary inclusion of new beneficiaries i.e., from shock-affected communities who are transitorily poor or vulnerable.

In addition to vertical and horizontal expansions, safety net programs can also be leveraged to implement new emergency programs that '**piggyback'** on or "**align with**" existing systems or programs (e.g., data, capacity, delivery mechanism), either led by government or humanitarian partners.

**Evidence suggests that timely disaster response, when combined with safety nets and pre-shock resilience building, can be highly effective in reducing the overall costs associated with a shock and reduce its impoverishing impact.** For instance, Cabot Venton (2018) found that in Ethiopia, Kenya, and Somalia, spending US$ 1 on safety nets can save between US$ 2.25 and US$ 2.88 in late humanitarian response. Similarly, spending US$ 1 on resilience programming (e.g., livelihoods adaptation prior to the onset of the shock) can save between US$ 2.27 and US$ 3.31 in late humanitarian response. In Egypt, Gansey et al. (2023) simulated that without the combined expansion of the Takaful and Karama cash transfer programs, the poverty rate after the onset of COVID-19 would have been 1.1 percentage points higher. Similarly, Paul et al. (2021) simulated that in Zambia, the full operationalization of the Social Cash Transfer program would reduce poverty by 4 percentage points, and 6 percentage points if the value of cash transfers were increased to existing beneficiaries.

**Unsurprisingly, the use of adaptive safety nets has increased over the last decade, particularly due to an increase in climate disasters and global economic shocks from pandemics or wars.** During such times, governments have, along with the regular safety net systems, used the adaptive mechanisms discussed above, which have helped safeguard the socio-economic conditions of the poor and the vulnerable. Using an adaptive safety net can help reduce economic losses that could potentially reverse years of development gains. Below are some examples of countries and situations in which adaptive safety nets have been established.

- **In the Africa region, governments are increasingly using their social protection programs to provide additional assistance to poor and vulnerable households affected by droughts**. In Kenya and Uganda, for example, governments have pre-agreed upon the rules for expanding or scaling

[2] del Ninno, Carlo; Mills, Bradford. 2015. Safety Nets in Africa: *Effective Mechanisms to Reach the Poor and Most Vulnerable.* Africa Development Forum. Washington, DC: World Bank; and Agence Française de Développement.

up their regular social protection programs. These rules clearly determine: (i) when to scale up in the event of a drought, (ii) where to scale up, (iii) how many households to cover, and (iv) what amount of payment to provide. This approach enables a rapid and transparent response to shocks. In addition, the greater predictability of when and to what extent a scale-up will occur not only assists the target beneficiaries, but also helps the government plan its budget, thereby helping to ensure that resources are utilized effectively.

- **Similarly, multiple governments globally undertook safety net expansions to tackle the economic fallout from COVID-19.** In total, 218 countries implemented 2,349 social assistance or safety net measures, with 1,023 of those being cash measures (such as social pensions, conditional and unconditional cash transfers) to provide short-term income support to households affected by COVID-19 (Gentilini et al 2022[3]). The short-term impacts of COVID-19 were most strongly felt by urban households. In many ways, this brought to fore important reconsideration of the more common approach to safety nets that tended to focus on rural poverty given its predominance. This compelled policymakers to think about putting in place a basic safety net for the urban poor which is capable of short-term adaptive scale-ups during times of need. Sierra Leone, Malawi, and Democratic Republic of Congo are a few examples of countries that scaled-up safety net coverage to urban households in the immediate aftermath of COVID-19 shocks (Zeufack et al 2022[4]).

***The successful establishment of Kwenda provides a strong basis for the Angolan government to use it in responding to the recurring climate and price shocks.***

**Since its establishment, Kwenda has evolved and gained greater significance as a key mechanism to reduce poverty in the country**. Initially designed as a compensatory cash transfer program for fuel subsidy reform in 2019, Kwenda was prioritized for rural areas when subsidy reforms were delayed due to COVID-19. As of May 2023, Kwenda has been implemented in municipalities across all 18 provinces of Angola, with 982,741 households registered – the majority of which reside in the poorer provinces. The program aims to reach 1.6 million beneficiary households – the estimated number of poor households in Angola, equivalent to approximately 9.5 million people. It is implemented by the government, which has allocated US$ 100 million to finance the program. The World Bank is providing technical and financial support to Kwenda, which is currently proposed to run for four years (2020 to 2024) with a budget of US$ 420 million.

**Kwenda prioritizes households living in the most impoverished communities within the poorest municipalities of Angola, and due to the overlap between poorer provinces and those affected by climatic and price shocks, a large share of those affected by these shocks are already enrolled in the program.** Kwenda's coverage of vulnerable households facing covariate shocks (i.e., shocks that affect everyone in the same community or geographic area including shocks related to climate and price increases) ranges from 54 percent to 65 percent.[5] Given the program's scale, if Kwenda perfectly targeted, around 0.98 million of the total 1.51 million households vulnerable to poverty from covariate shocks in Angola would become Kwenda beneficiaries once the program is fully rolled out. The

[3] Gentilini,Ugo; Almenfi,Mohamed Bubaker Alsafi; Iyengar,TMM; Okamura,Yuko; Downes,John Austin; Dale,Pamela; Weber,Michael; Newhouse,David Locke; Rodriguez Alas,Claudia P; Kamran,Mareeha; Mujica Canas,Ingrid Veronica; Fontenez,Maria Belen; Asieduah,Sandra; Mahboobani Martinez,Vikesh Ramesh; Reyes Hartley,Gonzalo Javier; Demarco,Gustavo C.; Abels,Miglena; Zafar,Usama; Urteaga,Emilio Raul; Valleriani,Giorgia; Muhindo,Jimmy Vulembera; Aziz,Sheraz. 2022. *Social Protection and Jobs Responses to COVID-19: A Real-Time Review of Country Measures*, World Bank, Washington, DC.

[4] Zeufack, Albert G.; Calderon, Cesar; Kabundi, Alain; Kubota, Megumi; Korman, Vijdan; Raju, Dhushyanth; Girma Abreha, Kaleb; Kassa, Woubet; Owusu, Solomon. 2022. *"Africa's Pulse, No. 25" (April)*, World Bank, Washington, DC.

[5] World Bank (2022). *Climate Change and Development Report, Angola.*

estimated coverage gap – i.e., those households estimated to be vulnerable to poverty due to covariate shocks but not enrolled in Kwenda– is approximately 0.53 million.[6]

***However, further investments are required to establish an effective and efficient adaptive system in Angola.***

**Given the current status of the Kwenda program roll-out, it can already be adapted in the short-term to respond to shocks by implementing a few key design and operational enhancements.** These include:

- **Increasing the duration and benefit level of existing regular Kwenda.** As highlighted earlier, cash transfers can enhance the resilience of poor households to shocks. Given that a large share of those affected by historical covariate shocks are already Kwenda beneficiaries, it implies that increasing the duration and benefit level of the program would provide these households with a stronger first layer of protection against shocks.

- **Adapting the existing delivery system modalities to facilitate a short-term increase in the benefit level and coverage of Kwenda in rural areas.** This includes several actions, such as: (a) identifying hotspots of climate shocks where the social registry could scale-up its coverage of rural households, including those that are not eligible for Kwenda cash transfers at the moment; (b) developing a social registry 'shock's module to collect and store specific information about the potential impact of shocks on registered households; (c) adjusting the contracts of payment service providers to allow for a temporary expansion in coverage and benefit levels; (d) undertaking preparedness actions to 'shock-proof' the delivery system, such as maintaining a roster of local partners that operate in the hotspot regions who can quickly support program implementation; (e) investing in IT solutions in these hotspots to facilitate implementation at times of shock, e.g., satellite phones and internet.

- **Scale-up of Kwenda to urban areas.** Scaling up Kwenda in urban areas could contribute to the double objective of mitigating poverty and enhancing resilience to shocks in these areas. Kwenda could be scaled up to urban areas by maintaining design parameters that are largely in line with those in rural areas. This is to ensure internal consistency within the national safety net system, as large differences could incentivize some individuals, especially in rural-urban bordering areas, to make decisions that could lead to leakage in the system. Relevant design parameters include the targeting criteria, benefit levels, duration, and alignment of institutions involved in the delivery process. However, it is important to also consider any critical differences between urban and rural contexts to ensure that the investments are tailored to the needs of those in urban contexts. For example, urban households tend to be on the move more so than rural households, and urban areas are more densely populated. Both of these factors have implications for the methods, costs, and effectiveness of registration and payment processes. Moreover, information systems and social media platforms have wider coverage in urban areas, which makes it easier to disseminate program-related information as well as misinformation and smear campaigns.

**To establish a long-term adaptive safety net system, it needs to be incorporated in key policy frameworks, establish a sustainable financing strategy, enhance monitoring and data management, and ensure appropriate coordination mechanisms.** Key recommended actions include the following:

- **Include a provision for adaptive social protection in existing policy frameworks**, including in the National Development Plan 2023-27 and the National Social Action Policy 2021. It will also be

[6] World Bank (2022). *Climate Change and Development Report, Angola.*

necessary to develop legal or policy provisions that outline the role of social protection in the national disaster response strategy.

- **Increase public expenditure on social safety net programs more broadly.** Over the last decade, spending on social safety nets dropped from 0.6 percent of GDP in 2010 to 0.1 percent of GDP in 2020, and has increased since then with the launch of the Kwenda program, going up to 0.3 percent of GDP in 2022. However, the average spending on safety nets in Sub-Saharan Africa is 1.2 percent of GDP and there is scope for further expansion of the budget to safety nets. Such expansion in budget for safety nets would contribute to financing regular and adaptive safety net programs, as well as livelihood programming that can enhance the resilience of households even further.

- **Develop a risk-layered financing strategy for adaptive safety nets.** This involves linking needed finance to promote early action through pre-agreed and transparent rules. Estimations undertaken in this report show that establishing an adaptive safety net system would cost between US$ 13-29 million to respond to droughts every two years in rural areas, and about US$ 103 million to respond to price shocks in urban areas every five years. Given the recurrent nature of shocks in the country, government could consider establishing: (a) a **contingency multi-year reserve fund** to provide immediate liquidity after a shock to cover the costs of Kwenda scale-ups in affected rural and urban areas; and (b) **secure a contingent line of credit** to complement the contingency fund and provide additional liquidity that can allow Kwenda to increase cash assistance and/or increase the number of its beneficiaries when severe shocks materialize. The government could also consider purchasing a sovereign insurance product to cover the costs of expanding adaptive safety nets in response to more severe and less frequent shocks.

- **Scale-up the monitoring of climate shocks and prices at the national and sub-national levels, and establish linkages between these shocks and scale-up of safety nets scale.** The government could consider implementing an early warning system (EWS) for climate shocks (such as droughts and floods) that would provide timely and objective information to support responses to these shocks. Data collected through the EWS, as well as other seasonal data, could be used to create transparent triggers for scaling up safety nets in order to mitigate the impact of these shocks. Other countries in the region have used a dual trigger approach in their design of scale-up mechanisms for adaptive safety nets in response to droughts. This approach combines a 'hard' trigger based on remote sensing data with a 'softer' trigger based on data sources that capture ground-level food insecurity conditions. While the hard trigger increases objectivity, speed, and transparency of an adaptive safety net mechanism, a softer trigger mitigates potential instances where there is a mismatch between satellite information and the conditions households are facing on the ground. In Angola, analysis finds that satellite imagery can accurately detect drought and flood occurrence. However, the government and development partners need to invest in high-frequency food security, agricultural production, and price data to complement satellite information. Monitoring price data at the national and sub-national level is also critical to identify price shocks (due to structural reforms or exogenous factors), to trigger the adaptive safety net system, and to respond to this type of shock in a timely manner.

- **Scale-up the national ID system to improve the targeting of adaptive safety nets and the interoperability with other databases.** Currently, Kwenda provides a program ID for each registered household. As these are unique to the program, it is challenging to merge the dataset with other existing databases. This is particularly problematic in urban areas where people tend to be more mobile than in rural areas, and hence it is likely to be tougher to keep track of individuals and

households that are already registered versus those who are not. By enabling interoperability across databases, the government would be able to monitor whether benefits are being received by the same individual or household and track them on various parameters.

- **Establish a clear institutional coordination mechanism for designing, delivering, and monitoring shock response through safety nets.** The Ministry of Finance already has a general contingency budget for unforeseen expenditures, including shocks. In addition, the Ministry of Agriculture and Fisheries has an operational contingency budget line and a prearranged contingent emergency component available for post-disaster response. The National Civil Protection Commission, mapped to the Ministry of Interior, is responsible for disaster response in the country. It is responsible for assessing Civil Protection policies, the overall organizational structure of bodies and services in the Civil Protection System, international cooperation agreements on civil protection, developing proposals for legal frameworks, and the National Contingency Plan. On the other hand, social protection has its own set of stakeholders, including MASFAMU, MAT, FAS-IDL, and the Minister of State for Social Action. An adaptive safety net system brings together the specific responsibilities of each of these stakeholders, and therefore, a clear institutional coordination mechanism is key. Given the existing mandates of various stakeholders, this could be done through a technical working group. Additionally, as and when the scale of humanitarian aid increases, the government needs to consider a coordination mechanism with them.

**In conclusion, climatic and economic shocks threaten the livelihoods and welfare of those already poor and vulnerable. However, Kwenda has laid the foundation for a safety net system that can be enhanced to support urban and rural households affected by these shocks.** Doing so would require planning for these contingencies in terms of: (a) aligning disaster risk management policy and social protection policy to incorporate the use of safety nets, in addition to other existing instruments, for disaster management; (b) further investments in existing delivery systems across both rural and urban areas in the form of expansion of the social registry, and adaptation of e-payment, GRM and M&E modalities to the realities of urban areas and a post-drought/ flood context where accessibility issues may intensify; (c) develop and agree on clear rules for institutional coordination, vertically (national to community level) and horizontally (across Ministries); (d) enhance the use of data and information to objectively detect and support the design of an appropriate response; and (e) pre-arranging financing through a risk layering approach so as to be able to respond to shocks of different frequency and intensities through combining a range of financial instruments (e.g., low frequency, high intensity shocks through risk transfer market-based instruments and high frequency, low intensity shocks through budgetary and other risk retention instruments). While some of these steps would already enhance the adaptiveness of Kwenda in the short term, others require more time but are critical to ensuring that the adaptiveness of the program can be established firmly over time.

# Chapter 1: Framing Adaptive Social Safety Nets in Angola

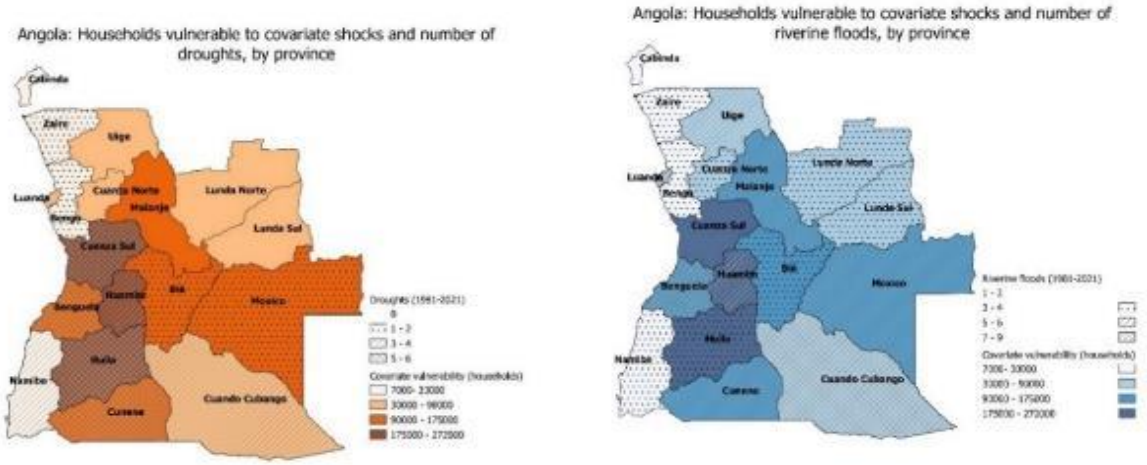
## Country Context

**Angola is a middle-income country, but it has high poverty levels, and its human capital outcomes are low on several development indicators.** In 2019, Angola had a total population of about 30.8 million people, of which 32 percent lived below the national poverty line. The poverty rates are almost three times higher in rural areas (54.7 percent) than in urban areas (17.8 percent) (World Bank Poverty Assessment 2020[1]). This strong dichotomy in welfare between urban and rural areas in Angola is reflected in the large inequality at the national level. The Gini coefficient in Angola is 0.51, which is one of the highest globally. Angola's life expectancy of 61.5 years is below the average of 67.9 years for lower middle-income countries globally. Maternal and child mortality rates are about double the average in other lower-middle-income countries. Angola's Human Capital Index is 0.4, implying that children born today are expected to be only 40 percent as productive as they would be with full education and health.

**Poverty and vulnerability affect a significant proportion of the country's urban residents**. Although poverty rates are higher in rural areas, the proportion of Angolans residing in urban areas has more than quadrupled over the past 50 years, from 15 percent in 1970 to around 67 percent in 2021.[1] Today, over 21 million people live in urban areas, and this figure is expected to triple over the next three decades to reach 61 million by 2050.[2] Moreover, around one in three urban residents (35 percent suffers from multidimensional poverty, including indicators such as access to education and health services and overall quality of life.[3] Further, urban areas are characterized by high levels of informality, which represented 67.5 percent of urban employment in 2020.[4] Unemployment in urban areas is around two and a half times the rate of rural unemployment (42.6 percent to 17.0 percent, respectively).[5]

**The country is affected by significant climate-related shocks, and climate change will exacerbate the intensity and frequency of floods, heatwaves, and droughts (Figure 1.1).** Climate models project rising mean temperatures across Angola and more frequent and severe weather-related disasters in the near future. Between 2005 and 2017, the country's economic losses from climate-related disasters such as flooding, droughts, and storms amounted to nearly US$1.2 billion (World Bank Angola Country Climate Development Report, or CCDR, 2022). Urban residents have heightened exposure to natural disasters because of factors such as uncontrolled urban expansion and land scarcity. As a result of these factors, the areas that are developed are hazard-prone and lack adequate drainage facilities, increasing the vulnerability of urban residents to disasters such as floods.[6] An estimated 1.2 million people live in areas exposed to flood risk (more than triple the number of people who were at risk in 2000), and coastal settlements will be affected by sea level rise, impacting half the national population.[7] Without climate adaptation, climate change is projected to reduce GDP by as much as 12 percent by 2060 (WB Angola CCDR).

*Figure 1.1: Climate and Poverty Hotspots—the most vulnerable populations to drought and poverty impacts in Angola*

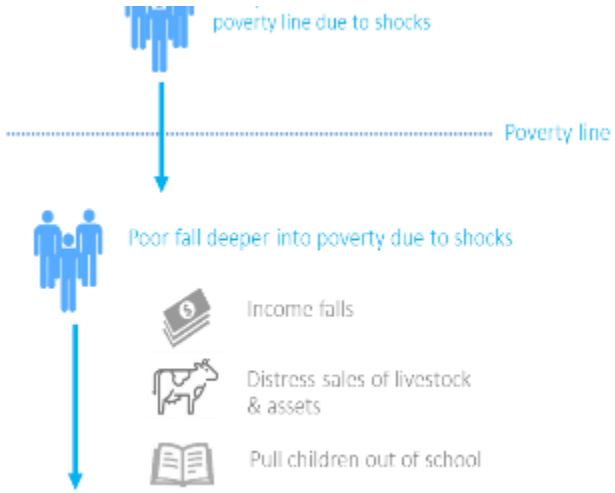



*Source: World Bank Angola Country Climate Development Report, 2022.*

**In addition to climate-related shocks, the population in Angola is also affected by price shocks that are caused by a range of local and global factors.** Price shocks, for example, could be associated with economic cycles that affect Angola due to either domestic or global conditions. Locally, price shocks could be driven by reforms such as removing subsidies on key commodities. International conflicts might also lead to price shocks, such as the Russia-Ukraine war, which has led to increases in food prices globally. In this report, price shocks are analyzed by using historical data on food prices at the national level in Angola. Historical food price inflation data suggests that in 2003, 2004, 2016, and 2021, Angolan households were affected by price shocks – defined as a yearly average food inflation above 30 percent with respect to the previous year – exposing particularly those living in poverty to food shortages in both rural and urban areas. Price shocks, however, can be defined in different ways, and more analysis is needed to better understand the local dynamics between price increases and food insecurity in Angola.

**Progress in poverty reduction and shared prosperity may be undermined by our high vulnerability to both climatic and price shocks.** It is estimated that 35 percent of Angolan households are vulnerable to falling into or experiencing worsening poverty if affected by a covariate or local shock (one that affects everyone in the same community or geographic area). These include climate-related disasters and economic shocks such as crop failures, oil price hikes, and pandemics Further, urban households, in comparison with their rural counterparts, are more vulnerable to these types of shocks because they have a higher dependence on cash, i.e., practically in urban areas everything needs to be bought with money, with weaker community networks. A sudden rise in expenses – or an inability to earn income – can have an immediate impact on daily needs such as accessing food and health services or undertaking travel (including seeking employment).[8] In 2020, the combined impacts of COVID-19 and collapsing oil prices were expected to have acutely affected urban residents through job losses, reduced hours of work, and higher prices for imported food.[9]

*Figure 1.2: Shocks deepen poverty of the poor and push non-poor into poverty*




*Source: Prepared by the authors from several World Bank sources.*

## Social safety nets in Angola

**Poverty linked programming is quite recent in Angola.** The largest non-war-related programs in Angola were Support to Vulnerable Families (the Kikuia Card or Cartão Kikuia),) implemented between 2014 and 2019, and the Child Value Cash Transfer Program (Valor Criança),) implemented in 2020 in 6 municipalities. In 2020, the Kwenda program was established by Presidential Decree, becoming Angola's flagship safety nets program.

**Since it was established, Kwenda has evolved and taken more prominence as a key mechanism to reduce poverty in the country**. Kwenda was originally designed as a compensatory cash transfer program for fuel subsidy reform in 2019. Kwenda was prioritized for rural areas when subsidy reforms were delayed due to COVID-19. As of May 2023, Kwenda was being implemented across municipalities in all 18 provinces of Angola, and 982,741 households had been registered, most of whom live in the poorer provinces. The program has a target of reaching 1.6 million beneficiary households— the estimated number of poor households in Angola, equivalent to approximately 9.5 million people. The government has implemented the program and committed US$ 100 million of financing towards it. The World Bank is providing technical and financial support to Kwenda, which is currently proposed to run for four years (2020 – 2024) with a budget of US$ 420 million.

**Eligibility for the program is determined by both geographic and household poverty conditions.** Geographic areas selected for Kwenda were based on: (a) municipalities with the highest concentration of poverty, using poverty maps developed by the National Institute of Statistics; and (b) the poorest micro-areas within the selected municipalities, according to consultations with the local administrations. All households in each micro-area are initially registered, and those who meet certain exclusion criteria are deemed ineligible. All families are registered through a door-to-door survey using a smartphone, and data is encrypted directly to Kwenda's management information system, Sistema de Informação Integrado de Protecção Social (SIIPS). Program beneficiaries currently receive cash transfers in four quarterly payments over a 12-month period, though the government is planning to expand the duration to 24 months. The monthly transfer value per household is Angolan Kwanza (Kz) 8,500 (equivalent to US$ 19/20). Kwenda also goes beyond cash transfers and provides the poor and vulnerable households with access to human development services, such as health and education, and economic inclusion activities.

**Digital mechanisms are used to pay a third of beneficiaries.** Kwenda's payment system uses three main transfer modalities across communities to ensure accessibility: (a) electronic debit cards (with options to cash out at ATMs or Point-of-Sale); (b) mobile money; and (c) cash. As part of the beneficiary enrolment process, all beneficiaries receive a beneficiary ID card, a debit card payment, or a phone with a SIM card where the benefits can be deposited. Almost a third of Kwenda beneficiaries receive their payments through digital means, and the majority use a debit card to cash out at ATMs. Where there is no network coverage or fixed ATMs within the specified distance, local business correspondents or bank agents use POS machines and provide physical cash. While the digital modality was the most prominent in the first year of the program, cash delivered through local business correspondents or bank agents has become the most prominent since the scale-up of Kwenda (63 percent of beneficiaries). Only 1 percent use mobile money.

**Kwenda has established an innovative Grievance Redress Mechanism (GRM) in all municipalities covered by the program.** The Kwenda GRM provides beneficiaries and others with a means of registering their needs and concerns on issues such as program exclusion, payment irregularities, suspected corruption, or incidents of gender-based violence. Well-functioning GRMs play a critical role in delivering cash transfers by enhancing accountability, transparency, and responsiveness, and Kwenda's GRM allows for near real-time registration of queries and complaints. As of April 2023, about 80 percent of queries and complaints were resolved within five days of receipt.

## Social protection and disaster risk management

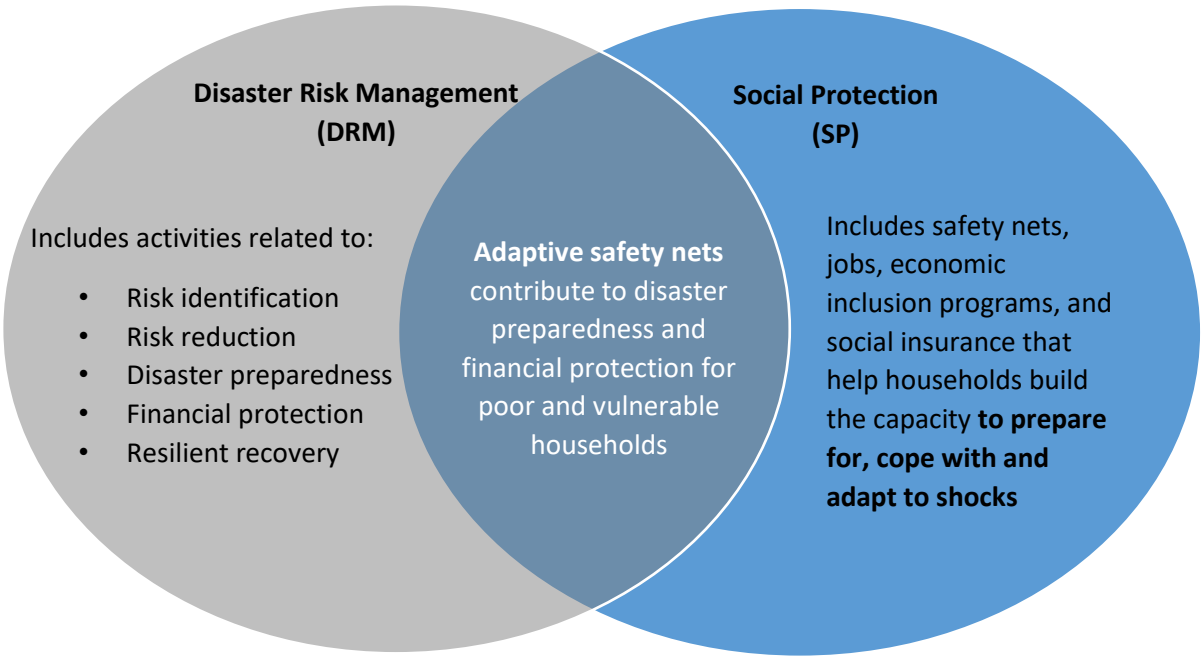
**Although many of these shocks cannot be prevented, their effects can certainly be minimized if there is sufficient preparedness to act early in the event of a shock to provide timely and well targeted support to those who need it the most.** (Clarke and Dercon, 2016[7]; Hill et al., 2019) A shock or natural disaster can result in long-lasting deprivation or families permanently falling into poverty. Providing timely and well-targeted support can mitigate the direct impact of shocks on household assets and welfare losses in the immediate aftermath of the shock, but it can also prevent some of the medium-term impacts, including forced displacement and negative coping mechanisms such as the distress sale of productive assets. There is growing recognition and evidence that the ability to act early is important for protecting household welfare against shocks and for fostering economic growth, improving competitiveness, and maintaining social stability.

**Integration of disaster risk management and social protection can build household's resilience**. A broad disaster risk management plan can help governments reduce, manage, and respond to disaster risks. In parallel, social protection plays a key role in building the capacity of households to better prepare for, cope with and adapt to shocks. Together, social safety nets, social insurance, and jobs and economic inclusion programs constitute the social protection "system", along with the policies that guide them and the delivery systems that underpin them. (ILO 2017; Robalino, Rawlings, and Walker 2012; World Bank 2012) A social protection system can protect household's wellbeing and ensure that they do not fall into poverty or become trapped in poverty because of the impact of shocks. An example of how social protection can contribute to disaster risk management is when governments invest in public works programs to conduct climate adaptation activities that reduce disaster risk. As an additional example, governments can help households cope better with risks by increasing the coverage of social insurance. While we recognize that there are many ways to integrate social protection and disaster risk management for a mutually reinforcing approach to reduce household vulnerability and build household resilience, this report will focus uniquely on one tool: adaptive safety net systems—a system by which safety net programs scale-up to provide short-term additional benefits to existing beneficiaries or by including new beneficiaries in the program

[7] Clarke, Daniel J.; Dercon, Stefan. 2016. Dull Disasters: How Planning Ahead Will Make a Difference. New York: Oxford University Press.

temporarily. This focus is in no way to undermine the use of any other complementing DRM activities and social protection programs to prepare for and respond to shocks.

*Figure 1.3: Overlap between Disaster Risk Management and Adaptive Safety Nets*



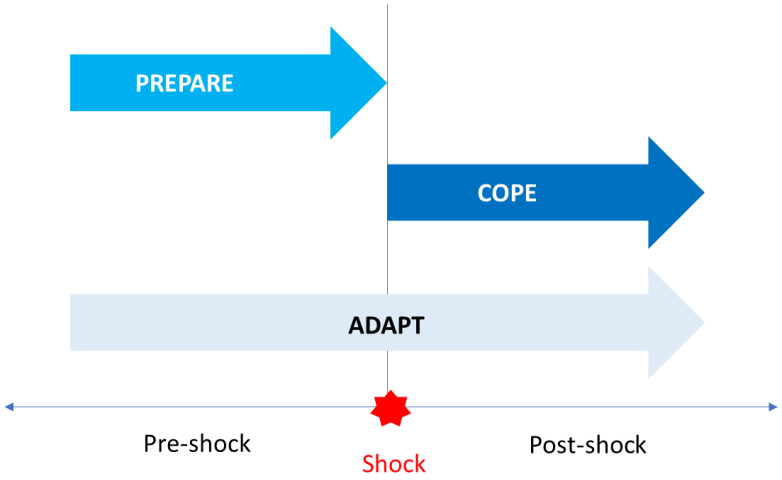

*Source: Prepared by the authors from World Bank sources.*

## Rationale for an Adaptive Safety Net System

**A well-functioning regular safety net system serves as a foundational investment to help build resilience in the poorest households.** Social safety net programs such as cash transfers serving the purpose of redistribution and poverty alleviation are used in various countries worldwide. (del Ninno & Mills, 2015[8]). Assistance delivered to poor or vulnerable households through safety nets can help increase their resilience in different ways. Pre-shock, a cash transfer, for example, provides an additional source of income that can enable beneficiary households to undertake preparedness measures (such as increased savings). Post-shock, the cash provided through a safety net program can help households better cope with shocks, smooth their consumption, and avoid negative coping strategies. Finally, safety nets can help households make long-term investments with higher returns to improve their livelihoods (e.g., adjusting assets or migrating away from highly shock-exposed areas), supporting adaptation to shocks.

[8] del Ninno, Carlo; Mills, Bradford. 2015. Safety Nets in Africa: *Effective Mechanisms to Reach the Poor and Most Vulnerable*. Africa Development Forum. Washington, DC: World Bank; and Agence Française de Développement.

*Figure 1.4: Household Resilience Building Through Safety Nets*




*Source: Prepared by the author from World Bank sources.*

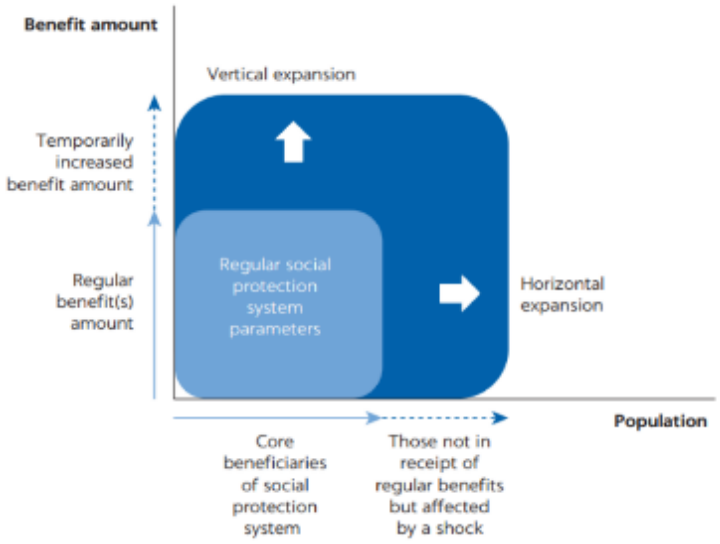
**Safety nets have increasingly been used to help poor and vulnerable households cope with different types of shocks.** The assistance provided through regular safety net programs helps households mitigate the negative impact of idiosyncratic shocks (i.e., shocks that affect households individually), such as illness, accident, unemployment, or the loss of a breadwinner. More recently, safety nets have been increasingly used as platforms to protect households in the immediate aftermath of covariate shocks (i.e., those that affect a whole locality at the same time), such as climate-related shocks, price hikes and pandemics. When covariate shocks strike, social safety nets can adapt to provide additional benefits to existing beneficiaries or increase coverage for affected poor and vulnerable households. Hence, safety nets can help create resilience and help families manage risks, cope with shocks, and continue to invest in productive assets and human capital.

**Existing safety net systems or programs can be adapted to help poor and vulnerable households cope with and respond to shocks.** Adaptive social protection systems respond to shocks by combining the regular safety net programs with a mechanism that allows their expansion primarily in two ways (see figure 1.5):

3. **Vertical expansion of an existing program involves providing existing beneficiaries with a temporary additional grant or extension of the program's duration for beneficiaries expected to exit around the time the shock hit.**
4. **Horizontal expansion** of an existing program involves the temporary inclusion of new beneficiaries, i.e., new transitorily poor or vulnerable beneficiaries from affected communities.

In addition to vertical and horizontal expansions, these programs can also be leveraged to implement new emergency programs that '**piggyback'** on existing systems (e.g., data, capacity, delivery mechanism), either led by the government or humanitarian partners.

*Figure 1.5: Vertical and horizontal expansions of social safety net programs*




*Source: Bowen et al. (2020).*

**An adaptive safety net helps with timely provision and well-targeted assistance to the poor and vulnerable.** Regular safety net programs already have systems in place to collect household's information, identify and register beneficiaries, make payments, address complaints, etc. This existing system can help with the timely provision of social assistance to poor households when a shock occurs. Also, evidence suggests that the poorest tend to be disproportionally affected by disasters given their higher exposure to risks and the more limited means they have to respond to these shocks on their own. Adaptive safety net programs tend to already support the poorest households in a community and therefore can deliver well-targeted assistance to the people who need it the most. Finally, adaptive safety nets can contribute to the disaster preparedness plans of a country as rules and financing for adaptive safety nets can be pre-agreed, making the roles and responsibilities of different stakeholders clear, and supporting disaster responses that are faster and more transparent.

**The use of adaptive safety nets has increased over the last decade, especially with a rise in climate disasters and global economic shocks from pandemics or wars.** During such times, governments have, along with the regular safety net systems, used scale-up mechanisms as discussed above, which have helped safeguard the socio-economic conditions of the poor and the vulnerable. Using an adaptive safety net can help reduce economic losses that could potentially reverse years of development gains. Below are examples of countries and situations where adaptive safety nets were established.

**In the Africa region, governments are increasingly using their social protection programs to provide additional assistance to poor and vulnerable households that are affected by droughts**. In Kenya and Uganda, for example, governments have pre-agreed on the rules for expanding or scaling up their regular social protection programs. These rules clearly determine: (i) when to scale up in the event of a drought; (ii) where to scale up; (iii) how many households to cover; and (iv) what amount of payment to provide. This approach enables a rapid and transparent response to shocks. In addition, the greater predictability of when and to what extent a scale-up will occur not only assists the target beneficiaries, but also helps the government plan its budget, thereby ensuring that resources are utilized effectively.

**Similarly, multiple governments globally undertook safety net expansions to tackle the economic fallout from COVID-19.** 218 countries put in place 2,349 social assistance or safety net measures, including 1,023 all-cash measures (including social pensions and conditional and unconditional cash

transfers), to provide short-term income support to households affected by COVID-19. (Gentilini et al., 2022[9]). The short-term impacts of COVID-19 tended to be felt most by urban households. In many ways, this brought to the fore important reconsideration of the more common approach to safety nets that tended to focus on rural poverty, given its predominance. This compelled policymakers to think about putting in place a basic safety net for the urban poor that is capable of short-term adaptive scale-ups during times of need. Sierra Leone, Malawi, and the Democratic Republic of Congo are a few examples of countries that scaled-up safety net coverage to urban households in the immediate aftermath of COVID-19 shocks (Zeufack et al., 2022[10]).

## Structure of the report

**This report focuses on adaptive safety nets as an important tool for the Angolan government to build resilience among the poor and vulnerable population against climatic risks and shocks.** The report herein is structured as follows:

- **Chapter 2: Climatic shocks and food security** – Presents an in-depth analysis of trends in climatic shocks and their links to livelihood conditions, poverty, and food security in Angola. Operationally, this analysis helps identify hotspots of historical food insecurity and weather shocks and, thereby, could help the government select geographical areas where implementing adaptive safety nets could have a greater impact. Additionally, the analysis also identifies the best suited satellite data sources to capture drought and flood risks in Angola going forward, which could inform the design of adaptive mechanisms in the future.
- **Chapter 3: Economic and price shocks, and food security –** Provides information on the dynamics and drivers of poverty and vulnerability in Angola, looking at the differences between urban and rural areas. Operationally, this analysis could inform government policy decisions about establishing a basic safety net program in urban areas that can be expanded for shock response. The chapter also provides information on price shocks, which could inform the design of adaptive mechanisms in the future, as price shocks are one of the main drivers of food insecurity in urban and rural areas. areas
- **Chapter 4: Readiness to scale up safety nets in rural areas** – Presents an assessment of the potential to adapt existing social safety net systems in rural areas in Angola using the methodology developed by the World Bank in its Stress Testing Social Protection Tool. The assessment identifies key areas of programmatic investments that could allow the Kwenda program to scale up in response to climate or price shocks in the future.
- **Chapter 5: Readiness to scale up safety nets in urban areas** – This chapter summarizes international lessons on scaling up safety nets in urban areas and then applies these lessons to Angola by outlining how an adaptive safety net could be designed and implemented in urban areas of the country, drawing on insights from the local context.
- **Chapter 6: Cost of scaling up safety nets** – The final chapter presents estimates on the costs associated with setting up an adaptive social safety net system in rural and urban areas of Angola. It discusses the main drivers of the cost of an adaptive safety net system and explores potential financial instruments that could be pre-arranged to cover these costs.

[9] Gentilini,Ugo; Almenfi,Mohamed Bubaker Alsafi; Iyengar,TMM; Okamura,Yuko; Downes,John Austin; Dale,Pamela; Weber,Michael; Newhouse,David Locke; Rodriguez Alas,Claudia P; Kamran,Mareeha; Mujica Canas,Ingrid Veronica; Fontenez,Maria Belen; Asieduah,Sandra; Mahboobani Martinez,Vikesh Ramesh; Reyes Hartley,Gonzalo Javier; Demarco,Gustavo C.; Abels,Miglena; Zafar,Usama; Urteaga,Emilio Raul; Valleriani,Giorgia; Muhindo,Jimmy Vulembera; Aziz,Sheraz. 2022. *Social Protection and Jobs Responses to COVID-19: A Real-Time Review of Country Measures*, World Bank, Washington, DC.

[10] Zeufack, Albert G.; Calderon, Cesar; Kabundi, Alain; Kubota, Megumi; Korman, Vijdan; Raju, Dhushyanth; Girma Abreha, Kaleb; Kassa, Woubet; Owusu, Solomon. 2022. *"Africa's Pulse, No. 25" (April)*, World Bank, Washington, DC.

# Chapter 2: Climatic Shocks and Food Security

Key messages

**Implementing adaptive safety nets is crucial for strengthening the long-term resilience of poor and vulnerable people against the impacts of climate shocks. However, adaptive safety net systems need to be informed by data and analytics to be effective.** The success of adaptive safety nets largely depends on their ability to scale up assistance quickly and predictably for affected communities during climate shocks. Designing an effective scale-up mechanism requires understanding past hazards and their impacts. This chapter presents an in-depth analysis of trends in droughts and floods in Angola and their links to livelihood conditions, poverty, and food security. This analysis helps identify hotspots of historical food insecurity and weather shocks, where implementing adaptive safety nets could have a greater impact. Additionally, the analysis also identifies the best-suited satellite data sources to capture drought and flood risks in Angola, which could inform the design of an adaptive mechanism in the future.

**An analysis of drought hotspots indicates that the south and southwest regions of Angola are highly vulnerable to droughts.** The most drought-prone areas of Angola include the southern pastoralist areas and two key agricultural areas: the central highlands, where maize and beans are produced, and the maize and cassava regions. The south and southwest regions of Angola also have high poverty and food insecurity levels, making their population particularly vulnerable to droughts. Furthermore, data shows that since 2010, droughts have become longer in the southern provinces of Angola. There is also a drying trend in central Angola's maize, bean, and cassava-producing areas, which could have a significant impact on food production.

**Our analysis indicates that the most significant human impacts of flooding in Angola appear to be associated with riverine flooding in socioeconomically vulnerable areas in Cunene, Namibe, Moxico, and Benguela provinces**. The highest number of historical reported flood events are in Luanda, Benguela, and Cuanza Norte; this, however, may reflect a bias toward urban areas in the underlying reporting mechanisms. The flood analysis conducted indicates that the most significant human impacts of flooding in Angola appear to be associated with riverine flooding in socioeconomically vulnerable areas around the Cunene River in Cunene and Namibe provinces, the Coporolo River in Benguela province, and the Zambezi River in Moxico province. It is in these areas that our analysis finds the biggest overlap between flood hazards and food insecurity. However, more localized and in-depth analysis is needed to better understand the occurrence, intensity, and duration of floods, as these are the result of the interaction of several factors, including water movement, topography, soil moisture content, and land use.

**A dual strategy for developing an adaptive safety net could be considered by the government to mitigate the limitations of remote sensing datasets.** Adaptive safety net programs are often effective when they pre-define the thresholds or "triggers" for mobilizing a shock response. A dual approach involves using a combination of 'hard' and 'soft' triggers. A 'hard' trigger based on remote sensing data can act as the primary method for deciding when and where to scale up safety nets in response to a climate-related shock. This 'hard' trigger increases the speed and transparency of decision making. The hard trigger, however, can be complemented with a secondary 'soft' trigger based on an evidence review of food insecurity conditions at the ground level. This soft trigger helps mitigate the

potential mismatch that sometimes occurs between remote sensing information and the conditions that households are experiencing on the ground.

**Analysis of satellite-derived datasets significantly corresponds to reported droughts, signifying the potential of using remote sensing products to set up objective and transparent scale-up mechanisms.** Mainly, the Normalized Difference Vegetation Index (NDVI), a satellite-derived product that indicates greenness, represents the most promising indicator for drought assessment in Angola. There is also a strong signal for detecting flood occurrences using satellite imagery, particularly in the Cunene River basin. Analysis of excessive rainfall shows that the key historical flood events are associated with significant positive rainfall anomalies, indicating the potential utility of satellite rainfall estimates for flood risk management. However, further localized analysis is necessary, as highlighted earlier. The government and partners could explore the viability of implementing promising mechanisms like anticipatory action, i.e., acting before the onset of a flood event, which has shown promise to strengthen adaptive safety in other countries.

**Finally, there is a great need to invest in setting up a system to collect data and monitor food insecurity conditions in Angola**. Historical and current data on food insecurity, agricultural production, and local food prices are very limited in Angola. Government and development partners could therefore consider investing in systematic data collection and dissemination for monitoring the livelihood conditions of poor and vulnerable households. The systematic monitoring of livelihood conditions in Angola would provide robust evidence to inform interventions to respond to the food insecurity crisis. From an adaptive safety nets perspective, food insecurity information could become the basis for defining a 'softer' trigger to determine where and when to scale up existing safety net programs.

## Introduction

**Adaptive safety nets can help increase the resilience of households to the threats posed by the accelerated impacts of climate change.** Providing predictable and timely support in the face of climate shocks helps alleviate irreversible long-term negative impacts on the country's poor and vulnerable populations, reducing poverty and contributing to building human capital. Establishing a scaling-up mechanism linked to existing safety net programs to assist poor and vulnerable households during a drought is a promising approach to improving resilience. The Kwenda program, Angola's flagship poverty mitigation program, provides an avenue to be responsive to growing climatic shocks to reduce poverty and to facilitate a more equitable distribution of wealth and income.

**Reliable data sources and indicators are critical for scale-up mechanisms to be transparent and objective.** Without regular *in situ* measurements, an indicator such as the satellite remote sensing offers an opportunity to continuously monitor droughts and floods over different spatial and temporal scales to understand the onset, severity, duration, and progress of events. In addition, to better understand how people are affected by shocks, socioeconomic datasets including demographic, market, livelihood, and food security datasets, help to better inform the design and implementation of a mechanism that scales up shock-responsive safety nets.

**The World Bank and the Government of Angola (GoA) are exploring the possibility of developing an adaptive social safety net system responsive to climatic shocks.** Toward this goal, this chapter aims to contribute to:

- Identify the best-suited satellite and socioeconomic data sources and models to capture drought and flood risks in Angola.

- Identify hotspots of food insecurity and weather shocks and thereby help the government select geographical areas where implementing adaptive safety nets could have the greatest impact.
- Provide recommendations on data that the government could collect to develop objective triggers to inform the timing and scope of safety net scale-ups in the future.

## Climatic shocks

**Angola has three major climatic zones, a hot and humid tropical climate in the north, a drier to desert climate from the south to the southwest, and a temperate tropical climate in the central plateau.** There are two main seasons in Angola: a hot and humid rainfall season from October to May and a dry and cool season from June to September. Rainfall is higher in the north, increasing from about 600 mm in the south to over 1600 mm in the northeast. The drier conditions in southern Angola are associated with the Benguela Front, a cold ocean current characterized by a sharp temperature gradient that results in aridity and desertification in some areas. The coastal regions are also arid or semi-arid, with rainfall ranging from 50– 100mm in parts of Namibe in the south to more than 800mm in coastal areas of Zaire and Cabinda provinces.[11]

**Angola is vulnerable to climate change and is already experiencing frequent droughts, floods, and coastal degradation.** Climate projections indicate annual temperature increases of 1 to 2 ºC in the near to medium term. Precipitation is projected to decrease by 2 percent by 2100, with the southern region experiencing a more significant decrease. Incidents of frequent and high-intensity droughts, floods, and heat waves are projected to increase. Coastal flooding is also expected to intensify because of sea level rise.[12]

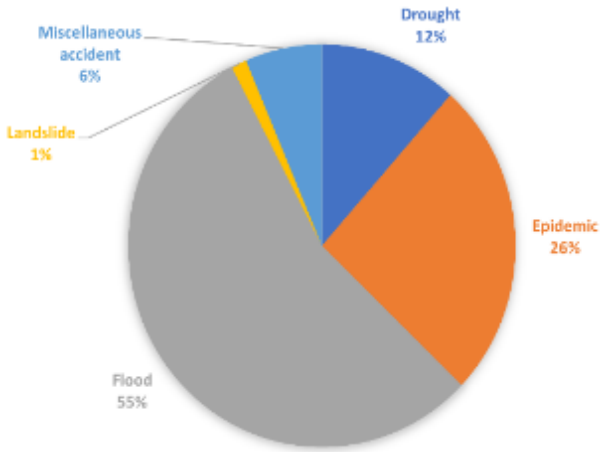
**Climate change is expected to deteriorate agricultural yields and livelihoods.** Despite its limited contribution to GDP, at 9 percent, agriculture is an important sector for Angola as it employs 51 percent of the population. Agricultural production is mainly rainfed and subsistence, with only a third of its arable land under production. Crop yield is below the sub-Saharan average, impacted by low infrastructure, limited access and use of improved technologies, and weak research and extension services.[13] Models estimate that climate change-induced drought will result in an average crop production loss ranging from 3.7 percent to 30 percent for common crops, such as cassava, maize, groundnut, millet, sorghum, potato, and banana, among others.[14]

**Climate change will produce considerable consequences for Angola's poor, half of whom depend on agriculture for their livelihoods.** Drought vulnerability is much more pronounced in southern Angola's pastoral and agro-pastoral areas. It is estimated that during the 2019 drought that affected the region, households lost 35 percent of their livestock assets.[15] More recently, the long dry spells during the 2020–21 season left 6 million people hungry and led to over 15 million people resorting to negative coping strategies.[16] Furthermore, drought is estimated to affect 13 percent of the population by 2050.[17] However, the country is also frequently affected by floods, with flooding accounting for 55 percent of natural hazard occurrences during the 1980-2020 period (Figure 2.1). The most recent devastating flood event occurred in 2009-2010, affecting more than 225,000 people and causing extensive damage to infrastructure and widespread displacement. Floods have significant implications for food security. Many rural residents live on riverbanks, making them highly susceptible to flooding

[11] FEWS NET. 2013. ANGOLA Livelihood Zones and Descriptions, November 2013. FEWS NET, Washington DC.
[12] Carvalho, S. C. P., Santos, F. D., & Pulquério, M. (2017). Climate change scenarios for Angola: an analysis of precipitation and temperature projections using four RCMs. *International journal of climatology*, *37*(8), 3398-3412.
[13] Africa Development Bank. 2017. Angola Country Strategy Paper, 2017-2021. ADB
[14] Hunter. R., Crespo. O., Coldrey, K, Cronin, K, New, M. 2020. Research Highlights – Climate Change and Future Crop Suitability in Angola. University of Cape Town, South Africa.
[15] World Bank, 2021. Angola Agricultural Transformation Project. Project Information Document.
[16] WFP, 2021. WFP Angola Country Brief. May 2021, WFP
[17] UNDRR. (2019). AGO: Angola Risk Profile - Floods & Droughts. Retrieved from http://riskprofilesundrr.org/documents/1850

and losing crops and farm assets. The direct economic loss from agriculture caused by increased flooding is projected to reach $3.5 million annually from 2050-2100.[18]

*Figure 2.1: Annual Natural Hazard Occurrence 1980-2020*




*Source: World Bank Climate Change Knowledge Portal*

## Droughts

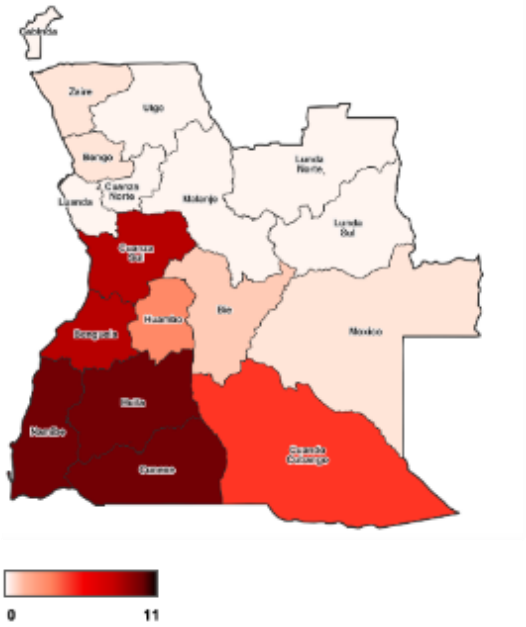
### *Detecting Drought Events*

**Reported data on historical droughts shows that the most drought prone provinces are in the country's south and west, with Cunene, Huilai, and Namibe being the most vulnerable provinces.** Historical drought information from the three largest disaster management repositories (the Emergency Events Database or EM-DAT, ReliefWeb, and DesInventar) and independent reports from Amnesty International, the World Food Programme, and the United Nations Food and Agriculture Organization[19] show that from 1977 to 2022, the provinces that are most vulnerable to drought are Cunene, Huilai, and Namibe, closely followed by Cuanza Sul, Huambo, and Benguela, which arefrequently impacted by droughts (figure 2.2). These findings suggest that the most drought-prone areas of Angola include the southern pastoralist areas (Cunene and Namibe) and two key agricultural areas: the central highlands where maize and beans are produced (Huambo, Huilai, and Cuanza Sul), and the transitional maize and cassava regions (mainly in Benguela and Cuanza Sul). The results also indicate that the southwestern parts of the country have experienced frequent, multi-year droughts since 2010. This trend suggests that droughts have become more frequent or intense in the last decade, which is also captured by satellite indicators that will be discussed subsequently. More information on drought-reported years is included in Annex I.

[18] UNDRR. (2019). AGO: Angola Risk Profile - Floods & Droughts. Retrieved from http://riskprofilesundrr.org/documents/1850

[19] Here it is important to note that the search was conducted in English, so reports that are only available in Portuguese or local languages may have been excluded.

*Figure 2.2: Number of agricultural seasons with droughts reported in each province (1977-2022)*



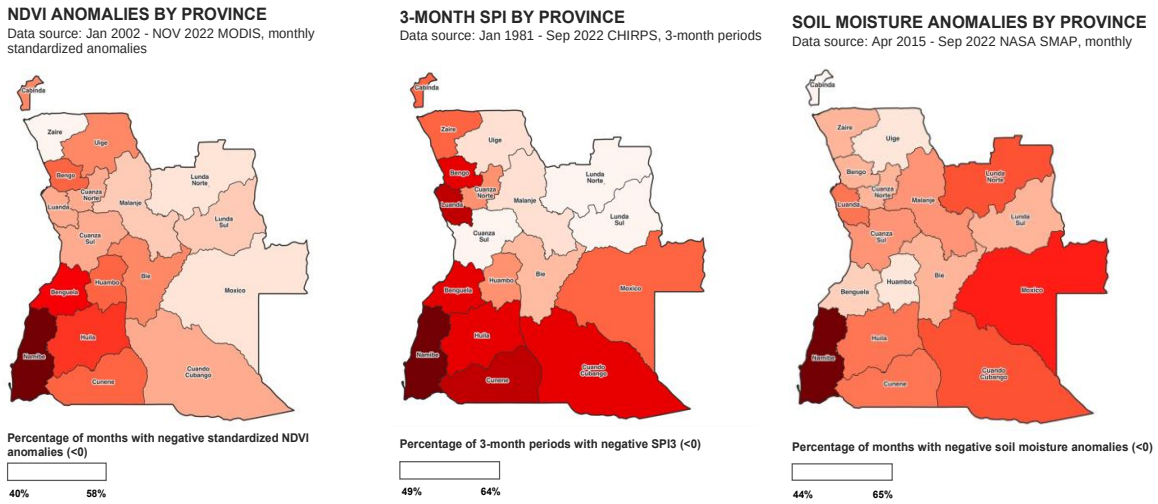

| Province | No. of affected growing seasons | Growing seasons affected by drought |
|---|---|---|
| Cunene | 11 | 1977-1978, 1981, 2004-2005, 2011-2012, 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017, 2020-2021, 2021-2022 |
| Huila | 11 | 1981, 1989-1990, 1990-1991, 2003, 2011-2012, 2012-2013, 2014-2015, 2015-2016, 2016-2017, 2020-2021, 2021-2022 |
| Namibe | 11 | 1989-1990, 1990-1991, 2009-2010, 2011-2012, 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017, 2020-2021, 2021-2022 |
| Cuanza Sul | 10 | 1989-1990, 1990-1991, 2000-2001, 2004-2005, 2011-2012, 2012-2013, 2013-2014, 2016-2017, 2020-2021, 2021-2022 |
| Benguela | 10 | 1981, 1988-1989, 1989-1990, 1990-1991, 2011-2012, 2012-2013, 2013-2014, 2016-2017, 2020-2021, 2021-2022 |
| Cuando Cubango | 7 | 1981, 2012-2013, 2013-2014, 2016-2017, 2019-2020, 2020-2021, 2021-2022 |
| Huambo | 5 | 2011-2012, 2012-2013, 2016-2017, 2020-2021, 2021-2022 |
| Bié | 3 | 1981, 2011-2012, 2012-2013 |
| Bengo | 2 | 2011-2012, 2012-2013 |
| Moxico | 2 | 2011-2012, 2012-2013 |
| Zaire | 2 | 2011-2012, 2012-2013 |
| Cabinda | 0 | |
| Cuanza Norte | 0 | |
| Luanda | 0 | |
| Lunda Norte | 0 | |
| Lunda Sul | 0 | |
| Malanje | 0 | |
| Uige | 0 | |

*Source: Drought data from EM-DAT, ReliefWeb, DesInventar, Amnesty International, WFP, and FAO. The years 2021-2022 represent the agricultural season, starting in October 2021 and ending in May 2022.*

**In addition to drought-reported years, satellite data sources can be used to identify historical drought years and monitor future drought conditions.** Over 25 remote sensing datasets are available in Angola. These datasets include remotely sensed rainfall indicators, water availability, and soil moisture. Using criteria that included historical data availability, temporal and spatial resolution, timeliness of data release, and ease of use, three satellite data sources were shortlisted to conduct drought analysis in Angola: (a) the Normalized Difference Vegetation Index (a proxy for vegetation health from NASA's Moderate Resolution Imaging Spectroradiometer, MODIS), (b) rainfall dataset ( from the Climate Hazards Group InfraRed Precipitation with Station Data, CHIRPS), and (c) soil moisture (from NASA's Soil Moisture Active Passive, SMAP). The box below provides more information on each of these sources of data. Annex II also provides more information on the remote sensing sources used in the analysis presented in this chapter.

**Drought years were identified using the three shortlisted satellite data sources (NDVI, rainfall, and soil moisture) by looking at their variations from historical levels in each province.** These variations, also referred to as anomalies, are the difference between the values observed at a particular point in time in a specific province and the long-term averages in that province. Negative variations or anomalies are associated with poorer vegetation, rainfall, or soil moisture conditions compared to historical levels. The negative variations or anomalies of the three remote sensing products capture droughts during the reported years (Figure 2.3). However, the different indicators highlight different areas of interest. NDVI anomalies generally show that areas in southwestern and central Angola are the most affected by drought, consistent with reported droughts. A commonly used measure for rainfall variation—the 3-month standardized precipitation index, or SPI—indicates a high frequency of meteorological drought in southern Angola and northwestern Angola but not in Cuanza Sul (where there have been at least ten reported droughts in the period covered), suggesting that precipitation has limits as a predictor of drought in parts of Angola. In contrast, soil moisture anomalies show a higher frequency of droughts in Namibe and eastern Angola, where limited droughts have been reported.

*Figure 2.3: Frequency of negative anomalies of NDVI (left), rainfall (centre), and soil moisture (right)*



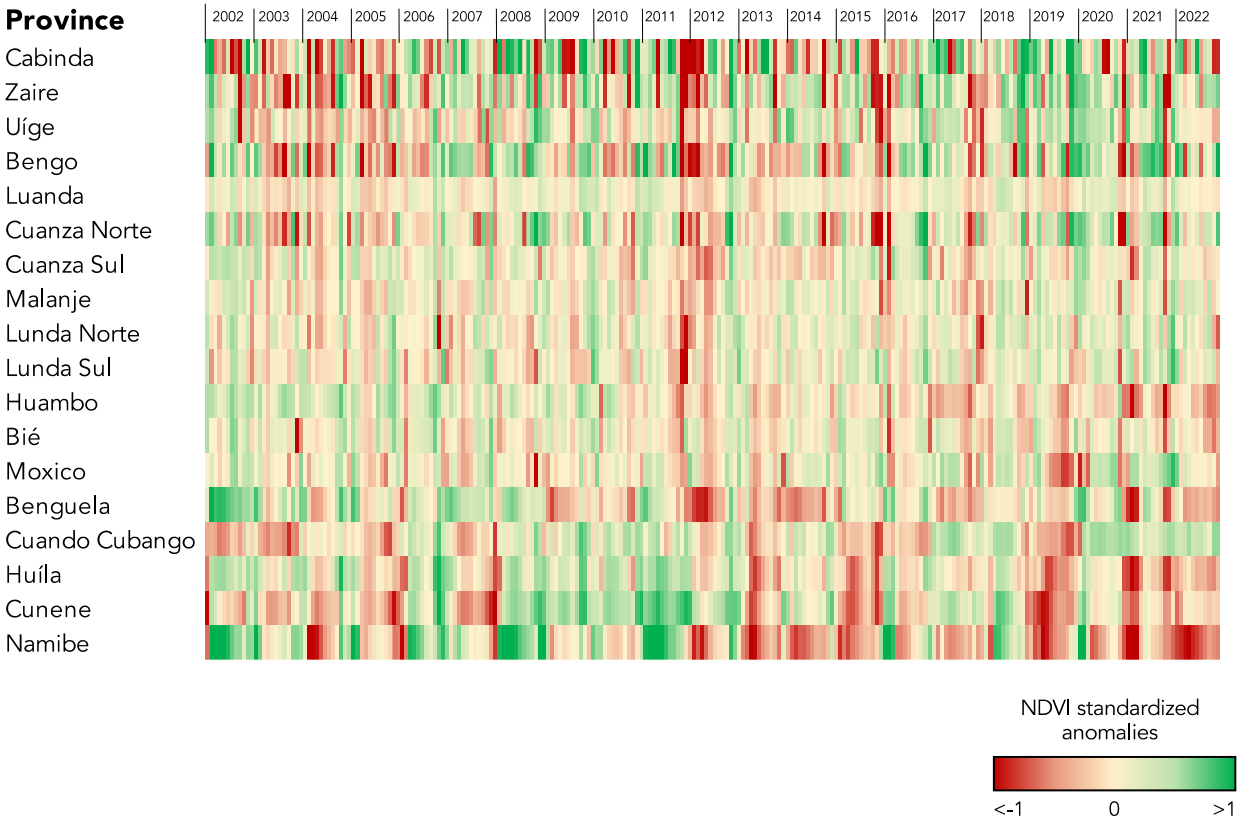

*Sources: Data from MODIS, CHIRPS, and SMAP*

**Based on this overview, NDVI variations or anomalies represent the most promising indicator for drought assessment in Angola.** Over a decade of research shows that NDVI is an effective drought metric in cropping and pastoral areas. The analysis shows that NDVI variations or anomalies are better than rainfall or soil moisture variations at reflecting the years where droughts were reported at the province level in Angola. For example, in 2012, most provinces experienced negative NDVI anomalies, consistent with one of the longest and most severe droughts on record that affected most of Angola. Subsequent drought analysis, therefore, focuses on NDVI.

### *Drought Trend Analysis*

**Historical patterns at the province level show that droughts in southern Angola are recurrent and prolonged compared to northern provinces**. Figure 2.4 shows monthly NDVI anomalies per province, with reduced vegetation shown in red and increased vegetation in green (see Annex III for timeseries of NDVI anomalies by province). Results indicate that in northern Angola, periods of negative NDVI anomalies (poor vegetation conditions) are followed by positive anomalies (good vegetation conditions). These trends suggest that droughts have a specific seasonality in the north, and subsequent rains allow for vegetation recovery. In contrast, in southern Angola, protracted droughts result from several consecutive months of anomalous climate conditions. Recurrent and prolonged droughts in southern provinces can erode livelihoods and exacerbate poverty trends. Particularly at-risk communities include pastoral and agropastoral communities in Cunene, Namibe, Huilaei, and Cuando Cubango. In this context, reduced vegetation translates to lower availability of grazing land for cattle rearing and, therefore, unhealthy livestock, and potentially lower availability of meat and milk for consumption and sale.

*Figure 2.4: Standardized monthly NDVI anomalies (green = positive, red = negative) by province*

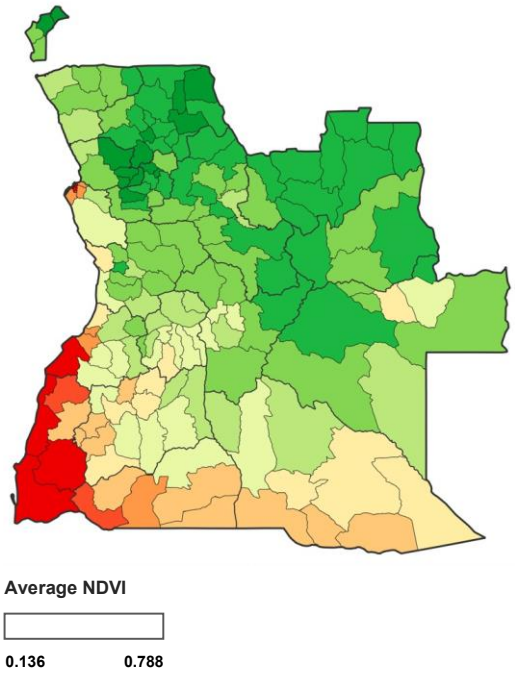



*Source: Data from MODIS (NASA). To the extent possible, provinces are shown from north to south to highlight regional patterns.*

**At the municipality level as well, this analysis is consistent, as southern areas in Angola appear to be more arid and experiencing longer droughts.** NDVI values are lower in the arid and semi-arid municipalities of southern and southwestern Angola, shown in red in Figure 2.5[20] In contrast, the highest NDVI values are in the highly forested areas of the Congo Basin in northern and northeastern Angola, as shown in green in the figure below. Moreover, municipalities in southern Angola appear to be "hotspots" for protracted drought events. This is shown in Figure 2.6, which maps the average length (measured as the number of consecutive months) with negative NDVI anomalies by municipality. The municipalities experiencing longer droughts on average present over nine months of consecutive NDVI anomalies.

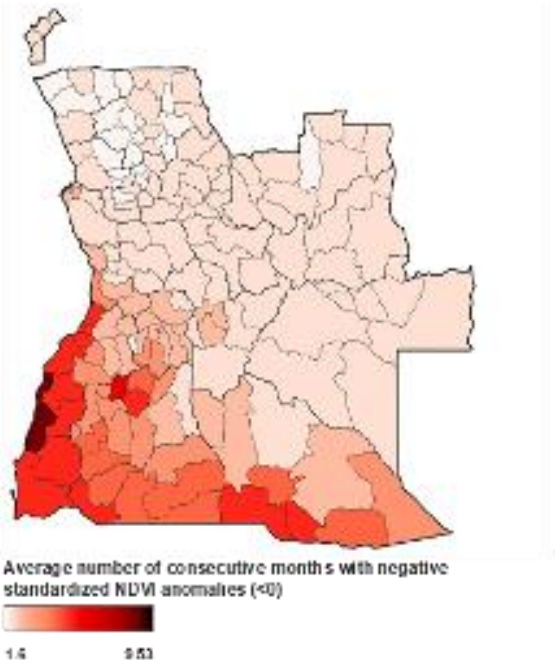
[20] Luanda also has low NDVI values; however, this is mainly due to low vegetation given that it is a highly built-up area and therefore low NDVI values are not related to drought conditions.

*Figure 2.5:* Average NDVI values by municipality




*Source: Data from MODIS (NASA).*

*Figure 2.6:* Hotspots of prolonged drought events




*Source: Data from MODIS (NASA). Prolonged drought events are measured by the average number of consecutive months with negative anomalies. Note: The picture illustrates average number of consecutive months with negative standardized NDVI anomalies.*

## Floods

### *Detecting Flood Events*

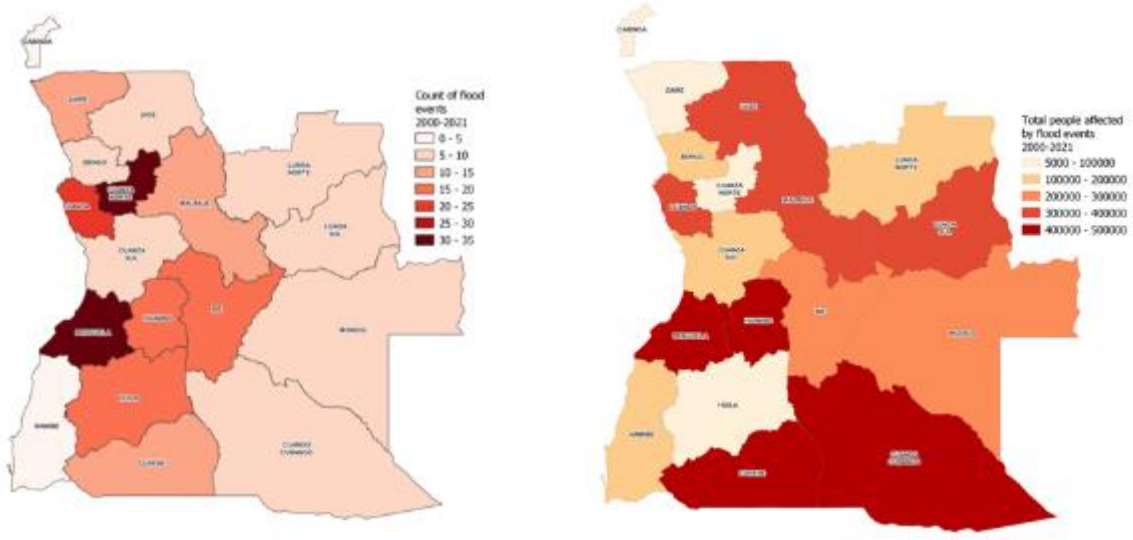
**Angola faces frequent flood events of different types.** According to the EM-DAT data, between 2000 and 2022, a total of 44 floods were reported in the country, making it the most frequent disaster in Angola. Over 40 percent of the reported flood events are riverine flooding. Riverine floods are generally confined to established floodplains and result from extended rainfall over several days, short bursts of intense precipitation, or blockages caused by debris that lead to the overflowing of rivers or streams and subsequent inundation of the surrounding area. Other types of floods reported in Angola are flash floods that can result in landslides and urban inundations. Flash floods are characterized by a rapid and powerful surge of water, typically caused by heavy rainfall in a short period or dam or levee failures. Finally, Angola also experiences flooding related to coastal storm surges.

**The province with the highest number of floods reported, Benguela and Cuanza Norte, while Cunene province has the highest numbers of people impacted by floods.** Combining the EM-DAT and DesInventar databases—the most comprehensive historical records on flood events in Angola—the frequency of flood events and the number of people affected during the 2000-2021 period are mapped by province (see Figure 2.7). The provinces that reported the most floods are Cuanza Norte and Benguela, with over 30 reported during the past 21 years, followed by Luanda. A greater number of reported flood events in these provinces may reflect a bias toward urban areas in the underlying news media information and not a greater incidence of floods per se. In this sense, looking at the estimated number of people affected reported by the same databases points to the fact that flood impact is felt in a greater range of areas—both the coastal cities and the areas on the Cunene River

(Cunene, Cuanda Cubango) and the Zambezi River (Lunda Sul, Moxico). Cunene is the province with the highest numbers of people impacted by floods.

*Figure 2.7: Flood events between 2000 and 2021*

*Number of reported events* *Number of people impacted*




*Sources: EM-DAT and DesInventar.*

**Satellite remote sensing can be used to monitor changing water levels and detect potential flood events; however, it has significant limitations.** The occurrence, duration linked, and intensity of flood events typically involve complex hydrological processes, including the interaction of water movements with topography, soil moisture content, and land use. For example, even with the same amount of rainfall, the resulting flooding outcome can differ significantly depending on the location. Among the different types of floods, slow-moving riverine floods are the most feasible to measure using remote sensing data[21]. Hence, the analysis focused on riverine areas for this report.

**Recognizing the limitations, two satellite data sources have been considered for flood analysis in Angola.** The first source of information considered is an excessive rainfall measure using CHIRPS satellite data. While excess rainfall is straightforward to measure,[22] it may not capture the complete hydrology of floods. Moreover, the CHIRPS satellite product is optimized to detect drought and exhibits known biases in its extreme rainfall estimates. The second product is the MODIS Near Real-Time (NRT) Global Flood Product (MCDWD). MCDWD is a dataset produced by NASA that uses imagery to identify areas currently experiencing flooding and provides information on the extent and severity of the flood. MCDWD offers a more direct measure of surface water. However, it has known limitations, including that it is algorithmically complicated to construct, can be blocked by cloud cover, and has issues related to missing data.

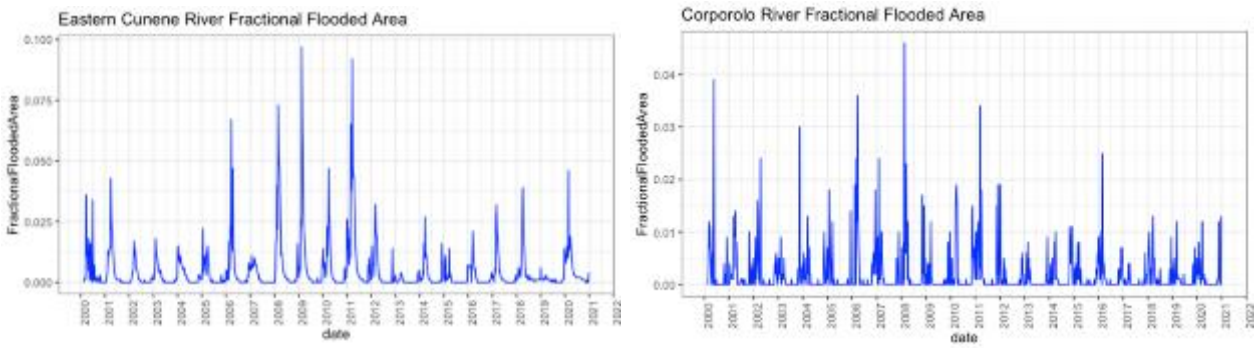
**Satellite flood analysis in the rest of the section focuses mainly on Benguela and Cunene.** These are the provinces that have more floods reported and more people affected by floods, respectively. Also, in both provinces, the most impactful floods reported are riverine floods, which are best captured by satellite sources.[23] Two watersheds corresponding to these provinces were considered in the analysis:

[21] Winsemius, H. C., Jongman, B., Veldkamp, T. I. E., Hallegatte, S., Bangalore, M., & Ward, P. J. (2018). Disaster risk, climate change, and poverty: Assessing the global exposure of poor people to floods and droughts. *Environment and Development Economics*, *23*(3), 328–348.
[22] Excessive rainfall is expressed as an anomaly, i.e., the difference in standard deviations from the 10-day climatological average in that area.
[23] The historical flood-year list in Benguela may also include some coastal floods, which are more challenging to measure with remote sensing.

the area around the Coporolo River near Benguela and the Cunene River floodplain. The Coporolo River, an ephemeral river[24] known to flood frequently, sits just east of Benguela municipality. Cunene, however, sits on the banks of the Cunene River, a permanent body of water. Many pastoralists and agro-pastoralists live in this area. This area is a floodplain, so seasonal inundation is common. Annex IV provides more information on the remote sensing flood analysis conducted for these two areas.

**The MCDWD satellite product captures historical reported floods in the Cunene River basin, but this is not the case in the Coporolo River basin near Benguela**. Figure 2.8 shows a time series of the fraction of flooded area over time as measured by MCDWD, averaged over each river basin study area. On one hand, the signal of a fractional flooded area in the Cunene River basin appears to be strong. The three worst reported flood years in the Cunene River basin—2009, 2010, and 2011—are all clearly identified as anomalous in MCDWD. On the other hand, the fractional flooded area that MCDWD can measure around the Coporolo River basin is very small, suggesting that there is little surface water that can be reliably detected. The largest years in the fractional flooded area bear little relationship to the flood years identified in humanitarian reports.

*Figure 2.8: Fractional flooded area in Cunene and Coporolo river basins, 2000-2021*



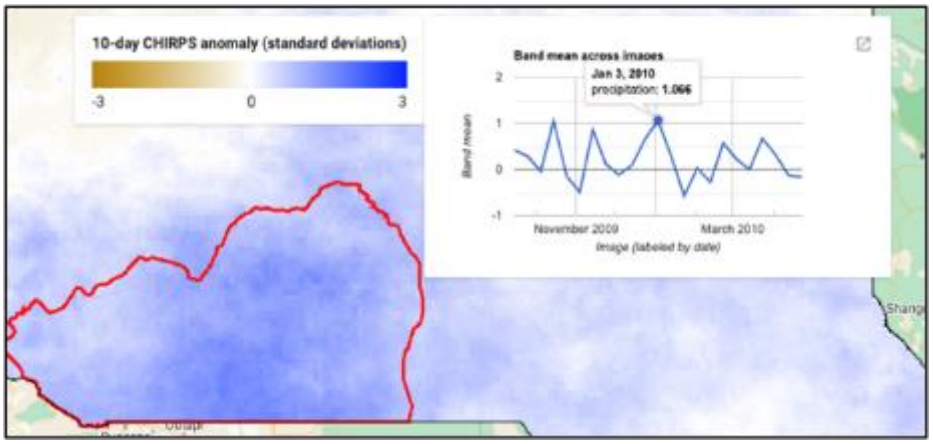

*Sources: Data from MODIS Near Real-Time (NRT) Global Flood Product (MCDWD)*

**Satellite rainfall estimates prove promising for tracking floods in both Cunene and Benguela.** In general, we see that all the key flood events considered are associated with significant positive rainfall anomalies, most of which fall around the reported timing of the event. As an example, the progression of CHIRPS rainfall during the 2009/10 rainfall season reasonably coincides with a key flood event reported in Cunene (see Figure 2.9). Similarly, the reports in Benguela coincide with CHIRPS anomalies earlier in the season. While initial analysis signals the potential of detecting flood events vis-à-vis excessive rainfall using satellite remote sensing datasets in these two provinces in Angola, an in-depth analysis is required to better understand the relationship between excessive rainfall and reported flood years for each location. This is because excessive rainfall events do not always result in flooding, as the risk of flooding depends on a variety of factors, including the intensity and duration of the rainfall, the topography and soil conditions of the area, and the presence of infrastructure such as drainage systems.

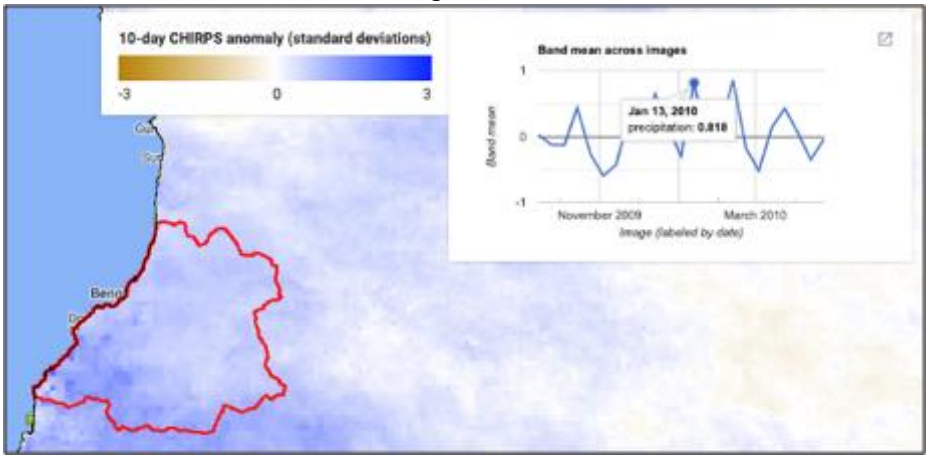
[24] Ephemeral River is a seasonal river that flows only during the rainy season.

*Figure 2.9: Progression of CHIRPS rainfall during the 2009/10 season in Cunene and Benguela*

Cunene




Benguela




*Sources: Data from CHIRPS.*

**Although remote sensing datasets have the potential to detect flood events, effective use of these products to inform scale-up mechanisms in adaptive safety nets necessitates appropriate tailoring for the specific event and context.** Given the frequent flooding that affects both urban and rural areas in Angola, improving the country's capability to assess, prepare, and respond to flood disasters is critical. Acting before the onset of a flood event—known as Anticipatory Action—is increasingly proven to be an attractive mechanism for reducing the impact of disasters on households and communities.[25,26] However, a more tailored approach for a specific region in Angola would be needed. That would entail acquiring additional data and sophisticated modeling of all variables that drive the risk of flooding, such as slope, elevation, the topography of the land, and river or stream flow rates. It is recommended that an in-depth study be undertaken to assess the feasibility of implementing an anticipatory action mechanism for floods in the Angolan context. Lessons can be drawn from World Bank programs in other African countries (e.g., Sierra Leon's Shock Responsive Social Protection Project).

[25] Pople, A., Hill, R. V., Dercon, S., and Brunckhorst, B. (2021), 'Anticipatory Cash Transfers in Climate Disaster Response', Working Paper 6, Centre for Disaster Protection, London.

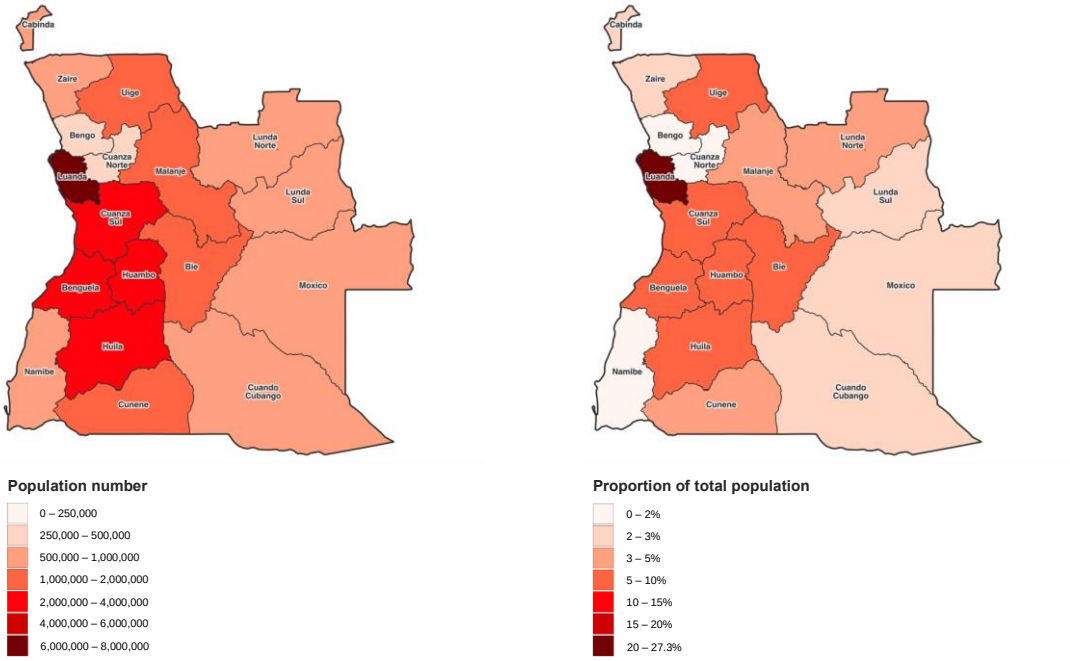
[26] Aguirre, J., Ugarte, D.D.L.T., Bazo, J., Quequezana, P., and Collado, M. (2019), 'Evaluation of early action mechanisms in Peru regarding preparedness for El Niño', International Journal of Disaster Risk Science, 10(4), pp.493-510.

## Food security and vulnerability

### Population and poverty

**Angola's National Institute of Statistics (INE) estimates that, in 2018/19, the population was approximately 30 million.** Most of the population is in the western part of the country, while the eastern part is only sparsely populated. Around 8 million inhabitants are concentrated in the capital city, Luanda. Approximately 43 percent of Angola's population lived in rural areas in 2021.[27] More than 85-90 percent of the rural populations in Angola rely on subsistence agriculture as their primary source of livelihood. Most rural agriculture is subsistence, with little or no marketable surplus. The coastal area being an exception, where irrigation is practiced by commercial farmers and, to some extent, the tuber-producing northern provinces.

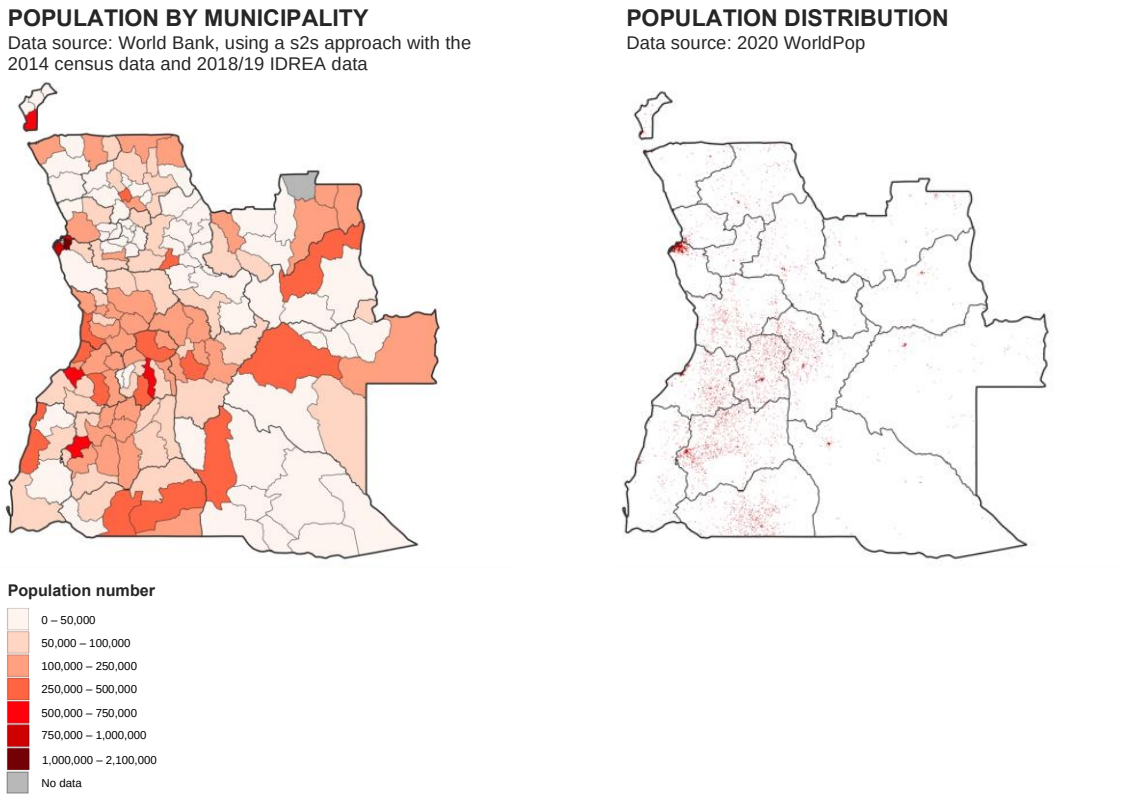
*Figure 2.10: Population by province, by number of people (left) and as a proportion of the total population (right)*




*Source: 2018/19 INE Survey on Expenditure, Revenue and Employment in Angola (IDREA).*

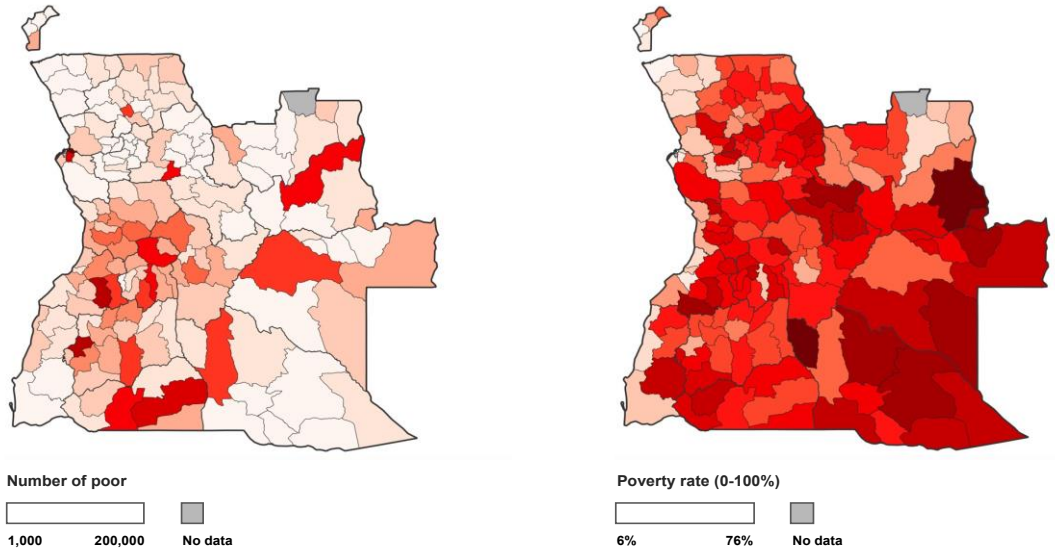
[27] World Bank indicators: https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS?locations=AO

*Figure 2.11: Population by municipality and population distribution*




**Based on the World Bank estimates (based on the Survey of Income, Expenditure and Employment in Angola (IDREA) and census data), poverty is widespread in Angola, with a third of the population living in poverty.** The highest numbers of poor are concentrated in some municipalities in Luanda, central, southern, and eastern provinces, as shown in Figure 2.12. The results are similar for the multidimensional poverty index and the relative wealth index. For more information on these indicators and additional socioeconomic indicators, please refer to Annex V.

*Figure 2.12: Poverty by Municipality, 2018-19*



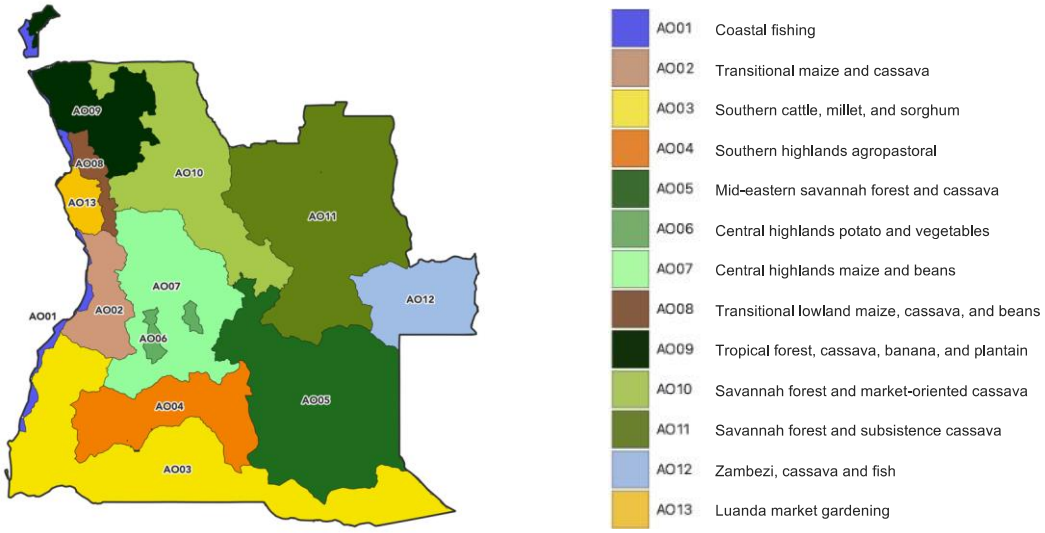

*Sources: World Bank estimates using data from 2014 census and 2018/19 IDREA.*

## Livelihood zones and food insecurity

**There are 13 main livelihood zones in Angola with varying food insecurity risks** (see Figure 2.13)**.** The livelihood zones that have low food security risk due to high productivity and a diversified production

system extend mostly over the northern, central, and eastern regions of the country. Livelihood zones such as: Coastal fishing; Mid-eastern savannah forest and cassava; Central highlands potato and vegetable; and Transitional lowland maize, cassava, and beans have low food insecurity risks, and their exposure to drought and flood risks is limited. Other livelihood zones also have low food insecurity risk, though they are more exposed to excessive rainfall and seasonal flooding; these are: the Transitional maize and cassava; the Tropical forest, cassava, banana, and plantain; the Savannah forest and market-oriented cassava; and the Zambezi, cassava, and fish livelihood zones.

*Figure 2.13: Livelihood Zones of Angola*

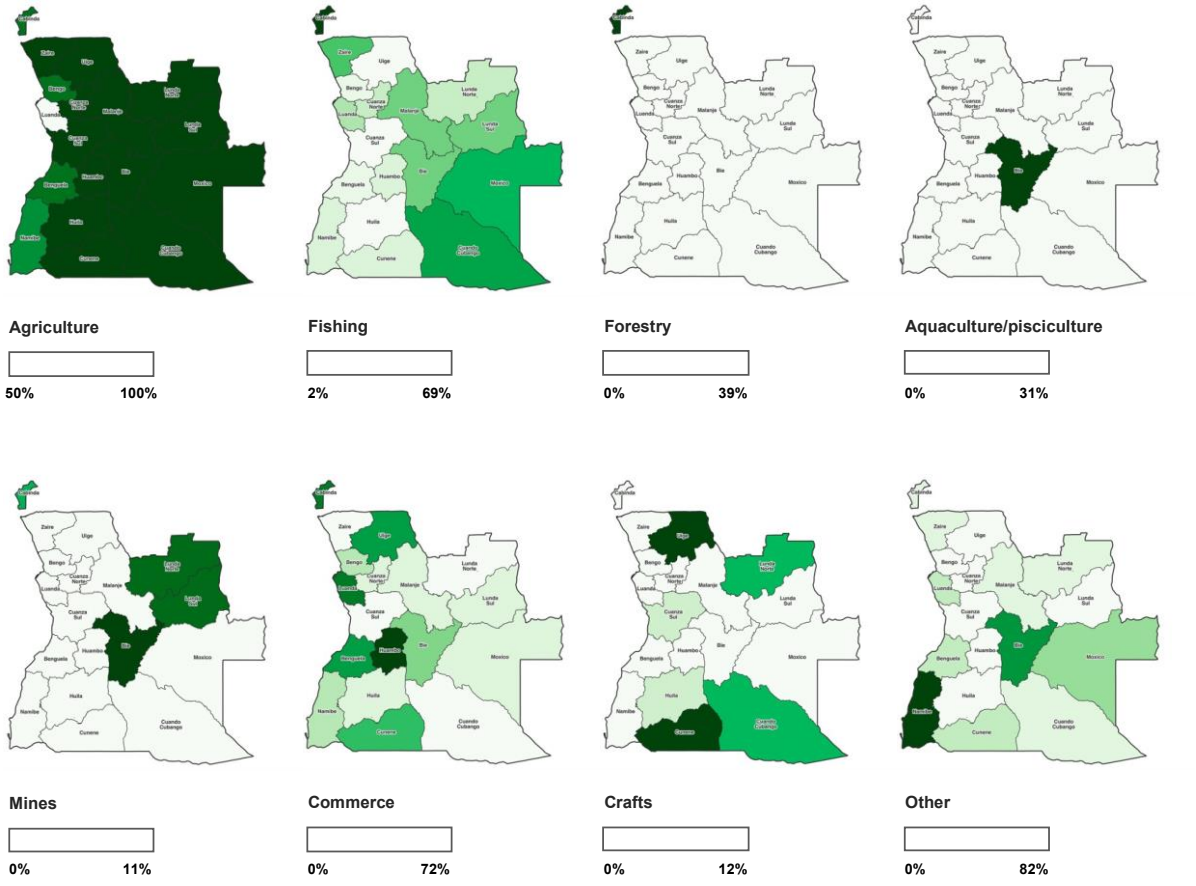



*Source: FEWS NET, 2016*

**The two livelihood zones that have a high food insecurity risk are in southern and central Angola.** According to the Famines Early Warning Systems Network (FEWS NET), the Southern cattle, millet, and sorghum and Central highlands maize and beans livelihood zones are the two livelihood zones that have a high food insecurity risk. The food insecurity risk is driven by semi-arid conditions and low productivity in the Southern cattle, millet, and sorghum livelihood zones. Whereas high population density and relatively small size of cultivable land are key drivers of food insecurity in the Central highlands maize and beans livelihood zones. The Savannah forest, subsistence cassava, and Luanda market gardening livelihood zones are characterized by moderate food insecurity risk due to subsistence production and low productivity.

**Agriculture is a dominant activity in villages in Angola** (see figure 2.14). The IDREA survey in 2018–19 collected information from village chiefs on major economic activities, and responses show that agriculture is the predominant activity in all provinces except Luanda. Prolonged droughts cause extensive damage to agricultural production, both crop yields and livestock, in Angola, often leading to shortages of local food production. In addition, when droughts affect the key producing areas of the country, reduced crop production can affect national food availability and increase food prices in local markets.

*Figure 2.14: Main economic activities in villages*

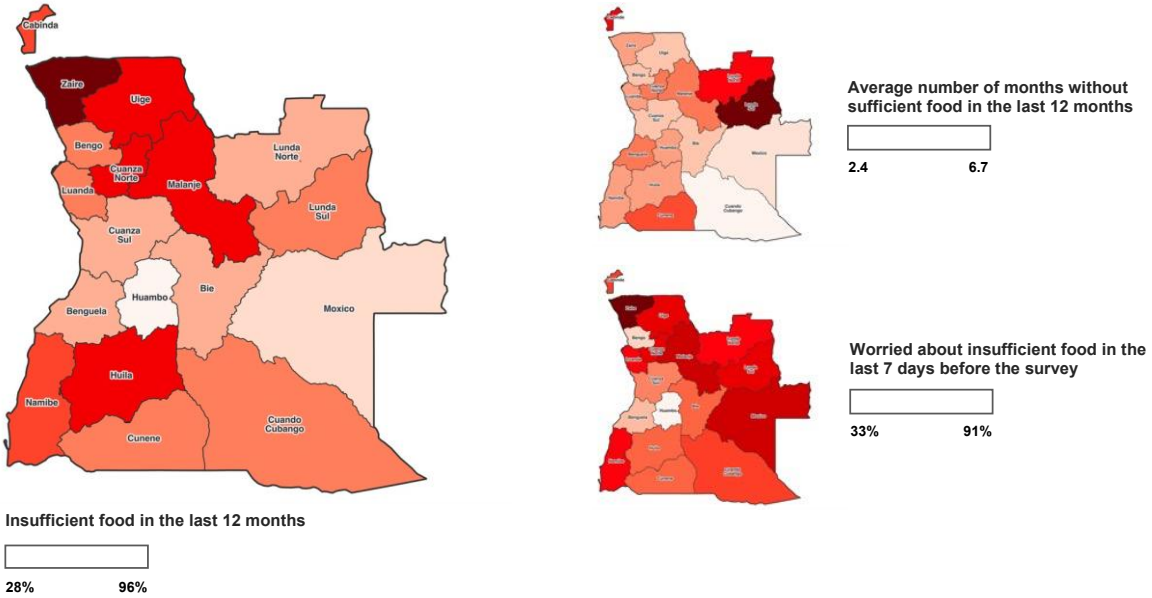



*Sources: Data from 2018/19 IDREA.*

**Angola's population suffers from high rates of food insecurity, especially among the poor.** According to the 2018/19 IDREA survey, over half of all households reported insufficient food during the last 12 months, and over two-thirds were concerned about food shortages in the seven days before the survey (see figure 2.15). Similarly, the WFP's mVAM assessment from January 2022 to January 2023 estimated that 10 percent of Angola's population suffered from insufficient food consumption, 36 percent resorted to crisis (or more extreme) food coping strategies, and 30 percent employed crisis or emergency livelihood coping strategies. WFP mVAM data shows that the food situation was particularly severe in the southern provinces, especially in Cunene, where 37 percent of the population suffered from insufficient food consumption. These provinces also have a high number of households living below the poverty line, worsening the food insecurity conditions when a shock occurs.

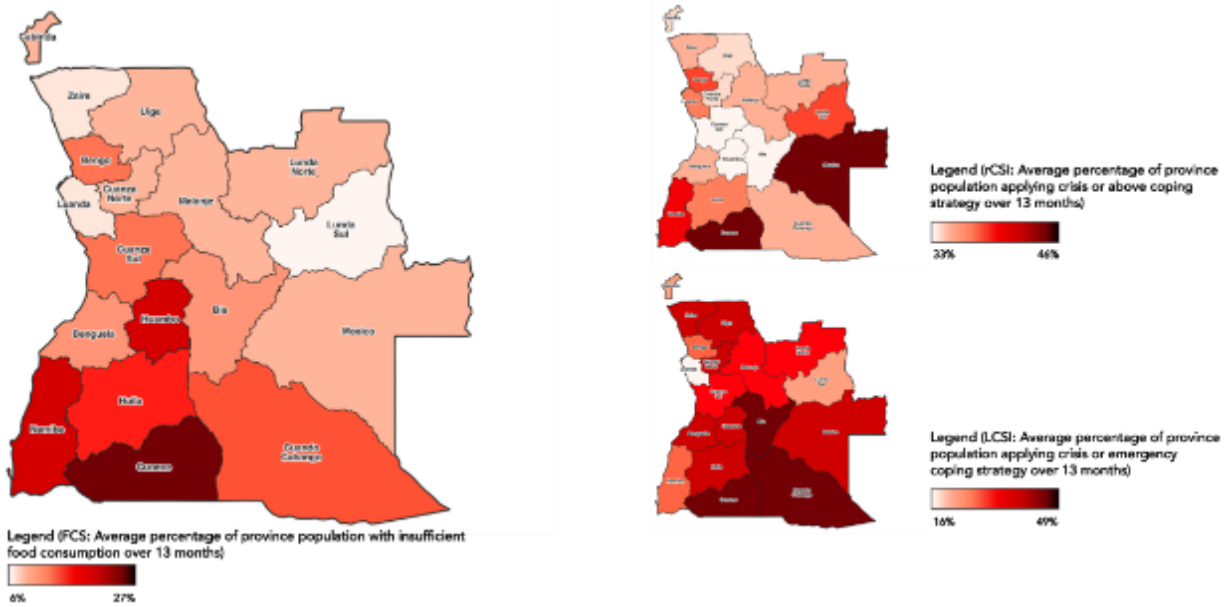
**The food insecurity of households can vary significantly over time, yet historical data and monitoring of food insecurity conditions are limited in Angola.** Food insecurity can be caused by a range of shocks, such as droughts, floods, political situations and conflict, and global economic conditions. The 2018–19 IDREA survey and the WFP's mVAM assessments provide important insight into the food security situation of Angola's population. However, there are currently no datasets with food security data over a longer period of time for Angola. Due to this, it is difficult to analyze the interconnectedness of droughts and floods with food insecurity conditions in the country.

*Figure 2.15: Reported Food Security by Survey Respondents*




*Sources: Data from 2018/19 IDREA.*

*Figure 2.16: Insufficient food consumption by province (Jan 2022 – Jan 2023)*




*Sources: WFP mVAM. Data for Luanda is city is excluded.*

## Hotspots for climate shocks and vulnerability

**Climate-related shocks, such as droughts and floods, and poverty are closely interlinked.** First, poorer populations are more vulnerable to drought and flood events, as they are less likely to be able to prepare for such events and lack the financial resources to access clean water and nutritious food during these events. Second, droughts and floods can erode livelihoods, diminish income from agricultural activities, reduce crop yields (and indirectly impact food prices), and exacerbate poverty through multiple pathways. For example, the increased likelihood of drought and floods makes investments riskier, and people may decide to invest less, making it difficult for people living in such areas to escape poverty.

**Hotspots of drought vulnerability are identified by combining NDVI and poverty data.** To determine the most drought-prone areas, municipalities are classified into quintiles based on the average length of droughts, which is measured by the number of consecutive months of negative NDVI anomalies—a proxy for areas that are most likely to experience drought events. To determine vulnerability areas, municipalities are classified into quintiles based on the number of poor people. We classify priority levels of areas by considering the highest quintile scores for each indicator according to the criteria in Table 2.1. Priority level 1 and 2 indicate areas with the highest likelihood of experiencing drought events along with the highest number of poor residents in those areas.

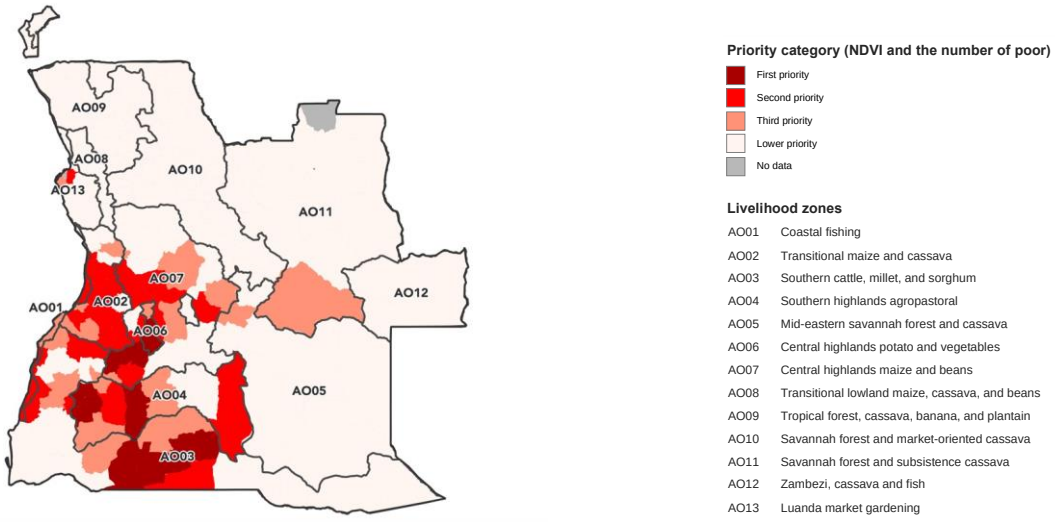
*Table 2.1: Hotspot Analysis Prioritization Matrix*

| Priority level | NDVI quintile | Poverty quintile |
|---|---|---|
| Priority 1 | 5 | 5 |
| Priority 2 | 4 | 5 |
| | 5 | 4 |
| Priority 3 | 4 | 4 |
| | 5 | 3 |
| | 3 | 5 |

*Sources: Author's estimations.*

**The most impacted municipalities are in the southern and central areas of Angola** (see Figure 2.17 for results). This is not surprising, as analysis in previous sections identified these regions as being the most drought-prone and having high levels of poverty and food insecurity. A handful of municipalities that depend on savannah forestry and cassava in the country's east are also vulnerable. Finally, municipalities in Luanda are highly vulnerable.

*Figure 2.17: Hotspots of drought vulnerability based on NDVI and absolute poverty numbers.*



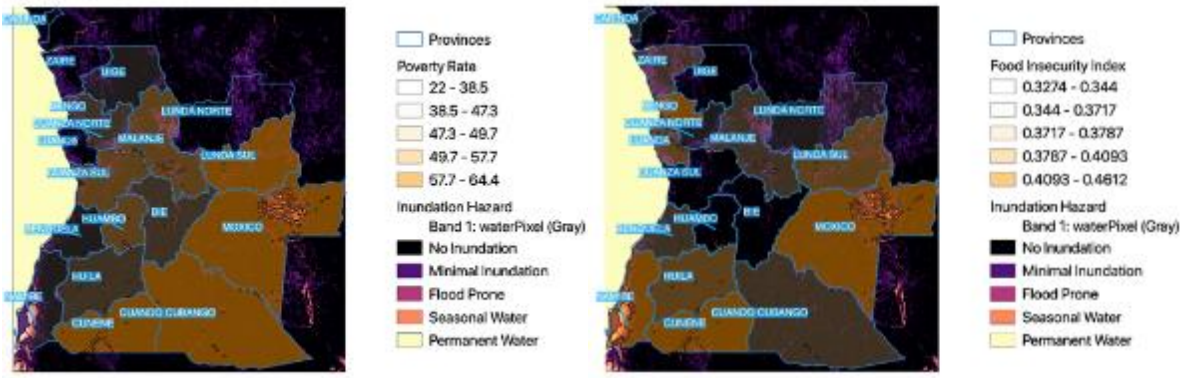

*Sources: Author's estimations.*

**Cunene, Namibe, and Moxico provinces were identified as hotspots for flood vulnerability by overlaying MCDWD information with poverty and food insecurity data.** Our analysis indicates that food insecurity is correlated with the local incidence of flooding in most of Angola. We see the most significant overlap between flood hazards (i.e., the areas prone to regular inundations as measured by MCDWD) and food insecurity in two river basin areas: the area around the Cunene River in Cunene and Namibe provinces, and the area around the Zambezi River in Moxico province. Both areas exhibit a high incidence of recorded, measurable riverine floods as well as a high level of average food insecurity. Cunene and Moxico provinces also exhibit a high per capita poverty rate, while the poverty

rate in Namibe province is closer to the national average of around 45 percent. Given the location-specific nature of flood risk, further analysis is required to accurately identify the communities that are most vulnerable to this type of risk.

*Figure 2.18: Overlap between incidence of flooding and vulnerability measure*

*MCDWD and Poverty Rate* *MCDWD and mVAM Food Consumption Score*




*Sources: Author's estimations.*

## Recommendations

**Adaptive safety net programs are often effective when they pre-define the thresholds or triggers for mobilizing a shock response.** Other countries in the region have used a dual-trigger approach in the design of scale-up mechanisms for adaptive safety nets. A dual-trigger approach combines a 'hard' trigger based on remote sensing data with a 'softer' trigger based on data sources that capture ground-level food insecurity conditions. Including a 'hard' trigger based on satellite data sources has several advantages, as these tend to be more objective (i.e., not influenced by geographical and political considerations), released in a timelier manner, and available for longer historical periods. While the hard trigger increases the objectiveness, speed, and transparency of an adaptive safety net mechanism, a softer trigger is also needed to mitigate potential cases where the there is a mismatch between the satellite information and the conditions that households are actually facing on the ground.

**The analysis presented in this chapter shows potential for using satellite data sources to capture drought and flood risks and therefore act as a 'hard' trigger to inform the scale-up of safety nets in Angola.** The satellite datasets and indicators reviewed present a high correlation to reported historical droughts and flood events, signifying the potential of using remote sensing products to set up objective and transparent scale-up mechanisms. Mainly, the Normalized Difference Vegetation Index (NDVI), a satellite-derived product that indicates greenness, represents the most promising indicator for drought assessment in Angola. Indicators such as NDVI monthly anomalies, periods of consecutive negative anomalies, or intensity may be good starting points for a drought 'hard' trigger design. There is also a strong signal for detecting flood occurrences using satellite imagery, particularly in the Cunene River basin. Analysis of excessive rainfall also shows that the key historical flood events are associated with significant positive rainfall anomalies, indicating the potential utility of satellite rainfall estimates for flood risk management.

**Additional in-depth analysis is, however, needed to design a 'hard' trigger that can accurately capture drought and flood conditions in particular geographical areas in Angola**. Typically, different indicators are tested and correlated with historically reported droughts, floods, and food insecurity to select the one that is most likely to identify droughts going forward. However, no matter how well the

indicator fits the historical data, there could always be a discrepancy in the future between the drought conditions indicated by the satellite indicator and the conditions on the ground. It is therefore important to consider complementary sources of data to inform the scale-up of safety nets, such as data related to food insecurity conditions, food prices, or agricultural yields.

**Additional investments are needed to systematically monitor and collect food insecurity information in Angola.** The lack of historical food security, agricultural production, and local food price time series data makes it challenging to sufficiently understand the extent to which historical drought and flood events are related to food insecurity in the country. The government and partners could consider investing in collecting and disseminating these types of data. More investment in household-level food security monitoring would be key to informing a 'softer' trigger for adaptive safety nets.

**Our analysis reveals that implementing an adaptive safety net system to respond to drought shocks could have a greater impact in south, southwest, and central Angola.** These areas are highly affected by drought and have high poverty levels. A safety net scale-up mechanism targeting these areas could protect the poorest and most vulnerable households in the country against droughts. In addition, there is a drying trend in central Angola's maize, bean, and cassava-producing areas. While severe levels of food insecurity are not reported in these areas, increasing the risk of intense drought could significantly impact the productivity and livelihoods of poor households in these areas. Therefore, adaptive safety net programs should consider scale-up mechanisms in central Angola's maize, bean, and cassava-producing regions.

**An adaptive system that responds to floods could have a greater impact in Cunene, Namibe, and Moxico, though additional localized analysis is needed to fully understand flood risks in these provinces.** The biggest overlap between flood hazards (i.e., the areas prone to regular inundation as measured by MCDWD) and food insecurity lies in two river basin areas: the area around the Cunene River in Cunene and Namibe provinces, and the area around the Zambezi River in Moxico province. Given the location specific nature of flood risk, however, further analysis is required to accurately identify the communities that are highly vulnerable to flood risk. Where flooding can be reliably predicted, acting before the onset of a flood event is increasingly proving to be a cost-effective mechanism for reducing the impact of disasters on households and communities. Given the frequent flooding that affects both urban and rural areas in Angola, we recommend further research to assess the feasibility of implementing an anticipatory action mechanism in the Angolan context.

**Finally, an adaptive safety net mechanism should be informed by the government's policy priorities and institutionalized through a locally led process.** For instance, in highly food-insecure areas, the objective of scaling up safety nets could be to maintain household consumption during shocks. Whereas, in non-subsistence crop production systems, the goal could be to protect input investments and prevent the depletion of household assets. Therefore, the objectives of the scale-up mechanism would largely tailor its design. Moreover, institutionalizing an adaptive safety net system requires bringing together and strengthening the capacity of a diverse set of local actors, including government stakeholders, civil society, the private sector, and local actors, especially the CASIs and ADECOS.

# Chapter 3: Poverty and Vulnerability in Urban Angola

## Key messages

**The poverty rate is lower in urban areas than in rural areas in Angola, yet about the same number of households are food poor and vulnerable to poverty in rural and urban areas.** Poverty rates are significantly higher in rural areas—55 percent compared to 18 percent in urban areas. Yet, this disparity in poverty rates hides the fact that 3.2 million people in urban areas were living in poverty (compared to 6.3 million in rural areas), and nearly as many urban (2.7 million) as rural Angolans (3.0 million) are food poor.

**The high incidence of poverty and shocks in urban areas is creating an urgent need to expand existing safety net programs into these areas, yet this expansion needs to be informed by robust evidence**. Recently implemented social protection programs in Angola, such as the Kwenda program, have put more emphasis on alleviating poverty in rural areas. Angolans living in urban poverty, on the other hand, remain largely without access to social protection. Since the current system is designed for the rural poor, expanding the scope of social protection in Angola requires learning about the characteristics of urban households living in poverty or vulnerable to poverty and establishing ways of targeting them. This chapter provides information on the dynamics and drivers of poverty and vulnerability in Angola, looking at the differences between urban and rural areas. Operationally, this analysis can help inform government policy decisions about establishing a basic safety net program in urban areas that can be expanded for shock response.

**In urban areas, households living in poverty or vulnerable to poverty are significantly more likely to be women-headed households, less likely to have access to adequate housing, and rely on self-employment.** Women-headed households are overrepresented among urban households living in poverty, more so if children are present. In urban areas, over one third of poor or vulnerable households are women-headed. Poor and vulnerable households in urban areas also have a larger presence of children. Housing characteristics are also worse for the urban poor. Poor and vulnerable households are less likely to use improved cooking fuels and less likely to have adequate walls and floors. Access to electricity and improved waste management are also significantly lower. Poor households are significantly more likely to live in crowded spaces (more than 3 people per room). Finally, there is a strong reliance on self-employment among urban Angolans living in poverty, especially for women. Urban women living in poverty or vulnerable to poverty are overrepresented in the group of the 'self-employed without worker's, including most informal jobs such as street vendors.

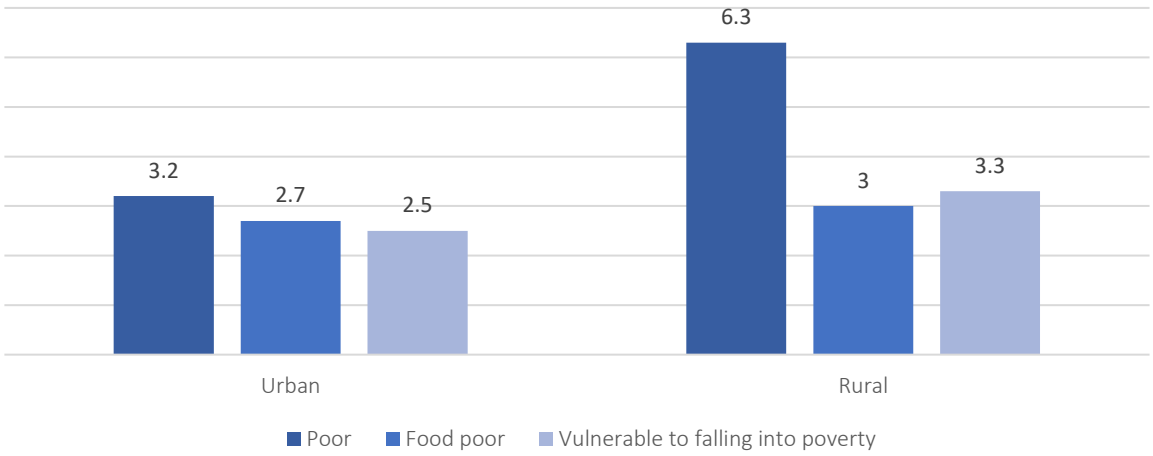
**Angolans living in poverty or vulnerable to poverty in urban areas report high rates of food insecurity, which increases with price shocks.** In 2018, close to 70 percent of Angolans living in poverty in urban areas reported experiencing a lack of food in the past 12 months, and almost 80 percent reported worrying about food in the past 7 days. In urban areas, where households are more dependent on markets to access food, increases in food prices are the main cause of food insecurity. This suggests that shocks to food prices should be monitored, as they are likely to push households deeper into poverty in urban areas of Angola. In contrast, in rural areas, where most households living in poverty or vulnerable to poverty produce their own food, shocks to agricultural productivity seem to be more relevant. At the national level and in the Luanda market, increases in food prices are mostly determined by international factors, as most of the food is imported. More analysis, however, is needed to better understand the relation between rises in food prices and climate shocks in local markets outside of Luanda.

# Introduction

**One in three Angolans living in poverty and half of those living in food poverty live in urban areas (Figure 3.1).** The most recent poverty estimates show that a third of Angolans were living in poverty in 2018. Poverty rates are significantly higher in rural areas—55 percent compared to 18 percent in urban areas. Yet, this disparity in poverty rates hides the fact that 3.2 million people in urban areas were living in poverty (compared to 6.3 million in rural areas) and nearly as many urban (2.7 million) as rural Angolans (3.0 million) are food poor (see Figure 3.1). Another 2.5 million people in urban areas (and 3.3 million in rural areas) were vulnerable—that is, they lived above the poverty line but had a high risk of falling below it in the event of a shock.

**The high incidence of poverty and shocks in urban areas is creating an urgent need to expand existing safety net programs into these areas**. Recently implemented social protection programs in Angola, such as the Kwenda program, have put more emphasis on alleviating poverty in rural areas. Angolans living in urban poverty, on the other hand, remain largely without access to social protection. Nonetheless, growing urbanization and the presence of shocks that disproportionately affect urban dwellers, such as high food prices, are turning urban poverty in Angola into an urgent priority. Thus, establishing a social protection system that can alleviate poverty in both rural and urban areas and that can be leveraged to mitigate the negative effects of shocks is highly needed. Since the current system is designed for the rural poor, expanding the scope of social protection to urban areas in Angola requires learning about the characteristics of urban households living in poverty or vulnerable to poverty and establishing ways of targeting them.

*Figure 3.1: Poverty and vulnerability in 2018, millions of people*[28]




*Source: World Bank calculations based on IDREA 2018/19.*

## Characteristics of poor and vulnerable households in urban areas

**Households living in poverty or vulnerable to poverty are large and have high dependency ratios, especially in urban areas (Table 3.1).** Interestingly, both poor and vulnerable households are larger in urban areas than in rural areas. In poor and vulnerable households in urban areas, more than half of the household members are children under the age of 15. The share of children under 15 is much lower in households that are neither living in poverty nor are vulnerable to it, both in urban (37.6

[28] The figure is produced by dividing the sample into three categories: poor, vulnerable, and other. Specifically, "poor" indicates that the household is monetary poor, according to the national poverty line; vulnerable" indicates that the household's consumption is above the poverty line but has at least 50 percent probability of falling into poverty at least once in the next two years; "other" indicates that the household is neither poor nor vulnerable. Households were identified as poor/vulnerable as part of the 2020 Poverty Assessment. The analysis was based on IDREA 2018/19.

percent) and rural areas (28 percent). On the other hand, the share of older household members is lower in urban areas compared to rural areas and is not correlated with poverty and vulnerability.

**Women-headed households are overrepresented among urban households living in poverty, more so if children are present.** In urban areas, over one-third of poor or vulnerable households are women-headed, compared to close to one-fourth of the households that are neither poor nor vulnerable. However, in rural areas, there is no clear relationship between poverty and the gender of the household head. Interestingly, the difference between poor and vulnerable households and others becomes much larger and more common across areas when the presence of children in households is considered. Indeed, the share of women-headed households with three or more children is much higher among poor and vulnerable households in both urban and rural areas. 21 percent of households living in poverty and 25 percent of households vulnerable to poverty in urban areas are women-headed households with three or more children. As a comparison, only 9.4 percent of urban households that are neither poor nor vulnerable have this characteristic. In rural areas, women-headed households with three or more children are also overrepresented among the poor and vulnerable: 18 and 11 percent vs. only 3 percent in the "other" category.

**In both urban and rural areas, household heads living in poverty or who are vulnerable to poverty are older and less educated (Table 3.1).** Households whose heads are over 60 years old are more likely to be vulnerable. In urban areas, 14 percent of vulnerable households have an elderly head, compared to 8.6 percent of the poor and 6.8 percent of the households that are neither poor nor vulnerable. This relationship—that vulnerability increases with the age of the household head—also holds in rural areas. Perhaps partly due to the advanced age, the average number of years of education for poor and vulnerable household heads is about half that of the other households.

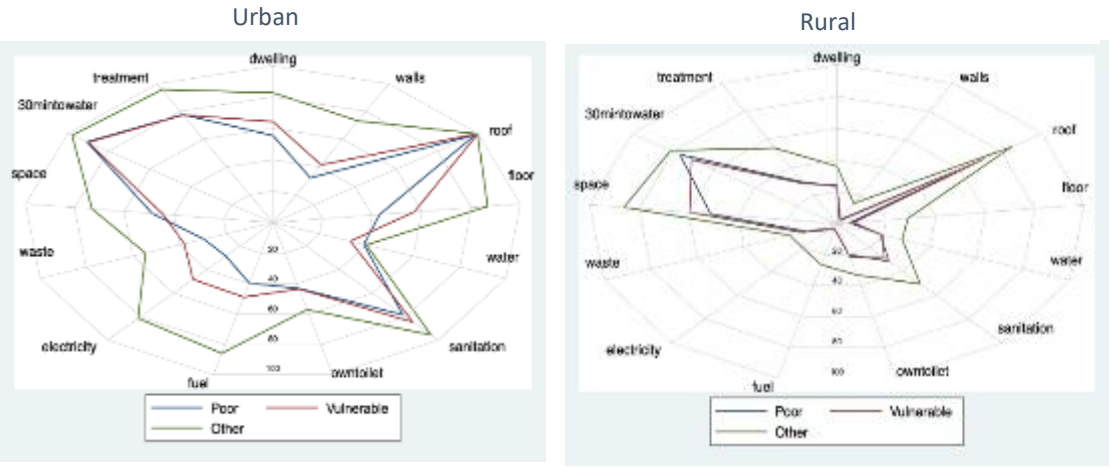
*Table 3.1: Household characteristics by poverty status and rural/urban*

| | Urban | | | Rural | | |
|---|---|---|---|---|---|---|
| | **Poor** | **Vulnerable** | **Other** | **Poor** | **Vulnerable** | **Other** |
| **Demographics** | | | | | | |
| Dependency ratio | 115.3 | 122.3 | 64.4 | 121.6 | 102.9 | 43.6 |
| Share of children under 15 years of age (%) | 51.7 | 52.7 | 37.6 | 52.3 | 47.2 | 28.0 |
| Share of adults over 64 years of age (%) | 1.9 | 2.4 | 1.6 | 2.5 | 3.5 | 2.3 |
| Household size (median) | 6 | 7 | 5 | 6 | 5 | 3 |
| Household size (mean) | 6.2 | 7.5 | 4.7 | 5.9 | 5.2 | 3.3 |
| **Household head (HH)** | | | | | | |
| Female HH (%) | 35.4 | 37.9 | 27.4 | 28.1 | 27.2 | 29.6 |
| Female HH with more than 3 children (%) | 21.3 | 25.5 | 9.4 | 18.0 | 11.3 | 3.1 |
| Age of HH (mean) | 42.9 | 44.5 | 39.6 | 43.8 | 43.1 | 41.1 |
| Adolescent HH (15-18 years) (%) | 0.3 | 1.6 | 0.4 | 0.4 | 1.8 | 1.0 |
| Elderly HH (60+ years) (%) | 8.6 | 14.1 | 6.8 | 12.9 | 16.3 | 11.4 |
| Education of HH (years) | 5.5 | 4.7 | 9.7 | 3.1 | 3.2 | 6.6 |

*Source: World Bank calculations based on IDREA 2018–19.*

**In urban areas, households living in poverty or vulnerable to poverty are significantly less likely to have access to adequate housing** than households that are neither poor nor vulnerable (Figure 3.2). Poor and vulnerable households are less likely to use improved fuels such as kerosene and LPG as cooking fuels and less likely to have adequate walls and floors. Access to electricity and improved waste management are also significantly lower. In rural areas, access to improved sanitation is lower for poor and vulnerable households compared to others, but access to adequate housing is generally low for all types of households. Finally, in both urban and rural areas, poor households are also significantly more likely to live in crowded spaces (more than 3 people per room).

*Figure 3.2: Housing by poverty status, urban and rural*



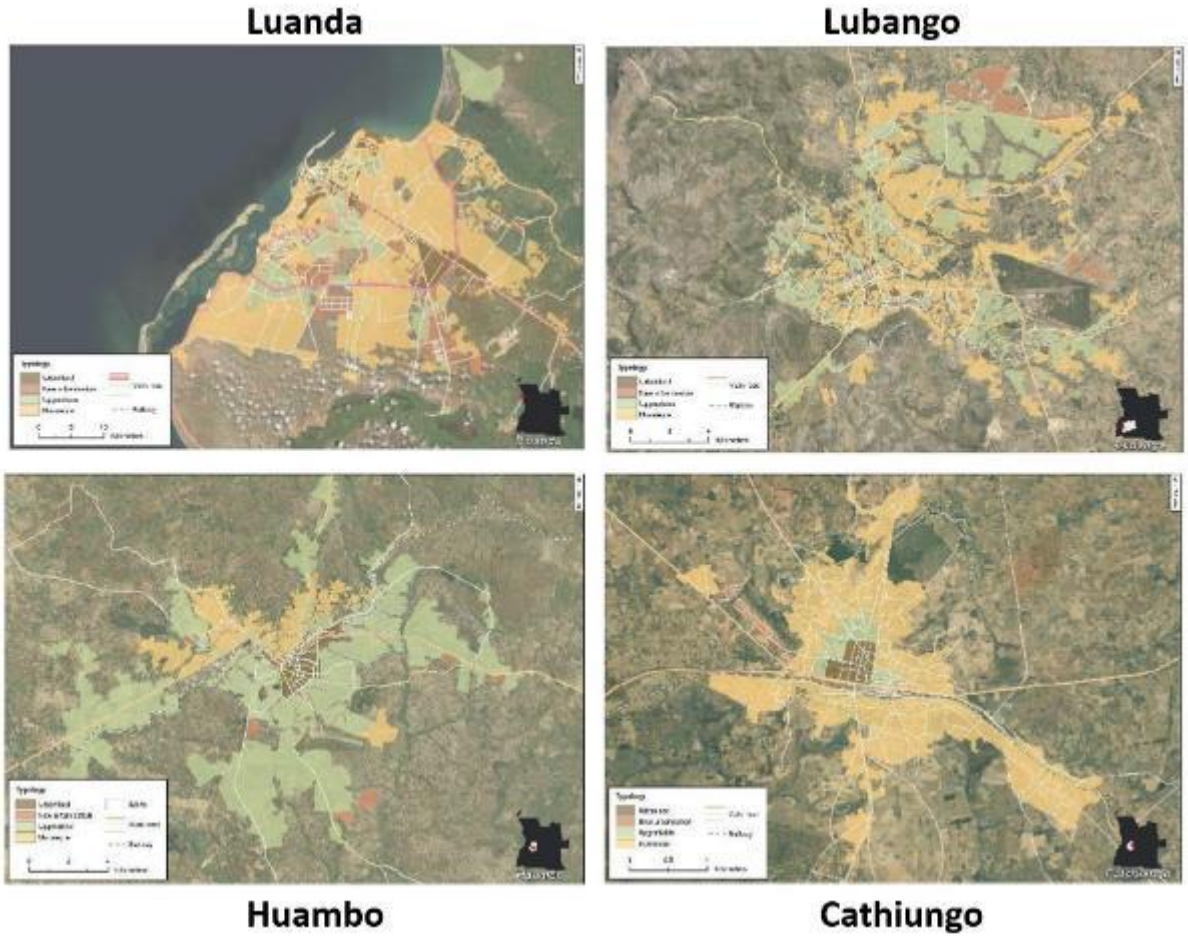

*Source: World Bank calculations based on IDREA 2018/19.*

**About two-thirds Luanda live in areas categorized as slums.** Neighborhoods in Angola's urban areas can be classified into four types based on the level of access to infrastructure and services. (World Bank Urbanization Review 2022[29]) These are urban centers, new formal urbanizations, upgradable areas, and slums.[30] Geospatial analysis combined with on-ground estimations of housing quality shows that large areas of Luanda, about 80 percent of the land area, can be categorized as slums. Combining this with population data, the analysis finds that a large share of Angolans living in Luanda live in slums. In secondary and smaller cities, about 90 percent of land area can be categorized as slums. (Figure 3.3) One caveat for this analysis is that it was compiled over a period of about a decade. However, the methodology can be updated and even produced at the level of communes relatively easily and cost-effectively using more granular data from Google Earth Maps covering all of Luanda and a sample-based mapping of housing quality using drone and open street mapping technology (a training dataset).

[29] World Bank, 2022 *Angola's Cities: Seizing the Opportunity*

[30] Urban centers: Mainly built during colonial times, such as the Central Business Districts and areas formally planned and extended with full urban services; new formal urbanizations - Built-up during the post war period. Mainly as satellite suburbs—often located outside the old city boundaries—that have the potential of being connected to water, sanitation, and electric systems but not always fully serviced yet; upgradable areas—Informal settlements without full urban services but laid out in a way that urban infrastructure can be installed without major displacement of communities; slums —Low-income high-density informal and disorganized settlements that are more difficult to upgrade. Some slums date back to the colonial era.

*Figure 3.3: Distribution of land area by type of neighborhood*



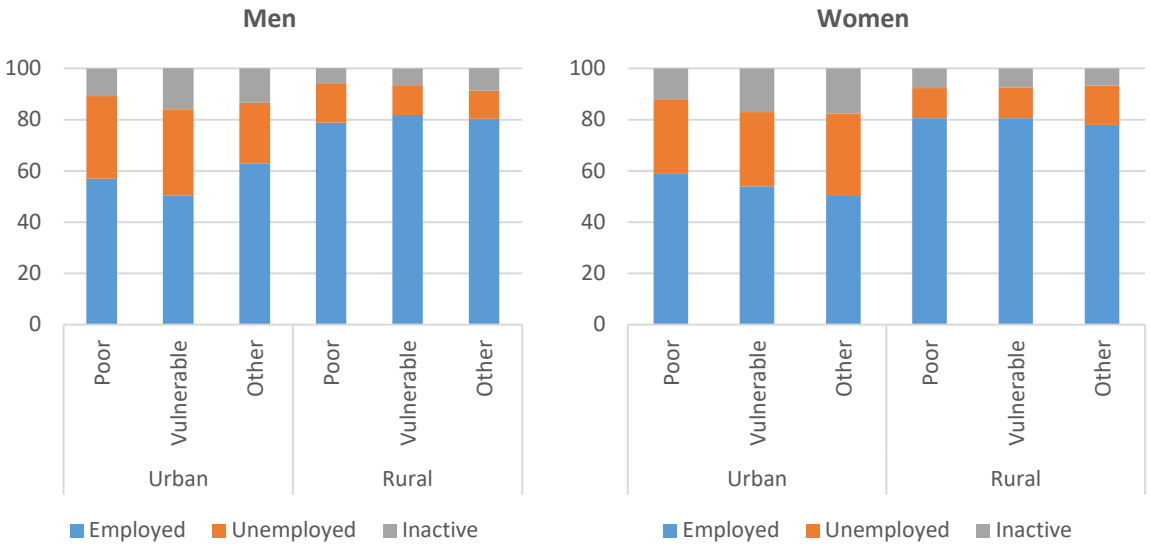

*Source: World Bank Urbanization Review 202231*
*Note: Urban center = brown; New formal urbanization = red; Upgradable = green; Slums = yellow*

## Labor market

**Poverty and vulnerability are associated with high unemployment rates, particularly for men (Figure 3.4).** Both genders are much more likely to be unemployed in urban areas than in rural areas. Urban poverty and vulnerability are more correlated with men's unemployment: men living in poverty or vulnerability have unemployment rates of about 33 percent, while other urban men face a somewhat lower unemployment rate of 24 percent. For women, however, the relationship is less clear; in fact, non-poor women have higher rates of unemployment than those living in poor or vulnerable households (32 percent compared to 29 percent).

[31] World Bank, 2022 *Angola's Cities: Seizing the Opportunity*

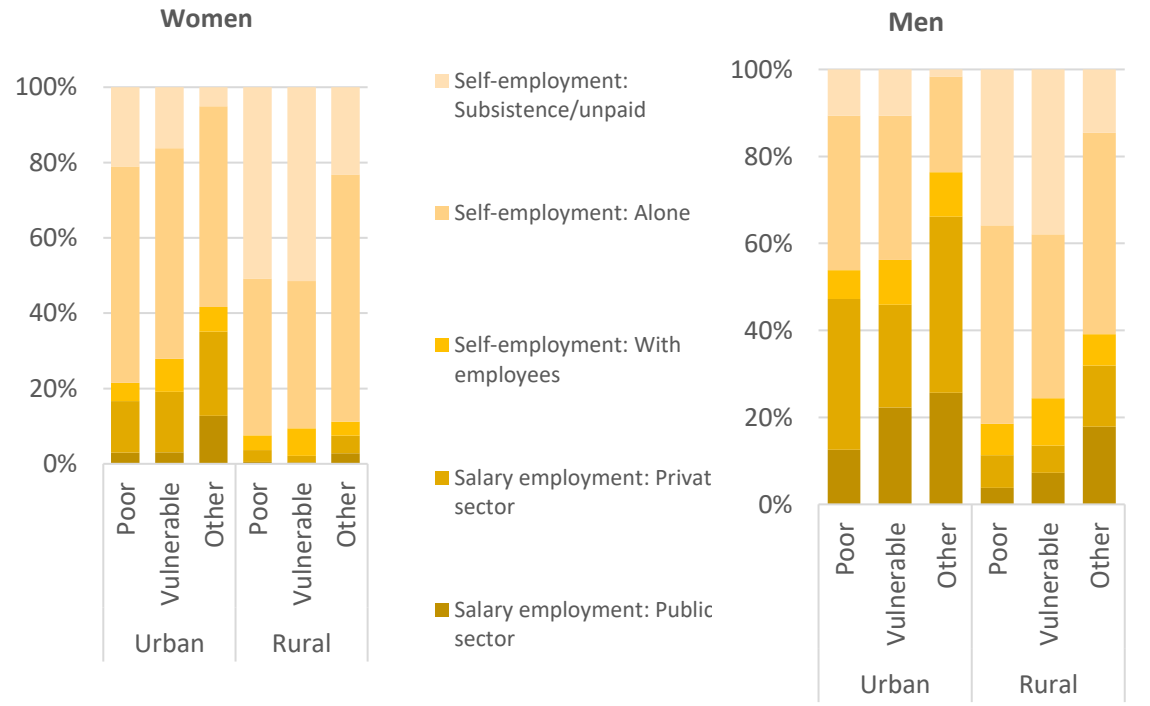
*Figure 3.4: Labor market participation by poverty status, gender, and rural/urban (% of employed)*




*Source: World Bank calculations based on IDREA 2018–19.*

**There is a strong reliance on self-employment among urban Angolans living in poverty, especially for women (Figure 3.5).** Thirty-six percent of men and 57 percent of women living in poverty engage in self-employed tasks in urban areas. This share of self-employment is equally pronounced for urban households vulnerable to poverty: 33 and 56 percent, respectively. While men with low skills have some options for wage employment in sectors like transportation and construction, there are few such options for similarly low-skilled women. Instead, urban women living in poverty or vulnerable to poverty are overrepresented in the group of the 'self-employed without worker's, a category that includes most informal jobs such as street vendors (Box 3.1 below).

*Figure 3.5: Labor market outcomes by poverty status, gender, and rural/urban (% of employed)*




*Source: World Bank calculations based on IDREA 2018–19.*

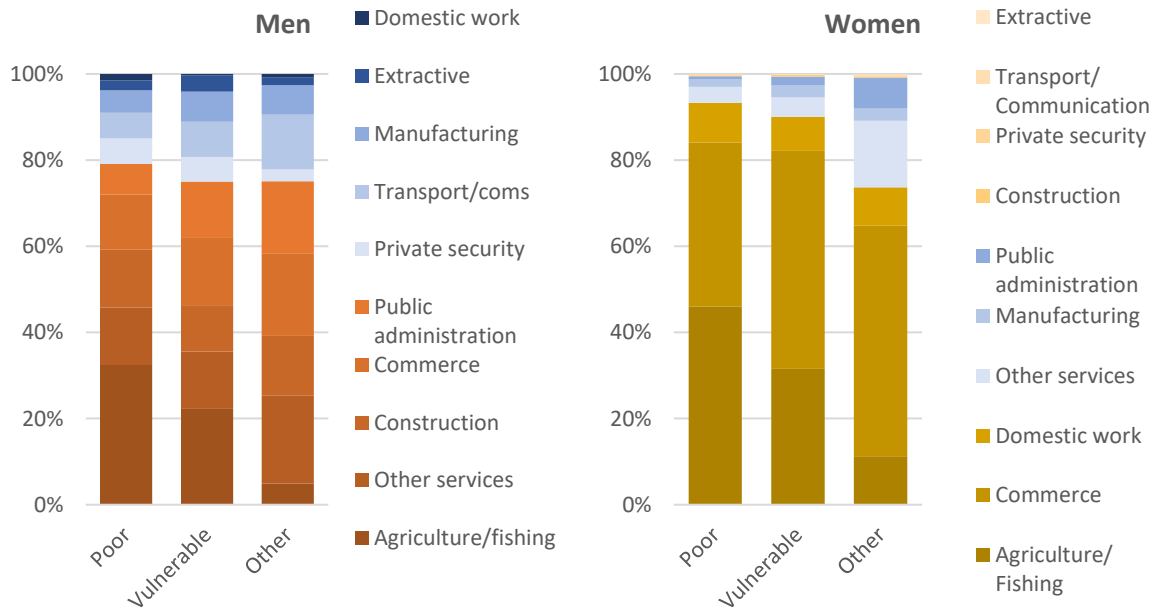
*Box 3.1. The importance of street vending for Angolan women*

**Street vending** is a vulnerable occupation that nonetheless represents **one of the most accessible employment opportunities for lower-skilled Angolan women**. Own-account commerce activities account for nearly 3 out of every 10 jobs held by women in urban areas. Nationally, female street vendors are overrepresented in the top 60 percent of the population, with more than one in five in the top quintile of the population. Yet, in Luanda, a city with lower poverty rates and higher income levels, nearly half (47.9 percent) of women street vendors are in the poorest 40 percent of the city's population, while only about one in ten is in the top quintile (World Bank, forthcoming).

*Source: World Bank (forthcoming). "Navigating Education, Motherhood, and Informal Labor: The Experiences of Young Women in Luanda."*

**Just two sectors account for the employment of more than 80 percent of urban women living in poverty or vulnerable to poverty: agriculture and commerce** (Figure 3.6)**.** Interestingly, even in urban areas, agriculture is the largest sector of employment for Angolans living in poverty. Almost half (46 percent) of employed women and a third (32 percent) of employed men living in poverty in urban areas engage in the sector. For those in vulnerable households, 38 percent of women and 22 percent of men work in agriculture. Employment in commerce activities is particularly important for women living in vulnerable urban households, accounting for 51 percent of all employment for this group. In contrast, men living in poverty or vulnerable to poverty work across more sectors, including construction and other services.

*Figure 3.6: Sector of employment by poverty status, gender, in urban areas (% of employed)*

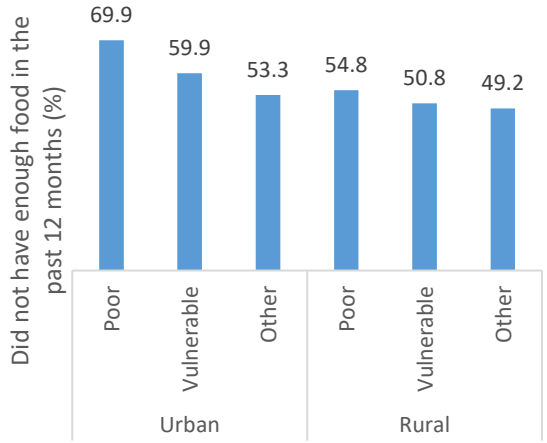



*Source: World Bank calculations based* on IDREA 2018–19.

## Food insecurity and shocks

**Angolans living in poverty or vulnerable to poverty in urban areas report high rates of food insecurity (Figure 3.7).** In 2018, close to 70 percent of Angolans living in poverty in urban areas reported experiencing a lack of food in the past 12 months, and almost 80 percent reported worrying about food in the past 7 days. Similarly, close to 60 percent of vulnerable urban households reported experiencing a lack of food, and about 75 percent reported worrying about food. In rural areas, even though rates are lower and less correlated to poverty and vulnerability, close to 55 percent and 51 percent of households living in poverty and vulnerable to poverty, respectively, experienced a lack of food. Interestingly, in both urban and rural areas, about 50 percent of the households that are not considered poor or vulnerable also reported experiencing a food shortage, and close to 60 percent reported worrying about food. This suggests that perhaps vulnerability is even more widespread than what is captured by our methodology.

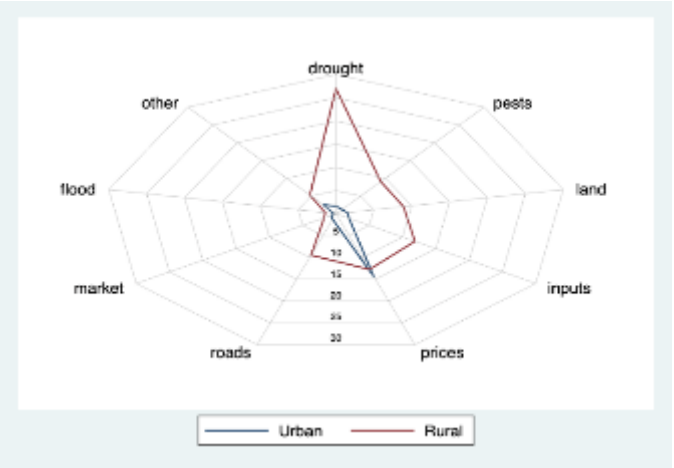
*Figure 3.7: Food insecurity by poverty status and rural/urban*




*Source: World Bank calculations based on IDREA 2018–19.*

**Food shortages are mainly caused by agricultural-related shocks in rural areas and by high food prices in urban areas (Figure 3.8).** In rural areas, where households living in poverty or vulnerable to poverty are more likely to produce part of the food they consume, shocks to agricultural productivity seem to be the main driver of food insecurity. In urban areas, where households are more dependent on markets to access food, increases in food prices are the main cause of food insecurity. Price shocks, though not the main driver, also contribute to increasing food insecurity in rural areas. This suggests that shocks to food prices should be monitored, as they are likely to push households deeper into poverty Angola.

*Figure 3.8: Cause of food shortage in urban/rural areas*



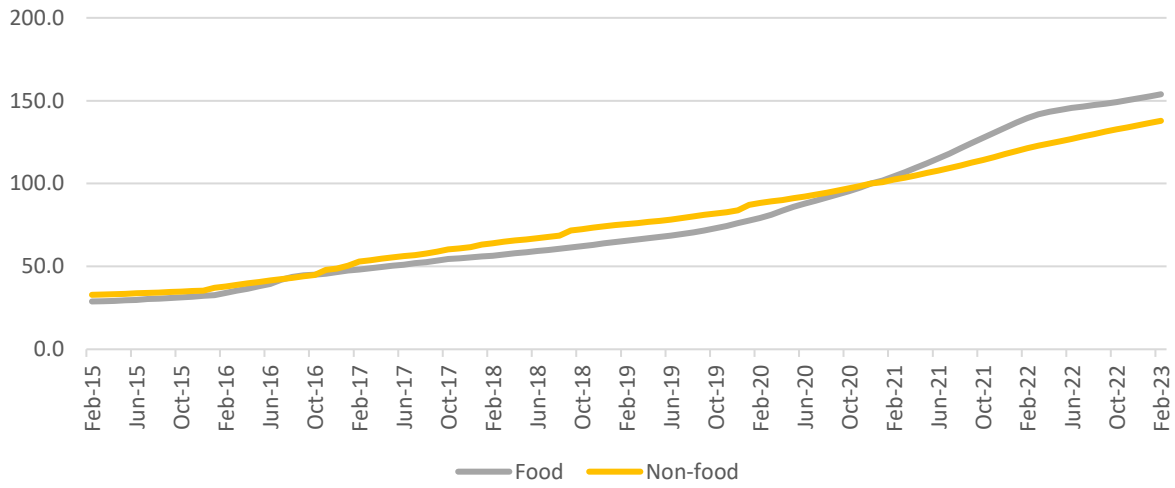

*Source: World Bank calculations based on IDREA 2018–19.*

**Price shocks can be caused by a range of local and global factors.** Price shocks, for example, could be associated with economic cycles that affect Angola due to either domestic or global conditions. Locally, price shocks could be driven by reforms such as removing subsidies on key commodities. International conflicts might also lead to price shocks, such as the Russia-Ukraine war, which has led to increases in food prices globally.

**In this report, price shocks are analyzed by using historical data on food prices in Angola.** The data on national food inflation is the year-on-year percentage change in the cost of purchasing a basket of goods. As an example, a yearly average food inflation above 30 percent with respect to the previous year occurred four times in the period between 2003 and 2022: in 2003, 2004, 2016, and 2021. This would be a shock with a 1-in-5-year return period, which could be considered a severe price shock. Historical food price inflation data suggests that in 2003, 2004, 2016, and 2021, Angolan households living in poverty were particularly exposed to food shortages.

**More recently, food price inflation has outpaced the already high inflation in Angola over the last three years, with likely significant challenges for households (Figure 3.9)**. Food prices increased by 54 percent while non-food prices increased by 38 percent, a gap of 16 percentage points between December 2020 and February 2023. This suggests that Angolan households living in poverty were particularly exposed to hardship, as increasing food prices are a major reason for food shortages in urban areas and a contributing factor in rural areas. Price shocks can be defined in different ways depending on their frequency and severity of their impact. More analysis is needed to better understand the dynamics between rapid increases in food prices and food insecurity in Angola. This analysis, however, is limited by the lack of food price data in local markets as well as the lack of regional or provincial historical food insecurity information in the country.

*Figure 3.9: National consumer price index for food and non-food items (base month 12/2020)*




*Source: World Bank analysis based on official CPI indicators.*

**While climate shocks have had large impacts on access to food in affected rural areas, there is limited evidence on their impact on food security in urban areas**. Climate-related shocks affect food security through reducing agricultural production and rising food prices (World Bank 2022). In Angola, our analysis did not find a statistically significant correlation between climate shocks and food prices at a national level. Such a low correlation might be explained by the fact that in Angola, and especially in Luanda, a large proportion of food is imported: over 45 percent of maize needs, 80 percent of rice needs, and 90 percent of wheat needs are met through imports, predominantly from Southern Africa and Portugal. Thus, national food prices in Angola, and particularly in the Luanda market, are likely to be more exposed to shocks in the countries that export grains to Angola. In addition, limited data exists on food prices in local markets in Angola other than in the Luanda market, therefore making it difficult to analyze whether there is a significant correlation between localized climate shocks and food prices in those local markets. Studying such a correlation would be particularly relevant in drought-prone areas in south and central Angola, where the second and third largest cities in the country, Lubango and Huambo, are located.

## Recommendations

**High urbanization and high food price inflation, particularly in recent years, highlight the importance for policymakers to consider approaches to tackle urban poverty and vulnerability in Angola.** So far, the country's flagship cash transfer program, Kwenda, launched in 2020, has only operated in rural areas and a few peri-urban areas. Developing strategies to tackle the needs of the urban poor requires a careful characterization of the population living in poverty or vulnerable to poverty in Angola's urban areas.

**To design an effective social safety net for urban areas, one should consider key groups to target.** First, **women and children**, as one-third of urban households living in poverty are headed by women, and more than half of the members of these households are children aged 15 and below. Second, interventions could target **low-skilled unemployed Angolans**, for example, with programs that provide temporary monetary support combined with skills training and support in job seeking or support to micro-enterprises. About one-third of people living in poverty or vulnerable to poverty are unemployed, both men and women. Third, **focusing on women working in agriculture or commerce** is another good option to identify poor and vulnerable households. These two sectors account for 80 percent of jobs for women in urban areas living in poverty.

**In addition, an effective social safety net that protects urban households from falling deeper into poverty when shocks occur needs to provide timely assistance**. There is a high risk of food insecurity in urban areas, linked to a high vulnerability to price increases. Thus, periods following structural reforms that affect price levels or periods of high increases in inflation are critical moments when safety nets could be leveraged to provide additional support to the poor and vulnerable urban population in Angola.

**An effective social safety net should be integrated with other sectoral interventions to sustainably end poverty.** Thus, strategies to improve access to cooking gas, electricity, and water, as well as developing strategies to improve housing conditions, are important complementary actions to mitigate poverty and vulnerability in urban Angola. In addition, microenterprise support initiatives are essential, especially for women, as the lack of employment causes most urban women workers living in poverty or vulnerable to poverty to be self-employed in agriculture and trade. Moreover, opportunities for apprenticeships for low-skilled adults and youth to help increase wages for poor and vulnerable wage workers are needed. Lastly, it is important to explore ways to increase women's employment opportunities in different sectors. In comparison, Angolan men living in poverty or being vulnerable to poverty are more likely to engage in wage employment in a variety of sectors, such as construction, transportation, the public sector, or other service jobs.

# Chapter 4: Readiness to scale up safety nets in rural areas

## Key messages

**Kwenda shows strong promise for shock response in rural areas due to its growing coverage and progressive targeting.** Given the large scale of Kwenda in the poorest communities, which are also among the most vulnerable to climatic or price shocks, it already provides an effective platform to support shock response. Enhancing the duration and level of Kwenda's transfers could further strengthen the impacts on household's resilience to cope with shocks. However, there is a need to consider the unwitting exclusion of specific vulnerable populations, such as child-headed households and refugees, due to Kwenda's current eligibility criteria.

**While the data and communications systems of Kwenda's delivery systems are already well-positioned for shock response, additional investments are required for the full realization of shock response.** This includes scale-up of the social registry to cover vulnerable households, such as those living in areas prone to climate shocks but not currently registered (e.g., other communities in the hotspot municipalities identified in Chapter 2 and where Kwenda already operates could be a priority), incorporating flexibility and preparedness actions in the payment (e.g., to avoid amplifying existing challenges related to digital infrastructure) and grievance redress system, and corresponding human resources to handle the additional caseload for short periods of time.

**Regarding climate shocks, a comprehensive early warning system is not yet operational, and it is currently planned for three provinces only.** Looking ahead, there is an opportunity to improve data sources and tools, and develop an EWS that covers floods and droughts, ideally national in scope. In due course, seasonal information can underpin a set of objective triggers— potentially a combination of "hard" and "soft" triggers, as was discussed in Chapter 2— for initiating a shock response.

**There are good foundations for adaptive social safety nets, given the established legal and policy frameworks for social protection and disaster risk management.** However, there is an opportunity to include legal and/or policy provisions specifically related to the role of social protection in disaster response. The Ministry of Social Action, Family and Women's Empowerment (Ministério da Acção Social, Família e Promoção da Mulher) is the lead policy agency for social protection. The largest safety net program, Kwenda, on the other hand, is implemented by the Ministry of Territorial Administration (MAT) through the FAS-Local Development Institute. The main government body for disaster response is the National Civil Protection Commission in the Ministry of Interior. These institutions need to come together coherently to ensure smooth coordination in shock response planning and execution.

**Angola needs to put in place mechanisms to pre-arrange financing for adaptive safety nets.** Currently, the primary mechanisms for funding disaster response are ex-post budgetary allocations and supplementation. There is an opportunity for a more strategic approach to Disaster Risk Financing, which would help to address the gap between available funds and the average annual cost of responses to natural disasters. This includes putting in place risk financing instruments that could respond to objective triggers for climate shocks to provide sufficient and timely financing for shock response.

## Introduction

**This chapter builds on the preceding chapters and explores the potential opportunities to scale up safety nets in rural areas to help address the needs that may arise from both climate and price**

**shocks**. Rural households are potentially exposed to negative impacts from one or both of these hazards—for instance, by living in an area prone to droughts or floods or by being net purchasers of food.[32] The incidence of such hazards threatens to push vulnerable households below the poverty line and the poor into heightened deprivation—depending on the nature of the shocks experienced, risk management strategies (household or community level), a household's ability to cope with the shock, and access to safety nets.[33] The chapter draws on insights from the preceding chapters relating to rural poverty and vulnerability, and the incidence of rural shocks (Chapter 2). It seeks to identify gaps and opportunities to leverage safety nets in response to climate and price shocks affecting rural areas, inform policy dialogue, and guide investment priorities.

**Poverty-linked programming has taken on more prominence in Angola, and the country has the foundations of a strong enabling environment for social protection.** The key policy framework for routine safety nets is the National Policy for Social Action (PNAS), which was approved in 2021 through Presidential Decree No. 37/21. Several other policy frameworks also provide a foundation, including the Angola National Development Plan 2018-2022. The Ministry of Social Action, Family, and Promotion of Women (MASFAMU) is the overall policy lead for safety nets, and the main implementing agency is the FAS-Local Development Institute (FAS-IDL). FAS-IDL oversees programs that combat poverty and economic stabilization and is responsible for the implementation of Kwenda—the country's flagship cash transfer program.

**Kwenda was established in 2020 by Presidential Decree and has a target of benefiting 1.6 million households—the estimated number of poor households in the country.** This is equivalent to approximately 9.5 million people. Kwenda's design is partially based on a pilot UNICEF cash transfer program, Valor a Criança, and the program is fully implemented by the government. Beneficiaries currently receive cash transfers in four quarterly payments over a 12-month period. Key information databases include SIIPS (managed by FAS and serving as the information management system for Kwenda) and SIGAS, the Social Action Information and Management System (used by CASIs). The government has approved the creation of a social registry, laying the foundations for an integrated approach to information management for all programs and services targeted at the poor and vulnerable nationwide.

**The conceptual framework for the assessment is the World Bank's Social Protection Stress Test Tool (SPSTT).**[34] The SPSTT provides a framework to assess the level of adaptiveness and scalability of social protection systems in the context of shocks. The tool is based on a qualitative questionnaire that analyses each of the four building blocks underlying an adaptive social protection system (see also Figure 4.1):

(1) **Institutional arrangements and partnerships:** The extent of government leadership on ASP in policies and strategies, and coordination structures involving social protection and disaster risk management.
(2) **Programs and delivery systems:** Whether safety nets are responsive to shocks in terms of beneficiary selection criteria, transfer levels, and delivery chains.
(3) **Finance:** Whether there are risk financing strategies that would enable funding to be available in case of a shock.

[32] Net sellers of food are better positioned to benefit from price shocks that increase the cost of food, and increasing food prices are a contributing factor to poverty in rural areas. However, as explained in Chapter 3, further analysis of the dynamics between food prices and food insecurity in Angola is constrained by the lack of food price data in local markets and a lack of regional or provincial historical food insecurity information.
[33] World Bank 2022. *Angola – Climate Change Development Report.*
[34] Available at https://documents1.worldbank.org/curated/en/559321634917529231/pdf/Stress-Testing-Social-Protection-A-Rapid-Appraisal-of-the-Adaptability-of-Social-Protection-Systems-and-Their-Readiness-to-Scale-Up-A-Guide-for-Practitioners.pdf.

(4) **Data and information:** Whether early warning systems exist to monitor and predict shocks, and what information is stored in social registries or other databases on household vulnerability to shocks and their capacity to cope and recover.

*Figure 4.1: Framework for Adaptive Social Protection: Four building blocks*


*Source: Bowen et al., 2020.*

**The methodology for the assessment included both primary and secondary research**. Primary data collection included key informant interviews and discussions with stakeholders in Angola during a mission in February-March 2023. Secondary research included a review of existing literature, documentation, and data. The assessment also incorporates findings from Chapter 2 of this report on climatic shocks in rural areas.

**The structure of the chapter is as follows**: First, the findings of the assessment are presented, based on the opportunities presented by Kwenda and structured by the four building blocks. Recommendations for enhancing the readiness of safety nets to scale up are then outlined. Key information regarding Kwenda's routine operations is included in **Annex VII**.

## Assessment findings

### Institutional Arrangements and Partnerships

**Overview:** This building block recognizes that government leadership can help improve efficiency and effectiveness. It assesses the ability of a country's government to lead shock response efforts, both ex ante and ex post, by ascertaining the relative strength and capacity of governmental institutions to drive planning for shocks, including through policies and strategies. The building block also analyses the extent and quality of coordination between the government and other stakeholders and actors in response to shocks, based on a clear articulation of roles and responsibilities.

**Key findings**:

- There are good foundations for adaptive social protection, given the established legal and policy frameworks for social protection and DRM. There is an opportunity to include legal and/or policy provisions specifically relating to the role of social protection in disaster response.
- MASFAMU is the lead policy agency for social protection; MAT implements Kwenda through FAS-IDL; and the main government body for disaster response is the CNPC. These institutions need to come together more coherently. The role of scalable safety nets should be incorporated into coordination structures for shock response.

#### *Overview of key institutions: Social Protection and DRM*

**MASFAMU has the mandate for coordinating and overseeing non-contributory social protection policies, while the largest safety net program, Kwenda, is implemented by MAT through FAS-IDL.** Created to harmonize programs and reduce duplication, MASFAMU also oversees various programs related to social assistance and poverty reduction. MASFAMU oversees a governance structure for the coordination of social protection that includes a high-level intersectoral commission (CNAS), which meets two to three times a year, and technical working groups that meet when there is a need to do so. The governance structure of Kwenda includes an Intersectoral Commission, which is responsible for monitoring the implementation and results of the program, and determining key design details such as geographical focus, number of beneficiaries, and transfer levels. FAS-IDL, which implements Kwenda, is part of MAT. The Intersectoral Commission is supported in its responsibilities by a Technical Group.[35]

**The main government body for disaster response is the National Civil Protection Commission (CNPC).** Headed by the President, this political-level sectoral body is comprised of various Ministers and Directors.[36] The President defines the CNPC's composition, leadership, and functioning.[37] Sitting under the Ministry of Interior (MININT), this specialized body is responsible for assessing Civil Protection policies, the overall organizational structure of bodies and services in the Civil Protection System, international cooperation agreements on civil protection, developing proposals for legal frameworks, and the National Contingency Plan.[38] It is also in charge of technical assistance and operational coordination for disaster response. MININT coordinates the CNPC's Executive Secretariat through the Civil Protection and Fire-Fighter Service (SPCB); civil protection and firefighter institutions are the primary responders to disasters in Angola. Presidential Decree No. 30/16 also makes provision

[35] FAS-Local Development Institute, 2022. *Operations Manual – Kwenda Program*. Republic of Angola.
[36] World Bank 2023 (forthcoming) Disaster Risk Financing Diagnostic Study, Angola.
[37] Civil Protection Laws 14/20 and 28/03.
[38] Civil Protection Laws 14/20 and 28/03.

for a Technical Committee for Prevention and Disaster Risk Reduction.[39] The Ministry of Agriculture and Forestry is responsible for conducting food security assessments.

**When a disaster occurs, the CNPC is responsible for developing, approving, and executing a response plan.** If the disaster requires a national-level response, the CNPC undertakes an initial assessment of affected areas and populations. This is followed by a rapid but multisectoral and more comprehensive assessment, which is carried out by the CNPC in coordination with UN agencies, national and international NGOs, and civil society.[40] Line ministries and other government bodies prepare their post-disaster action plans based on this assessment. An inter-ministerial commission of affected sectors is commonly formed on a temporary basis, under the coordination of the CNPC Executive Secretariat and the SPCB.[41] The sector most affected by the disaster tends to lead the implementation of the action plan; in the case of food insecurity, the Ministry of Agriculture and Forestry usually takes the lead.

**Angola's disaster management framework is operated at the national, provincial, municipal, and community levels**. Institutional arrangements and processes for shock response, described in the preceding paragraph, are mirrored at the provincial and municipal levels. In the event of less severe, local, and recurrent events, these are managed by municipalities with their own financial and operational resources. For example, municipal authorities are allocated a total of 25 million Kwanzas each year for responding to disasters. Responses are overseen and led by the Municipal Administrator. If the effects of the shock are greater than the municipality can cope with, the response is led by the provincial or national-level government.

### *International actors*

**Angola's Development Partners have established a body to discuss social protection issues among themselves.** It is chaired by the ILO and co-chaired by UNICEF and includes the World Bank and WFP, although there is currently no existing structure for the group to interact with the government. While there are positive examples of coordination between development partners and the government, these are the result of bilateral engagements and do not necessarily speak to the system as a whole.

**The international donor community is also involved in the provision of financial and technical support for disaster response in Angola.** Coordination between the national system and the United Nations and its partners is through the Disaster Management Team (UNDMT) and the CNPC, together with other technical groups.[42] Development partners are also engaged in helping authorities address some of the challenges facing the DRM sector including those related to institutional coordination, decentralization, information management, and priority-setting. In particular, translating policies and strategies into action requires strengthening institutional capacity, working across sectors, and improving tools and capabilities to ensure compliance with essential standards.

**That said, the involvement of external actors in emergency assistance is markedly smaller than in other countries in the region, and this means the humanitarian sector is not a significant part of the landscape for adaptive social protection**. Angola does not have the scale of implementation or funding for humanitarian responses that is commonly seen in sub-Saharan Africa. Humanitarian assistance for food security averaged just US$3.65 million over the past six years (Table 4.1).[43] The

[39] World Bank 2023 (forthcoming). Disaster Risk Financing Diagnostic Study, Angola.
[40] World Bank 2023 (forthcoming). Disaster Risk Financing Diagnostic Study, Angola.
[41] World Bank 2023 (forthcoming). Disaster Risk Financing Diagnostic Study, Angola.
[42] Chaired by the Minister of Environment and with representatives from all ministries that engage in environment policy, the Technical Multi-sectoral Commission for the Environment (CTMA) is the Government agency with overall responsibility for drought decision-making: Southern Africa Drought Resilience Initiative (2021), *Drought resilience profile: Angola.*
[43] UNOCHA. Financial Tracking Service. Information on Angola. Accessible at https://fts.unocha.org/countries/7/summary/2023https://fts.unocha.org/countries/7/summary/2023

implication is that the humanitarian sector is not a substantial actor in terms of a potential source of financing, user of delivery systems, or social registry, nor in terms of conditioning the political economy around any reform.

### *Policy and Legislative Frameworks: Social Protection and DRM*

**There is currently no provision for scaling up safety nets in Angola's existing policy framework for social protection, although there are foundations upon which to build.** While Angola's policy and legal documents outline a range of social protection interventions, including social safety nets and social insurance, those documents do not envisage the use of social protection to respond to covariate shocks. The PNAS refers to the role of disaster response, but only in the context of proposing that actors in disaster risk management and civil protection should prioritize the most vulnerable in their actions (Chapters X and XVI of the PNAS). The policy does not elaborate on details that would be included if there were a specific emphasis on adaptive social protection, such as how the social protection system should be leveraged to respond to disasters, how social protection beneficiaries should be supported and to what degree, and how the social protection and disaster response stakeholders should collaborate.

**There is a growing recognition globally that a strong legal and policy foundation can confer legitimacy and provide strategic direction to the cause of adaptive social protection.** One example of a country that has incorporated adaptive social protection into its national social protection framework is Malawi, as described below in Box 4.1.

*Box 4.1: Incorporating shock response into Malawi's national social protection framework*

Under the National Social Support Policy and its 2018 Malawi National Social Support Programme II (MNSSP II) and Implementation Plan, the government has made a commitment to design and implement a social protection system that is sensitive to shocks. This is included as a core pillar and extensively discussed in terms of practical implications for existing programmes.

The policy framework commits the government to covering more people, providing complementary support to respond to the multiple and compound needs of the population (including resilience building), and providing assistance 'that meets seasonal needs, prepares for and responds to unpredictable shocks together with the humanitarian sector, and supports recovery and the return to regular programming.'

*Source: UNICEF. (2019) Shock Responsive Social Protection Assessment Tool.*

**The foundational legal instrument for DRM in Angola is the Civil Protection Law.** Aligned with the principles of the Sendai Framework[44], the law (No. 28/03 of 7 November 1997) establishes the Civil Protection Policy and defines the mandates of all civil protection institutions. It also defines the scope of civil protection activities, the types of disaster events, and the legal parameters for what constitutes States of Catastrophe and Public Calamity.[45]

**Angola's Contingency Plans provide another important foundation for DRM.** Officially titled the "National Calamity and Disaster Preparedness, Contingency, Response and Recovery Plans", these documents are required under the Civil Protection Law to assess the resources available for disaster-related interventions, establish rules and procedures for relevant institutions, and determine the

[44] Further details on the Sendai framework are available at https://www.undrr.org/publication/sendai-framework-disaster-risk-reduction-2015-2030 (accessed 10 December 2022).
[45] World Bank 2023 (forthcoming). Disaster Risk Financing Diagnostic Study, Angola.

criteria for mobilization and coordination of all public and private resources.[46] Municipal and Provincial Contingency Plans are approved by the CNPC based on a prior assessment by subnational authorities, while the National Contingency Plan is appraised by the CNPC and approved by the President.[47] The current version of the National Contingency Plan is being updated. The extent to which contingency plans are used in practice at national and subnational levels may warrant further exploration in a subsequent phase of analysis.

**The National Contingency Plan outlines the processes for the assessment and financing of disaster response but does not include automatic triggers for shock response.** Financial management is led by the CNPC and implemented by the Civil Protection and Fire Service (SPCB), the Ministry of Interior, and the Ministry of Finance. The National Contingency Plan also defines the responsibilities and timelines for post-disaster impact assessments and recommends the establishment of a Financial Protection Plan and development of a Financial Preparedness and Response Strategy.[48] However, while declarations of disaster under the Civil Protection Law have operational implications, they do not automatically trigger a certain type of post-disaster response (such as leveraging the social protection system) or an allocation of additional funding for post-disaster interventions.[49]

**There are no legal or policy provisions specifically relating to the role of social protection in disaster response.** As of yet, the laws and strategies outlined above do not recognize the potential role of adaptive social protection in DRM. Other important policy documents for DRM include the Strategic Plan for Prevention and Disaster Risk Reduction and the Drought Recovery Framework. The Strategic Plan, approved on 3 February 2016 by Presidential Decree No. 30/16 and currently being updated, recommends the development of a financial protection strategy, including risk retention and risk transfer instruments, to lower the country's fiscal vulnerability and build resilience.[50] The Drought Recovery Framework 2018-2022, which has not yet been approved due to transitions in the government,[51] was developed to improve the institutional and strategic basis for drought management through a focus on coordinated actions and finances to support the recovery of damages and losses caused by droughts in the Southern provinces.[52]

### *Institutional Coordination: Social Protection and DRM*

**There are currently no coordination mechanisms in place that specifically relate to the potential role of adaptive social protection or scaling up safety nets.** MASFAMU does not yet have any particular mandate regarding adaptive social protection, nor do FAS-IDL, MAT, the Ministry of Agriculture and Forestry, or any other subnational entities. However, it is recognized that coordination in shock response is of vital importance. Zambia provides an example of coherent collaboration between government and development partners in leveraging social protection systems in response to shocks—see Box 4.2 for an illustration of success factors during COVID-19.

*Box 4.2: Coordinating social protection responses to shocks in Zambia*

In Zambia, the social protection response to COVID-19 included an emergency cash transfer through a vertical and horizontal expansion of the national social assistance programme. The response was supported by existing social protection donors as well as additional development

[46] World Bank 2023 (forthcoming). Disaster Risk Financing Diagnostic Study, Angola.
[47] World Bank 2023 (forthcoming). Disaster Risk Financing Diagnostic Study, Angola.
[48] World Bank 2023 (forthcoming). Disaster Risk Financing Diagnostic Study, Angola.
[49] World Bank 2023 (forthcoming). Disaster Risk Financing Diagnostic Study, Angola.
[50] World Bank 2023 (forthcoming). Disaster Risk Financing Diagnostic Study, Angola.
[51] World Bank 2023 (forthcoming). Disaster Risk Financing Diagnostic Study, Angola.
[52] UNDP 2019. "Strengthening Disaster Risk Management (DRM) institutional frameworks and capacities." Draft project document. Accessed on 10 December 2022 at https://info.undp.org/docs/pdc/Documents/AGO/Annex%20I%20DoA.pdf

and humanitarian donors, ensuring a single programme approach. Some of the promising practices that contributed to that coherent and successful approach were as follows:

- Social protection actors in government and UN agencies had already been working collectively for several years on a jointly designed, jointly funded programme to build social protection;
- the The Cash Working Group from a drought response in 2019 was revitalized and much expanded in May 2020 to bring together all stakeholders from development and humanitarian communities, chaired by the government;
- strong Strong political will and a pre-existing joint understanding of the importance and a willingness to respond through social protection— – across government social protection and disaster management departments, and across partners;
- strong Strong leadership by the government to overcome challenges.

*Source: Smith, G. (2021) 'Overcoming barriers to coordinating across social protection and humanitarian assistance – building on promising practice's, Social Protection Approaches to COVID-19 Expert Advice Service (SPACE), DAI Global UK Ltd, United Kingdom.*

**At present, institutionalized linkages that would embed adaptive social protection in Angola's disaster response system are yet to be developed**. Coordination mechanisms are not yet in place to support effective vertical or horizontal coordination of adaptive social protection actions, i.e., including both social protection and DRM actors. For instance, the potential opportunities of leveraging the social protection system in response to a shock are not currently incorporated into CNPC deliberations. Similarly, while MASFAMU is involved in disaster response coordination at the subnational level, primarily with a view to identifying vulnerable populations, the potential roles of FAS-IDL (through the use of SIIPS and Kwenda) and other actors that may have a role—such as the Ministry of Agriculture and Fisheries, which leads to food insecurity—are not yet considered in those coordination structures. That said, it is recognized that there is much potential for expansion in the future.

## Programs and Delivery Systems

**Overview:** This building block is focused on assessing the ability of social protection programs and delivery systems to expand—both horizontally and vertically—in response to a covariate shock. This includes looking at whether the necessary changes to delivery and payment mechanisms have been anticipated and whether protocols are in place. Another important dimension is whether the system is inclusive and can meet the needs of populations most vulnerable to shocks. The capacity of communications mechanisms and grievance channels is also examined.

**Key findings**:

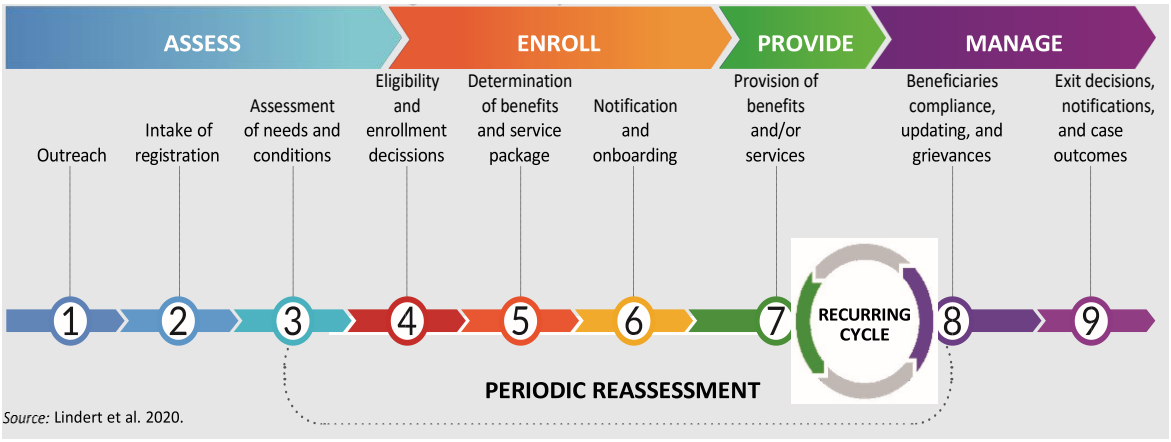
- Kwenda shows strong promise for shock response, including growing coverage and progressive targeting. Enhancing the duration and level of Kwenda's transfers could strengthen the impacts on household's resilience to cope with shocks. However, there is a risk that vulnerable populations are unwittingly excluded from shock response due to Kwenda's current eligibility criteria;
- Certain aspects of Kwenda's delivery systems are well positioned to be used for shock response, including data and communications systems. The existing GRM could be leveraged in times of shock but may need additional resources or preparedness actions (e.g., staff to cope with the extra caseload);

- Vertical or horizontal expansion would amplify existing challenges in the payment system. It will be important to undertake preparedness actions to "shock proof" the system in advance, such as maintaining a roster of local partners that operate in the hotspot regions and can support program implementation with a quick turnaround time and investing in IT solutions in these hotspots to facilitate implementation at times of shock, e.g., satellite phones and internet. The contracts for payment service providers should include the possibility of providing transfers in times of shock.

### *Kwenda Program*

**Making Kwenda adaptive would require prior planning and preparedness actions to ensure that all aspects of the delivery chain can operate effectively in the event of a shock**. To date, the government has not leveraged social protection programs in response to shocks, including COVID-19, although, as set out in Box 4.4, UNICEF worked with government counterparts to introduce three social assistance initiatives that sought to mitigate the impacts of the pandemic. Figure 4.2 below illustrates the delivery chain for social assistance, and an adaptive system—one that can respond to shocks—requires prior preparedness actions. This means having clarity on who will do what, when, how, and why at each stage of the delivery chain when a shock occurs, rather than needing to make decisions in a short timeframe after the shock.[53] The following paragraphs focus on the delivery chain for Kwenda and assess the extent to which it is currently adaptive.

*Figure 4.2: Delivery chain for cash transfers*




*Source: Lindert et al., 2020.*

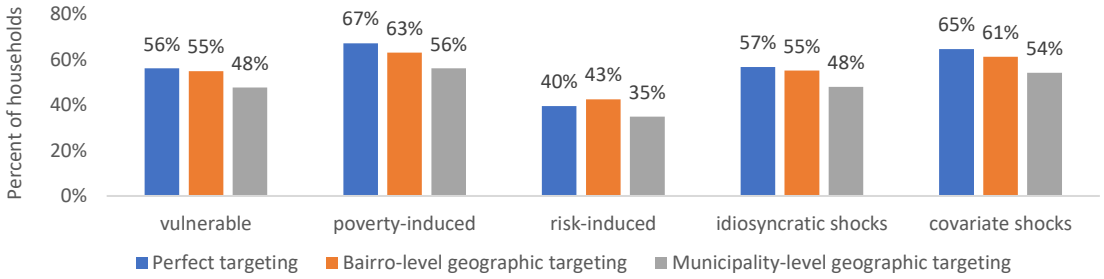
**Kwenda's existing communication strategy could be leveraged to conduct outreach processes in times of shock, although prior preparedness will be crucial.** Kwenda has several communication mechanisms to support its outreach process, as outlined in the Operations Manual. In the event of a shock, Kwenda's existing communication structures can be used, such as to inform communities about an imminent response to drought or flood through social protection systems. The Communication Strategy includes a teledrama, a documentary, advertising, press releases, social media, and publication of the final list of enrolled households. The strategy recognizes that different communication methods are needed for various stakeholders, including beneficiary families and communities, ineligible families, community leaders, civil society in general, and governmental authorities.[54] However, given the novelty in Angola of using a social protection program to respond to

[53] For instance, stage 4 in the delivery chain would involve understanding *in advance of a shock* which geographical locations and population groups are likely to be in the greatest need of assistance based on historical patterns and vulnerability analysis, and how they would be identified, registered, and enrolled.
[54] FAS Local Development Institute, 2022. *Operations Manual – Kwenda Program*. Republic of Angola.

shocks, it will be particularly important for there to be a high-quality approach. Other countries have experienced teething issues when initiating shock responses through mechanisms such as vertical and/or horizontal expansion.

**It is encouraging that Kwenda has already enrolled a substantial proportion of the country's vulnerable and shock-prone households, but over half a million vulnerable households remain uncovered.** There appears to be a positive correlation between the poorer provinces where Kwenda is operational and those areas that are most affected by climate shocks such as droughts and floods - such as Cunene, Namibe, Huíla, and Moxico. (Chapter 2 of this report sheds more light on the incidence of shocks in rural areas.)) Kwenda's coverage of vulnerable households experiencing covariate shocks is between 54 percent and 65 percent (Figure 4.3).[55] If Kwenda were perfectly targeted, around 0.98 million of the total 1.51 million households vulnerable to poverty from covariate shocks in Angola will be Kwenda beneficiaries when the program is fully rolled out. The estimated gap in coverage—i.e., those households estimated to be vulnerable to poverty due to covariate shocks but are not Kwenda beneficiaries—is approximately 0.53 million.[56]

*Figure 4.3: Fraction of vulnerable households receiving Kwenda by type of vulnerability*




*Source: World Bank (2022). Climate Change and Development Report, Angola.*

**A shock response could be provided to all or some households that have been registered.** Eligibility criteria could include geographic location and/or membership in a vulnerable group, such as women, older persons, and people with disabilities, who are often among those most affected by disasters.[57] This information is already held in SIIPS. A total of 62 percent of beneficiaries, for example, have a female household representative receiving the payment[58]. A vertical expansion would be provided to existing Kwenda beneficiaries who meet the eligibility criteria, whereas those registered in SIIPS but not yet enrolled would need to be enrolled (temporarily) in Kwenda.[59]

**Enhancing the duration and level of Kwenda's transfers could strengthen their impact on resilience.** A key aspect of adaptive social protection is building the capacity of households to withstand the impact of shocks, and there is growing evidence that social safety net programs can enhance resilience over time.[60] The current duration of Kwenda—which involves the provision of transfers for only 12 months, a significantly shorter period than is common in sub-Saharan Africa, where safety net

[55] World Bank (2022). *Climate Change and Development Report, Angola.*
[56] World Bank (2022). *Climate Change and Development Report, Angola.*
[57] Social exclusion, gender inequality, and discriminatory social norms and practices affect how individuals can access social protection benefits in a crisis. See Holmes, R. et al. (2020). "Strengthening gender equality and social inclusion during the implementation of social protection responses to COVID-19." Social Protection Approaches to COVID-19 Expert Advice Service (SPACE), DAI Global UK Ltd, United Kingdom.
[58] World Bank data.
[59] In the future, if the original design of Kwenda is maintained and payments are only provided for 12 months, SIIPS will presumably hold information on "former" Kwenda beneficiaries that could be leveraged in response to shock. Those former beneficiaries could be re-enrolled temporarily through a short-term reactivation of their beneficiary status in SIIPS.
[60] E.g., Frank Otchere & Sudhanshu Handa (2022) "Building Resilience through Social Protection: Evidence from Malawi", *The Journal of Development Studies*, 58:10, 1958-1980, DOI: 10.1080/00220388.2022.2075733

programs commonly have a duration of between two to five years[61]—is unlikely to contribute substantively to resilience. At present, there is no provision in Kwenda to adjust the transfer value in times of shock, and analysis has not yet been undertaken to consider the impact of previous shocks on prices and estimate Kwenda's regular transfer as a proportion of consumption needs during a future shock. Some countries are incorporating seasonal increases into routine cash transfers to make them more adaptive to predictable and regular shocks. For example, recognizing that consumption costs can vary according to the season, transfer levels for routine beneficiaries in Burkina Faso are being temporarily increased during the peak months of the lean season (2022 and 2023). This is essentially a form of vertical expansion, but it is applied to all beneficiaries on a regular (annual) basis.

**If a decision were made for Kwenda to expand vertically in response to shock, the payment system would face a number of challenges.** Several issues already constrain the ecosystem within which Kwenda's routine cash transfers are paid, and some of them would likely be amplified in the event of a disaster. These limitations include challenges with: (i) physical infrastructure—especially electricity, telecommunications, and road connectivity (which may be damaged after a shock); (ii) financial infrastructure—especially a limited network of bank agents and ATMs or irregular availability of their services, timely and sufficient availability of multi-cash cards, challenges in managing logistics and security of cash payments; and (iii) local markets—especially the presence of access points for POS machines and the acceptance of digital payments by local merchants.[62] Moreover, if physical payments are required after a shock, potential challenges include security during cash handling; fraud and corruption risks; and lack of timeliness, particularly if the shock has caused damage to physical infrastructure.

**Another possible constraint is that contracts with Kwenda's payment service providers might only specify obligations in relation to *routine* social protection.** This is the experience of other countries across Sub-Saharan Africa. If payment service providers are neither authorized nor mandated to deliver any payments to beneficiaries other than routine quarterly transfers, a vertical expansion may be delayed without a contract amendment. Funds could be available and beneficiaries identified, but the missing link would be a gap in the supply chain. A vital preparedness action in advance of shock would therefore be to negotiate an amendment to contracts with Kwenda payment service providers to facilitate vertical expansion.

[61] Beegle, K. et al. (2018). *Realizing the Full Potential of Social Safety Nets in Africa.* World Bank Group.
[62] World Bank 2023 (forthcoming). *Draft note on the strategy for institutionalization of Kwenda.* August 2022.

*Box 4.3: What drives timely responses to shocks? A strong foundational social protection system*

**An analysis of responses to COVID-19 illustrates the importance of investing in the foundations of social protection to deliver a timely response to shocks.** The analysis found that stronger systems, processes, and administrative capacity, greater coverage, and higher levels of integration, among many other factors, can provide better platforms for social protection responses to shocks. Data from 53 countries showed that the main drivers of timely responses to shocks include:

- Contextual issues, such as national ID coverage, financial inclusion, and technological inclusion.
- Strong legal frameworks and available domestic funding.
- Access to data/information, via high-coverage and high-quality social registries and social protection information systems.
- The capacity to register people quickly, even for countries relying substantially on pre-existing data, to ensure those who have only recently become vulnerable due to a shock also have access to social protection.
- Use of digital solutions to speed up outreach, applications, enrolment, payments, and overall communication with beneficiaries.

*Source: Beazley, R., Marzi, M., Steller, R. (2021) 'Drivers of Timely and Large-Scale Cash Responses to COVID19: what does the data say?', Social Protection Approaches to COVID-19 Expert Advice Service (SPACE), DAI Global UK Ltd, United Kingdom.*

**A rapid response through social protection programs may also encounter challenges with existing public financial management systems.** In addition to considering pre-arranged financial instruments that will supply money for shock response so that plans are backed by the right amount of funds that come at the right time, it is also crucial to consider the systems, plans, and capacities that will use money for shock response. Irrespective of the selected instrument, financing must find its way to the right target groups through well-functioning, planned, and coordinated delivery systems with capacity to scale, with appropriate coordination mechanisms, action plans, and decisions around how and when funds can be disbursed.[63]

**Kwenda's Grievance Redress Mechanism (GRM) could be leveraged in times of shock but may need additional resources or preparedness actions**. If Kwenda were to be expanded vertically or horizontally in response to shock, it would likely be relatively straightforward to avail all beneficiaries of the mechanism. However, it would be crucial to "shock-proof" the GRM and ensure that it can cope with the additional strain posed by a higher caseload. GRMs must provide a predictable, responsive, transparent, and credible process for all parties, and outcomes must be perceived as fair, objective, and durable. Accessibility is an important concern, and reporting channels must be readily available for all population groups. Accordingly, it would be crucial to ensure that the GRM has a sufficient number of dedicated and well-trained staff to cope with the extra caseload in times of shock response.

### *Non-government social assistance and emergency response programs*

**While external actors are not present in Angola to the extent commonly seen within the region, recent initiatives by UNICEF and WFP present valuable insights for adaptive social protection**. UNICEF has been involved in three small emergency cash transfer programs, which have yielded some important lessons. The programs were implemented by UNICEF in the context of COVID-19 and are

[63] Longhurst, D., Evans, S., Connolly, D., Lung, F., McCord, A., Allan, S., Plichta, (2021) "What are future financing options for shock-responsive social protection? A technical primer", Social Protection Approaches to COVID-19 Expert Advice Service (SPACE), DAI Global UK Ltd, United Kingdom.

detailed in Box 4.4 below. In keeping with the relatively small presence of humanitarian actors in Angola, WFP has a relatively small footprint. It recently introduced three temporary social assistance programs that could complement a scalable safety net in rural areas. The main program involved the distribution of commodity vouchers in response to drought. The initiative reached around 30,000 people in drought-affected areas of Huila and Cunene provinces. Eligibility criteria included women-headed households, elderly people, chronically ill people, and those suffering from malnutrition.[64] There were three cycles of distribution in total, with no further funding available for future droughts. Each family received a voucher valued at approximately US$70 and equivalent to 25 kg of rice, 25 kg of maize meal, 10 kg of pulses, 5 liters of oil, and 1 kg of salt.

*Box 4.4: UNICEF's recent emergency cash transfer programs in Angola – overview and key lessons*

UNICEF's emergency programs in response to COVID-19 focused on three groups: severely malnourished children; children under five years of age and living in urban areas; and children with HIV.

The malnourished children program used a database related to the rollout of nutrition services, and it targeted families of children under five who were diagnosed with malnutrition in the 49 health facilities included in the project. Some of the challenges included weak information systems in the health facilities to register and track patients and caregiver's lack of documentation for them and the children.

The urban program was based around geographical areas indicated by the government and where an NGO was already working. The beneficiary list was drawn from databases that already held information on households in that area. UNICEF updated the database and then proceeded with enrolment. Selection for the HIV program was based on a national database of children that were in a national HIV program.

Some key lessons from these three initiatives include the following:

- Training on social protection and the importance of interventions as a response to shocks should be the entry point.
- Engagement of partners, such as CSOs, is fundamental to ensuring the necessary agility.
- Financial services must be ready and experienced to meet the challenges of emergency response.
- A database is key to guiding the identification of beneficiaries (weak information systems in the health facilities make it challenging to register and track patients).
- Lack of documentation for caregivers and children.
- Regular debriefings with the Government can improve joint action and any corrective actions.
- Advocacy for sustainability and financial support for emergency response are needed.

*Source: UNICEF Angola.*

[64] Other temporary WFP programs include emergency school feeding and addressing moderate-to-acute malnutrition. The emergency school feeding program has been provided in Huila province only, with funding available through CERF until March 2023. The program is reaching 10,000 children. The malnutrition program provides food support to children under five plus a commodity voucher (valued at US$50/month) for the child's family for three months to avoid division of food support among the household. The initiative is currently reaching 70,000 people in Huila province and will expand to two more provinces before the funding concludes in July 2023. In Huila, geographic areas were selected through a cross-agency process based on Integrated Phase Classification (IPC) analysis and the SMART survey for nutrition.

**Some WFP drought response beneficiaries are also registered with Kwenda, which is not problematic given that the objectives of the two programs are different:** Kwenda seeks to address chronic poverty, whereas the commodity voucher is designed to address chronic needs arising from a shock. Indeed, WFP has gathered anecdotal evidence suggesting that beneficiaries use the two types of assistance to complement each other. The program's beneficiary list was developed by Civil Protection and MASFAMU, and WFP indicated there is an opportunity for capacity building in terms of selection and targeting, and ultimately would like to achieve harmonized and joint targeting between WFP and Civil Protection (i.e., a form of "piggy backing" or "alignment" in the language of adaptive social protection).

## Finance

**Overview:** This building block is focused on whether the government has proactively planned how it could rapidly mobilize the surge resources required to meet the increased needs following a shock. It analyses whether there is a government financing plan that outlines the instruments that the government will draw upon in the event of a shock so that they can rapidly mobilize funding for a scale-up of social protection.

**Key findings**:

- Angola's primary mechanisms for funding disaster response are ex-post budgetary allocations and supplementation. There is an opportunity for a more strategic approach to Disaster Risk Financing, which would help to address the gap between available funds and the average annual cost of disaster response.

**Angola's primary mechanisms for funding disaster response are ex-post budgetary allocations and supplementation.**[65] Currently, there are three main options for funding disaster response: (i) reallocations from other budget lines (within sectors and/or between sectors); (ii) issuing extraordinary credits, which can be done by Presidential decree (pursuant to Civil Protection Law (No. 28/03), as updated by Law No. 14/20 in 2020); and (iii) using funds from the General Contingency Budget, a budget line for unforeseen expenditures (equivalent to US$340 million in 2020), including those from climate shocks. (A more detailed understanding of how the General Contingency Budget has been used in the past may be a useful component of subsequent analysis.) The external provision of humanitarian assistance for food security is very limited, averaging US$ 2.95 million between 2014 and 2023 (see Table 4.1 —– which also includes total humanitarian assistance across all sectors, such as health, nutrition, protection, water, sanitation, etc.). The government has also developed a Strategic Food Reserve (Box 4.5), although it appears this has not yet been deployed for the purposes of emergency response.

*Table 4.1: International humanitarian assistance for Angola—total levels and for food security (USD million)*

| Year | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Food security** | 0.7 | 0 | 0 | 6.9 | 5.4 | 1.5 | 1.8 | 0.8 | 9.0 | 3.4 |
| **Total humanitarian assistance** | 8.7 | 1.3 | 12.7 | 18.7 | 9.6 | 9.6 | 19.7 | 12.2 | 19.8 | 17.9 |

***Source**: UNOCHA. Financial Tracking System. Angola. Accessible here*

[65] Unless otherwise stated, the information and statistics in this section are drawn from: World Bank 2023 (forthcoming). Disaster Risk Financing Diagnostic Study, Angola.

*Box 4.5: Introduction of strategic food reserve in Angola – the Reserva Estratégica Alimentar*

At the end of 2021, the Government of Angola initiated a strategic food reserve known as REA (Reserva Estratégica Alimentar). The REA is under the Ministry of Commerce and is operated by a private company, the Angola Customs Warehouse, which was selected through a public tender. The purpose of the REA includes addressing "excess price surges caused by hoarding and speculation" of essential food products and preparation in the event of severe natural disasters or other emergencies.

The REA regulation decree stated that the food emergency assistance component of the REA will be triggered only after a declaration of a food emergency by the President. The REA is also used to stimulate agriculture production by buying directly from farmers, training farmers, and distributing imported fertilizers. Initially, the government invested 200 million U.S. dollars for the construction and rehabilitation of infrastructure, the acquisition of cold equipment, passage control, and electricity production for the distribution centers of the customs warehouse.

The REA initially had 345,000 tons of essential food products, including maize, rice, sugar, beans, wheat, vegetable oil, etc., and plans to increase that to 515,000 tons in the medium term. In 2022, the REA added fertilizers and other agricultural inputs to the stock. Most of the storage facilities are in urban areas (Luanda and Benguela) owned by Angola Customs Warehouse, and some REA products use private storage.

Other countries in the region, including Zambia, Zimbabwe and Malawi, also have a strategic food reserve, although their primary purpose is to provide food emergency support and protect vulnerable consumers, and sometimes extent to include price stabilization and agricultural production stimulus. They are usually operated by the government.

***Source**: World Bank (2023). Internal draft note on the Strategic Food Reserve in Angola.*

**There does not appear to be any legal impediment to funds being allocated to social protection programs for disaster response, although this has not happened as yet.** All affected sectors submit funding requests to the Ministry of Finance (MoF). The Treasury and the Budget Unit consider these funding requests and the sources of funding available to arrange budgetary allocations or supplementations as needed and as feasible. The financing process can be flexible to ensure timeliness, with the MoF able to shorten approval timelines, although this is not necessarily the case for recurrent, small events.

**Some sector-specific contingent budgets have been developed, although not for social protection.** Agriculture is the most advanced, with an operational contingency budget line and a prearranged contingent credit available for post-disaster response. There are no prearranged risk financing instruments for social protection, aside from a line of credit of up to US$ 4.5 million that is accessible to the Ministry of Agriculture and Fisheries for emergencies via the Contingent Emergency Component (CERC) in the World Bank- financed Agriculture Transformation Project (MOSAP 3). This source of funding can be used for any post-disaster interventions in any affected area, but it has not yet been drawn down on, so there are no past experiences to analyze nor lessons learned.

**Notwithstanding the established processes, the gap between available funds and the average annual cost of disaster response is substantial.** The World Bank has conservatively estimated the average annual cost of disaster response at US$ 75 million per year, with that for a one-in-50-year

shock estimated to reach US$ 600 million. When compared to the existing funding approach in Angola, where a maximum of US$ 9 million is mobilized through budget reallocation, the post-disaster funding gap could exceed US$ 65 million per year.

**Processes are underway to strengthen the government's approach to disaster-risk financing.** At present, other than the General Contingency Budget at MINFIN, there are no pre-arranged financial instruments—such as a reserve fund dedicated to disasters or a sovereign insurance product for disasters—that could improve the predictability of funds for post-disaster interventions and strengthen planning practices in the DRM sector. However, it is encouraging that a Disaster Risk Financing diagnostic is underway at the time of this writing, led by the World Bank. This diagnostic is the first step towards developing a national strategy, policy, or legislation setting out commitments to disaster risk financing, including the role of adaptive social protection.

## Data and Information Systems

**Overview:** This building block is focused on the information that is available to the social protection system so that appropriate and timely action can be taken. One dimension of this relates to households and the extent to which information is collected and stored on those who are vulnerable to shocks, for instance, in a social registry and other information systems. The building block also examines Early Warning Systems (EWS) and analyses the extent to which they have the capacity to monitor natural hazards and alert populations in advance of a shock.

**Key findings**:

- The government has approved the creation of a social registry, which would draw on SIGAS and SIIPS. It is in the early stages of operationalization. The foundations for vertical expansion are in place, and some horizontal expansion is feasible for those households that have been registered but then excluded from Kwenda. It will be important to expand registrations to other geographies and households most vulnerable to shocks.
- A comprehensive EWS is not yet operational; one is planned for three provinces (only). Looking ahead, there is an opportunity to improve data sources and tools, and develop an EWS that covers floods and droughts, ideally national in scope. In due course, seasonal information can underpin a set of objective triggers for initiating a shock response.

### *Social Protection Information Systems*

**Information systems are important enablers of scaling up safety nets, and there are several key dimensions that can help enhance the effectiveness, efficiency, and inclusivity of a response.** These dimensions are reflected in the SPSTT questionnaire, which focuses on the following characteristics of information systems:

- The degree of coverage (registration) of the population that is likely to be affected by shocks, including in both rural and urban areas;
- The extent to which the socioeconomic and other household data is as current as possible and preferably less than three year's old;
- Whether a protocol exists for updating the registry or database, both in terms of ongoing or day-to-day updates through on-demand processes and also a periodic full update;
- Whether there is information that allows identifying, locating, and contacting the beneficiary and transferring a benefit in the wake of a shock;
- Existence of protocols that allow humanitarian partners to use the government's registry or databases for their shock response; and
- Whether there are data privacy regulations with a specified course of action in case of a privacy breach.

**This section focuses on the extent to which existing information management in Angola aligns with some of these key principles, particularly the first two.** These dimensions cannot usually be introduced at the time of a shock; instead, it is advisable to prepare in advance and make the required investments before the shock hits. As mentioned in Chapter 1 of this report and outlined in more detail in Box 4.6 below, the most relevant information systems for rural areas are SIIPS, SIGAS (the Social Action Information and Management System), and the social registry (Cadastro Social Único, CSU).

*Box 4.6: Overview of Angola's key information systems for social protection*

**SIIPS is managed by FAS-IDL and serves as the information management system for Kwenda.** It supports Kwenda's operations, with modules on registration, enrolment, payment, and grievance redress. The data held by SIIPS is therefore concentrated on households in rural areas and on provinces with a high poverty headcount, as these criteria have been the focus of Kwenda to date. SIIPS registers all households in a certain geographic area that have been selected as eligible for Kwenda. Through its registration module, the SIIPS collects data on more than 140 variables related to beneficiary characteristics. As of April 2023, a total of 982,741 households had been registered.[66]

**SIGAS is managed by MASFAMU and is used by CASIs**. The system is intended to harmonize the collection, processing, and analysis of data on vulnerable groups and beneficiaries of social action programs. SIGAS includes information from Valor Criança. It does not have geocoding, and interlocutors in government indicated that SIGAS would not be particularly useful in terms of shock response.

**The government has approved the creation of a social registry, laying the foundations for an integrated approach to information management for all programs and services targeted at the poor and vulnerable nationwide.** The creation of a social registry, to be known as the Cadastro Social Único (CSU) and operating under the coordination of MASFAMU, is envisaged by Presidential Decree No. 136/19, May 5.[67] The CSU is intended to serve as a unique database of potential beneficiaries of multiple social programs in the country, providing a platform to support outreach, intake, registration, and eligibility determination for social programs (i.e., not only social protection programs). Social registries can help to support information sharing across agencies delivering programs and services and reduce duplication and administrative costs.

**It is envisaged that the CSU would draw on information from both SIGAS and SIIPS**. Government informants indicated during this assessment that it is intended for both SIIPS and SIGAS to provide data for the social registry. The SIIPS and SIGAS databases are already linked, and the systems are interoperable. Data collected during the registration process of any program that uses SIIPS (currently only Kwenda) is available for encrypted transfer to SIGAS, which will subsequently be capable of providing all the data compiled by Kwenda to the CSU. SIGAS therefore holds all the information that is currently in SIIPS, in addition to data that is entered separately into SIGAS. These two information systems would therefore continue to exist but would be integrated with the CSU such that the data is interoperable across all platforms. The CSU would be the overall "host" for social protection programs such as Kwenda.

**The proposed social registry (CSU) is under the mandate of MASFAMU; however, it is not fully operational.** Subsequent to the CSU being decreed, the government has not yet announced a timetable for the initiative to be established and brought to fruition. Establishing and maintaining a social registry is indeed a substantial task that requires significant initial planning on technical and financial matters. It will require considerable upfront and ongoing investment in software, hardware, and personnel, accompanied by a sustainable financing plan. Creating and enforcing privacy regulations play a critical role in protecting the data of people whose details are held in a

[66] World Bank 2023 (forthcoming). *Draft note on the strategy for institutionalization of Kwenda.* August 2022
[67] World Bank 2020. Poverty Assessment, Angola.

social registry. Decisions will also be required regarding what data should be held in the CSU (including whether the CSU would collect data in addition to that which is sourced from systems such as SIGAS and SIIPS) and how the information will be updated over time. Some of these details are highlighted in the Presidential Decree on the CSU**;** however, further technical consultations will be required to operationalize it.

**The positive correlation between information held in SIIPS and areas most affected by covariate shocks provides a strong foundation for vertical and horizontal expansion in those areas.** As noted earlier, SIIPS has data on households from all provinces, including those with the highest rates of vulnerability to poverty associated with covariate shocks (Cunene, Huíla, Namibe and Cuando Cubango).[68] This means it would be relatively straightforward to provide vertical expansion to households affected by a shock. It may also be feasible to use SIIPS to expand Kwenda horizontally, to a limited extent (the households that are in SIIPS but are not currently eligible for Kwenda are those who live in the same poor communities as Kwenda beneficiaries but are eligible for the program as they are either in public sector employment or already receiving a public pension). The universal approach to registering households in Kwenda locations means that SIIPS holds a lot of basic information on all residents, even though not every household will be enrolled in the program.

**However, the government does not currently have a way to identify households affected by shocks in non-Kwenda locations.** While SIIPS has a large overlap with the most shock-prone locations, it is foreseeable that shocks will hit other parts of the country and that officials will need to understand who is most affected and in need of support. Including additional beneficiaries in a program (horizontal expansion) can be timely if there is a list of registered yet unenrolled households. For example, other communities in the same 'hotspot' municipalities—which are identified in Chapter 2 of this report—and where Kwenda already operates could be a priority. A new registration process would be required, and the ideal way to do this is before a shock, not after it. One way to address this is to pre-emptively register households in SIIPS in shock-prone areas where Kwenda does not exist. For slow-onset shocks such as drought, pre-registration could be prioritized for households living in the most vulnerable locations, and registration can occur ahead of the lean season. However, the routine undertaking of a food insecurity assessment is currently operational in only three provinces.

**A key challenge facing any registry is that its contents will need updating on a regular basis.** The extent to which the information held in SIIPS is up to date will be an important consideration in terms of future shock responses. While the data held in SIIPS is relatively new given that the information has only recently been collected, the relevance of that data would need to be maintained if it were to be useful for shock response. (Even then, the data would still be static and representative of pre-shock conditions, posing exclusion risks.) The information collected during registration can quickly become out of date. Poverty can be dynamic, and household demographics can change. While the information in SIIPS was current at the time that it was collected, issues such as income profiles, sociodemographic indicators, addresses, bank account details, etc., may no longer be valid when a future shock occurs.

**One method of keeping the information updated is to use a "dynamic" process**. This means developing an ongoing process to update SIIPS or the CSU, for instance, through "on-demand" digital platforms and/or physical structures. A growing number of countries use digital windows and helplines to update existing information in social registries. However, this works most effectively where there is high penetration of mobile phones, unlike in Angola, where only 55 percent of the population has access to a mobile phone.[69] Another option is to use outreach processes to update SIIPS or the CSU

[68] World Bank (2020). *Poverty Assessment – Angola.* Page 50.
[69] World Bank (2020). *Poverty Assessment – Angola.*

when there is a change in household circumstances/information, and the Integrated Social Action Centers (CASIs) and Community Development and Sanitation Agents (ADECOS) could potentially play a role in this regard.

**Whether through on-demand or administrator-driven registration processes, care should be taken to ensure that vulnerable groups are not unwittingly excluded.** The poorest and most vulnerable members of the population are those most likely at risk of exclusion from a shock response program. The census survey approach adopted by Kwenda—a comprehensive method that helps reduce exclusion risks—will likely not be a feasible post-shock approach in Angola. A digital approach could be particularly problematic, and care should also be taken with regard to documentation requirements, as 86 percent of the population does not have a government-approved identification card. An emphasis on vulnerable groups could be incorporated as part of registration processes. Additional support may also be required through a range of last-mile efforts. In this regard, collaboration with local actors could be extremely valuable (see Box 4.7).

*Box 4.7: Examples from COVID-19 of how local actors have helped to minimize exclusion*

Local actors are embedded in their communities and therefore are often ideally placed to ensure inclusive and equitable delivery of social protection responses to shocks, ensuring that the most vulnerable are reached. The following COVID-19 examples provide an illustration.

In **Indonesia**, the social protection response to COVID used networks of organizations of Persons With Disabilities (PWDs) to administer surveys through local health cadres, community rehabilitation teams, self-help cadres, and subdistrict staff to identify PWDs and integrate their information into the government's national databases quickly and cost-effectively. Individuals were supported to receive identification documents and assistive devices to allow them to access social protection.

In **India**, the Self-Employed Women's Association (SEWA), a network of over two million self-employed women, played a key role in facilitating access to government-funded COVID-19 social protection responses. SEWA informed its members of their entitlements, how to apply, and how to open a bank account.

*Source: Cabot Venton, C. (2021). Direct support to local actors: considerations for donors. Social Protection Approaches to COVID-19 Expert Advice Service (SPACE), DAI Global UK Ltd, United Kingdom.*

### *Early Warning Systems*

**At present, there are no functioning Early Warning Systems (EWS) that focus on food insecurity, drought, and/or floods.** That said, although there is no comprehensive approach as yet, it is encouraging that there is an existing foundation for communication systems to raise awareness about the risk of shocks—an important component of an EWS. INAMET uses various transmission media (radio, phone, and newspapers) to disseminate forecasting information to the population, and these systems are reasonably well organized. However, the EWS is not complete, and the existing approach has some shortcomings: (i) there are often delays in providing warning messages; (ii) there are not yet any established linkages with contingency plans;[70] (iii) there is no EWS as yet for food insecurity or drought; and (iv) monitoring systems that do exist serve predominantly water management purposes and have weak spatial coverage.[71] On the latter point, there have been several recent efforts to pilot

[70] Southern Africa Drought Resilience Initiative (2021), *Drought resilience profile: Angola*.
[71] Southern Africa Drought Resilience Initiative (2021), *Drought resilience profile: Angola*.

real-time EWS for river-level monitoring in some areas.[72] However, the institutional mechanisms to manage real-time flood monitoring are limited, and there are no stable data exchange protocols in place between relevant institutions, posing a potential threat as far as data accessibility is concerned.[73]

**Plans are in place to redress this gap and develop an EWS that would cover floods and droughts, although only in three provinces.** Through the EU-funded Fortalecimento da Resiliência e da Segurança Alimentar e Nutricional (FRESAN) program, UNDP and WFP are providing technical and financial support to the government to develop the EWS that would enhance and integrate relevant data sources. The EWS will only be for three provinces, as there are insufficient resources to cover the whole country. Monitoring and forecasting of rainfall are undertaken by the National Institute of Meteorology and Geophysics (INAMET), and the government is investing in improving the collection and sharing of that information by INAMET. The central objective is the linking of databases with the national meteorological services and the sharing of this information with civil protection officials.

**Angola is gradually enhancing its efforts to gather and consolidate information on past disasters.** The Comissão Nacional de Protecção Civil (CNPC) and INAMET already gather historical data to strengthen an existing database that can be used to identify disaster impacts and weather anomalies. A national disaster loss database is also being implemented, including the recording of information on historical damages and losses.[74] However, no detailed hazard maps for floods and droughts are available, and the availability of data on the occurrence and impact of natural disasters is limited, especially for recurrent, localized events.[75]

### *Vulnerability assessments*

**Identifying "who is vulnerable to shocks" is an important ingredient for adaptive social protection, but there are currently limited data sources or tools available in Angola.** Translating high-quality seasonal forecasts into granular information on who is or will be affected by a natural disaster helps to prepare a social protection system for shock response. Angola's vulnerability and impact assessment capacity in terms of climate shocks have been externally assessed as "low".[76] External support for existing assessments is prominent, and assessments do not seem to be institutionalized yet. The Ministry of Agriculture issues a bulletin every three months with a special focus on food security, and a post-harvest food security assessment was conducted in 2022, although it is unclear if this is an annual and institutionalized process. Assessments have been conducted in recent years using IPC analysis,[77] but only in three provinces.[78] FEWS NET also publishes remote monitoring reports.

**One mechanism that might be useful for responding to climate shocks is WFP's tool, which collects information on food insecurity and nutrition on a rolling basis**. The mobile Vulnerability Assessment Monitoring (mVAM) tool is based on information collected by calling people randomly and asking them about food consumption and coping strategies. WFP uses the mVAM results to determine its actions in drought response, in combination with IPC analysis. While not comprehensive, mVAM

[72] Southern Africa Drought Resilience Initiative (2021), *Drought resilience profile: Angola*; World Bank (2022), Angola Urbanisation Review.
[73] World Bank (2022), Angola Urbanisation Review.
[74] Southern Africa Drought Resilience Initiative (2021), *Drought resilience profile: Angola*.
[75] Southern Africa Drought Resilience Initiative (2021), *Drought resilience profile: Angola*; World Bank 2023 (forthcoming). Disaster Risk Financing Diagnostic Study, Angola.
[76] Southern Africa Drought Resilience Initiative (2021), *Drought resilience profile: Angola*.
[77] Integrated Food Security Phase Classification website https://www.ipcinfo.org/ipcinfo-website/where-what/southern-africa/angola/en/ (accessed 22 November 2022)
[78] Southern Africa Drought Resilience Initiative (2021), *Drought resilience profile: Angola*. WFP coordinates food security assessments in the southern part of the country, including the preparation of assessment tools, training of trainers and enumerators, and data analysis. WFP has also supported a decentralized approach to vulnerability and impact assessment through the establishment of provincial food security and nutrition working groups in Cunene and Cuando Cubango provinces, where provincial Government staff have been trained on food security and nutrition, data collection and analysis, and reporting.

provides up-to-date information that can help identify priority hotspots for deeper assessment. WFP also conducts rainy season reports and nutrition (SMART) surveys.

### *Triggers for shock response*

**In a growing number of countries, seasonal information, including IPC data, underpins a set of objective triggers for initiating a shock response**. One of the best-known examples in the region is Kenya's Hunger Safety Net Program (HSNP), a nationally owned cash transfer program that has clear triggers for shock response. See Box 4.8 below. Such a mechanism does not yet exist in Angola, but it could be considered in the future as part of an adaptive social protection system.[79] For example, at the community or regional level, and easily measured indicators of market prices or weather, such as rainfall or temperature, could be used to trigger a scale-up of Kwenda for households within eligible communities or regions as a means of preventing asset depletion and protecting welfare. The analysis in Chapter 2 shows the potential for using satellite data to capture drought and flood risks as part of a 'hard' trigger to inform a scale-up, although additional in-depth analysis is needed in particular geographical areas. Additional investments are also needed to systematically monitor and collect food insecurity information at the household-level to inform a 'softer' trigger for adaptive safety nets.

[79] Covariate shocks common to all households in a community are less likely to be insured through informal risk sharing schemes *within* communities or even by mutual insurance schemes *across* communities. The prevalence of climate-induced covariate shocks in some regions provides a strong case for implementing an adaptive or scalable social protection system that relies on community- or regional-scale indicators.

*Box 4.8. Using seasonal data to trigger shock-responsive social protection in Kenya*

The HSNP's routine operations include the delivery of unconditional cash transfers to approximately 100,000 poor and vulnerable households in four drought-prone counties in Kenya. It also has the capacity and financing to expand horizontally to provide ad hoc support to an additional 270,000 households that are not routine beneficiaries but have been registered and pre-enrolled so that they can receive temporary support when a trigger is activated.

The HSNP's framework for scalability outlines who will be provided with a response in the event of a shock (amount, frequency, and duration). The key source of seasonal information is the Vegetation Condition Index. Emergency payments are triggered depending on the level of the index, and this has occurred on multiple occasions over recent years, as outlined in the HSNP's dashboard.

| Location | Trigger Vegetation Condition Index (VCI) | | Drought Phase Equivalent | Maximum coverage of households to receive cash transfer | Amount of Transfer | Frequency | Duration of Transfer |
|---|---|---|---|---|---|---|---|
| *Sub-county* | ≥ 50 and 35 to 50 | Wet or No Drought | 1 Normal | Routine HSNP households | Standard payment (5,400 Ksh) | Every 2 months | Ongoing |
| | *20 to 35* | Moderate drought | 2 Alert | Routine HSNP households | Standard payment | Every 2 months | Ongoing |
| | *10 to 20* | Severe Drought | 3 Alarm | Routine HSNP households | Standard payment | Every 2 months | Ongoing |
| | | | | Beyond routine HHs, up to 50% coverage in each sub-location | Emergency payment (2,700 Ksh) | Every month | For each month VCI is at severe drought status |
| | *< 10* | Extreme Drought | 4 Emergency | Routine HSNP households | Standard payment | Every 2 months | Ongoing |
| | | | | Beyond routine HHs, up to 75% coverage in each sub-location | Emergency payment (2,550 Ksh) | Every month | For each month VCI at extreme drought status |

*Source: UNICEF. 2019. Programme Guidance: Strengthening Shock Responsive Social Protection Systems. New York.*

## Recommendations

**The existing social protection system in Angola presents an important foundation and vehicle for future responses to both climate and price shocks in rural areas.** In addition to providing a platform for protecting vulnerable populations in regular times, social protection programs such as Kwenda can be expanded to provide assistance when shocks occur, including droughts, floods, and rapid price increases. Options include vertical (providing top-ups in addition to Kwenda benefits) and horizontal (providing transfers to non-Kwenda beneficiaries affected by a shock) expansions of the program. Planning and preparing for contingencies in terms of programmatic design and financing is critical.

**To leverage Kwenda for shock response purposes, its institutionalization and preparedness actions to support a future vertical or horizontal expansion are necessary.** Both types of expansion are important because covariate shocks increase the risk of impoverishment across large parts of a community. In addition, the program's institutionalization is important given the anticipated long-term trajectory of likely shocks. Transitioning Kwenda from a 12-month initiative to a multi-year

program, as is common within the region, would also lay a strong foundation for supporting shock response, given that the delivery of rapid assistance is more effective when there is an existing system in place.

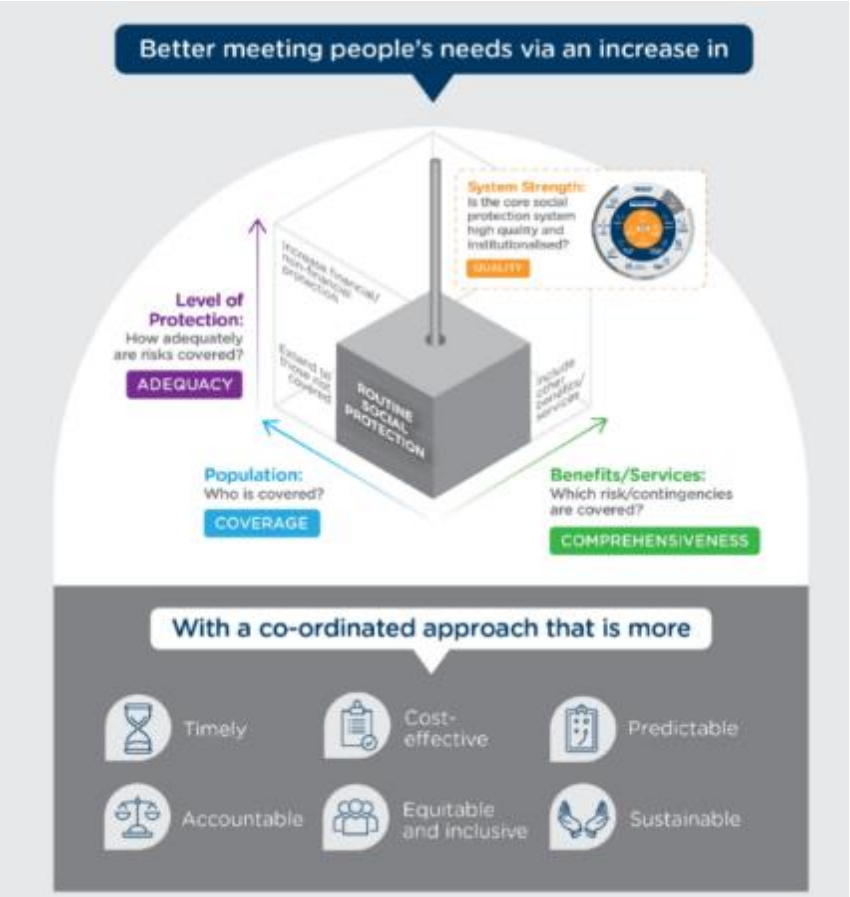
**Investing in a functional and up-to-date CSU will position Angola strongly to respond to shocks in an efficient and effective manner.** When established, the CSU can provide a single source of data for all government social protection programs and should ideally be interoperable with all government and non-government databases. A social registry that can access information on both enrolled and non-enrolled households can support vertical and horizontal expansions without further data collection. Interoperability between the CSU and all relevant databases will allow implementers of a shock response to rapidly gather information on on beneficiaries in need of support, their current payment mechanism (for enrolled households), and any potential opportunities to establish connections with complementary programs. SIIPS already provides a basis for a very limited horizontal expansion.

**The preparedness of the social protection system in Angola varies according to the four building blocks.** Safety nets are still nascent in Angola, and hence their ability to expand is still limited. However, the Government of Angola is undertaking important investments in this direction. Set out in Table 4.2 below is an assessment using a traffic light system that seeks to capture the level of preparedness of each building block to respond to heightened needs caused by future shocks. The table aims to provide an understanding of how far existing national capacities could be scaled up in anticipation of and in response to shocks, while also setting a baseline for potential follow-up assessments.

**The recommendations to improve the capacity of the social protection system to scale up in rural areas of Angola are structured by the four building blocks** and span both rapid-onset and slow-onset shocks, including those caused by climate and economic factors. The recommendations have been developed with consideration of the extent to which each will advance various principles that are noted in the evolving global literature as good practices for adaptive social protection.[80] These include coverage, adequacy, comprehensiveness, timeliness, cost-effectiveness, inclusiveness, accountability to affected populations, predictability, government ownership and sustainability, and operational feasibility. Figure 4.4 provides a visual representation of these and other important issues in adaptive social protection.

[80] See, for instance, SPACE (2020). SPACE Strategy Decision Matrix. https://socialprotection.org/discover/publications/space-strategy-decision-matrix

*Figure 4.4: Considerations when leveraging social protection to respond to covariate shocks*




*Source: Adapted by SPACE, based on TRANSFORM (2020)*

### *Institutional Arrangements and Partnerships*

1. **Update strategic instruments for both DRM and social protection.** This could include identifying an overarching vision and framework for adaptive social protection, with goals and priorities, and ensuring that cross-sectoral linkages are incorporated.
2. **Develop and operationalize coordination structures for government actors at the national and subnational levels that recognize the potential role of social protection in shock response.** At the national level, establish a technical working group for adaptive social protection at the level of the Minister of State for Social Affairs in the President's Office. At the local level, establishing or enhancing mechanisms may require a review of Terms of Reference of local structures. Development Partners should also coordinate on this agenda by including it as an agenda in their social protection coordination group, which already includes the key humanitarian actor, WFP. Development partners should also consider a formal means of interaction between their coordination group and the proposed technical working group for adaptive social protection.

### *Programs and Delivery Systems*

1. **Institutionalize Kwenda as a permanent social protection instrument and strengthen routine provision**. Strengthening the system that underpins routine social assistance for chronically poor populations is crucial to delivering any form of shock response. As described in Box 4.3, a stronger routine social protection system—including processes, administrative capacity, coverage, and integration—provides a robust foundation for effective responses to shocks. Key opportunities for action include enhancing the adequacy of Kwenda transfer levels, transitioning Kwenda to a multi-year program, and ensuring that processes and structures are in place for business continuity.

Kwenda needs to be able to withstand the impact of a shock and maintain routine delivery (i.e., not collapse).[81]

2. **Prepare the Kwenda delivery chain for a shock response.** Potential actions could include: (i) increasing CSU registration of households in shock-prone areas; (ii) equipping payment systems with capacity for a scale-up (including adjustments to contracts to authorize payment delivery in response to shock; maintaining a roster of local partners that operate in the hotspot regions and can support program implementation with a quick turnaround time; and investing in IT solutions in these hotspots to facilitate implementation at times of shock, e.g., satellite phones and internet); (iii) develop new eligibility criteria based on categories of households or individuals considered highly vulnerable to shocks; (iv) draft new SOPs or an operational manual that instructs officials on how to implement Kwenda in response to a shock; and (v) ensure adequate financial, human, and technical resources can be deployed to GRMs to enable them to cope with the increased caseload caused by a vertical or horizontal expansion of Kwenda.

*Finance*

1. **Strengthen the foundational social protection system by increasing overall spending** to allow broadening coverage of Kwenda and enhancing the duration—and potentially the adequacy—of transfers.
2. **Develop and adopt a comprehensive disaster risk financing strategy**, including provisions for financing instruments, delivery mechanisms, and institutional reforms. A broad selection of financing instruments will help the government mobilize funds effectively after major disasters. This could include a dedicated contingency multi-year reserve fund or line of credit to provide immediate liquidity after disasters and mitigate the impact of shocks on vulnerable households.

*Data and Information Systems*

1. **Operationalize the CSU in line with the Presidential Decree and populate it with more households living in shock-prone areas.** These households would not necessarily be enrolled in Kwenda or another program, but the objective of registering them in the CSU is that they could be temporarily enrolled in the future, in response to a shock. The shock-specific information on existing households should also be updated potentially through the development of a social registry 'shock's module. Establishing the CSU also involves ensuring the necessary protocols and technical arrangements are in place to facilitate access, interoperability with other databases, and data privacy.
2. **Establish an Early Warning System and create triggers to initiate the scale-up of social protection.** The existing efforts to establish an EWS should continue, with a focus on enhancing the capacity of line ministries and local authorities in relation to the collection, real-time monitoring, and analysis of seasonal data sources. The EWS should be expanded to national coverage in due course. To create the linkage between the EWS and social protection, it will be important to develop triggers that are measurable and robust indicators—not subject to political interference—that would trigger social protection initiatives to mitigate the impact of a shock. A national database that tracks the occurrence and impact of natural disasters would also help improve the quality of disaster risk assessments. Chapter 2 provides a preliminary assessment of what it would take to develop such triggers.

[81] As outlined by Barca (2020) and subsequently adopted by SPACE and Maintains, among others. A program or system component can be considered resilient if it makes temporary adjustments to ensure business continuity, but core aspects, such as objectives, target population, transfer level, etc., should remain unchanged.

*Table 4.2: Summarized assessment of key components and opportunities to strengthen readiness*

*Note: Rating is higher if Harvey balls have a more significant share of black; a higher rating implies greater readiness in terms of shock response*

| Building block and sub-component | Rating | Summarized assessment of current situation | Opportunities to improve readiness for shock response |
|---|---|---|---|
| **Programs**<br>Design features, coverage, adequacy | ◕ | • Kwenda shows strong promise for shock response – including growing coverage and progressive targeting<br>• Kwenda's targeting criteria and scale imply that a large proportion of households that are vulnerable, and particularly to covariate shocks, will already be enrolled to receive cash transfers | • Enhance the duration and level of Kwenda's transfers to strengthen the impacts on household's resilience and ability to cope with shocks |
| **Programs**<br>Inclusion | ◑ | • Kwenda's existing eligibility criteria already has a specific emphasis on gender, disability, and older persons, and women-headed households<br>• But no other vulnerable groups – such as child-headed households and refugees | • Revise eligibility criteria to include other vulnerable categories that could be unwittingly excluded from shock response<br>• Undertake further analysis linking shock-induced food insecurity and household characteristics. |
| **Programs**<br>Delivery systems - outreach, registration, grievance redress | ◕ | • Certain aspects of Kwenda's delivery systems are well positioned to be used for shock response – including data and communications systems<br>• Universal registration process in micro-areas means there is already a good level of information on residents. | • Develop specific registration tools to collect shock-specific information – where shocks affect households not included in Kwenda. Existing data may need a light touch update in case circumstances have changed since registration<br>• Kwenda's GRM can be leveraged in times of shock but will require additional resources or preparedness actions (e.g., staff to cope with the extra caseload) |
| **Programs**<br>Delivery systems - payment mechanisms | ◑ | • Kwenda uses several different mechanisms to transfer payments for routine social transfers. Existing contracts with payment service providers might only relate to routine transfers (not in response to shocks).<br>• Current challenges include: physical infrastructure – electricity, telecommunications, road connectivity; financial infrastructure – bank agents and ATMs; and | • Adjust contracts for payment service providers to include the possibility of shock response<br>• Undertake preparedness actions to "shock proof" the system as vertical or horizontal expansion would amplify existing challenges in the payment system, such as maintaining a roster of local partners that operate in the hotspot regions and can support program implementation with a quick turnaround time, and |

| | | | |
|---|---|---|---|
| | | local markets – presence of access points and merchants. | investing in IT solutions in these hotspots to facilitate implementation at times of shock, e.g., satellite phones and internet. |
| **Data and information systems**<br>EWS - functionality; triggers to initiate scale up of SP | ◔ | • Comprehensive EWS is not yet operational; one is planned for three provinces (only).<br>• Angola's vulnerability and impact assessment capacity is still emerging<br>• WFP recently introduced a tool which collects information on food insecurity and nutrition on a rolling basis<br>• The lack of a national ID makes it tougher to use existing databases | • Improve data sources and tools and develop an EWS that covers floods and drought, ideally national in scope<br>• Use seasonal information to underpin a set of objective triggers for initiating a shock response, potentially drawing on the considerations outlined in Chapter 2 of this report |
| **Data and information systems**<br>Social registry - coverage of disaster-prone areas; interoperability | ◑ | • The government has approved the creation of a social registry, which would draw on SIGAS and SIIPS. It is in the early stages of operationalization.<br>• Foundations for Vertical Expansion are in place<br>• Horizontal expansion is also feasible. Households that have been registered but then excluded from Kwenda could be temporarily enrolled. | • Operationalize the CSU to meet international standards<br>• Increase the scale of registrations in geographies and amongst households that are most vulnerable, and develop a social registry 'shock's module to update shock-specific information on existing households<br>• Take steps to leverage other databases – beyond SIIPS and the CSU – so that they can play a role in shock response<br>• Scale up ID coverage to vulnerable populations |
| **Financing**<br>The ability of the government to analyze and model cost implications of different shocks over time.<br>Whether financing is in place to ensure a timely response to disasters | ◔ | • Angola's primary mechanisms for funding disaster response are ex-post budgetary allocations and supplementation<br>• Current expenditure is relatively low, having declined over the past decade as a proportion of GDP.<br>• There is no legal impediment to funds being allocated to social protection programs for disaster response<br>• The introduction of Kwenda has both consolidated and increased the expenditure on safety nets. | • Enhance public expenditure on contributory and non-contributory social protection.<br>• Adopt a strategic approach to Disaster Risk Financing<br>• Address the gap between available funds and the average annual cost of disaster response |
| **Policies and institutions** | ◕ | • Established legal and policy framework for social protection and DRM: Policy framework for safety nets | • Include a provision for adaptive social protection in the existing policy framework. Foundations exist upon |

| | | | |
|---|---|---|---|
| Government leadership – including policies and legislative frameworks for SP and DRM | | (PNAS); Civil Protection Law; Contingency Plans (processes for assessment and financing of disaster response); Strategic Plan for Prevention and Disaster Risk Reduction; Drought Recovery Framework | which to build. One option is to integrate the ASP pillar in PNAS (rather than developing a new, separate, policy), and another is to include this in the National Development Plan 2023-27<br>• Develop legal or policy provisions specifically relating to role of social protection in disaster response. |
| **Policies and institutions**<br>Institutional arrangements – coordination mechanisms between DRM and social protection | ◔ | • MASFAMU is the lead policy agency for social protection<br>• From a technical and operational perspective, the main government body for disaster response is the CNPC.<br>• The disaster management framework is operated at the national, provincial, municipal and community levels | • Establish a technical working group on shock responsive social safety nets to enhance institutional coordination. |

# Chapter 5: Readiness to scale up safety nets in urban areas

## Key messages

**There are currently no large-scale safety net instruments in urban Angola; however, rural Kwenda provides the basis for expanding of routine safety nets to urban areas.** Kwenda, while designed as a fuel subsidy reform compensation mechanism in 2019 with a target population of the poor and vulnerable in urban areas, started prioritizing the poor and vulnerable rural population in response to the onset of COVID-19 in 2020. Currently, almost all its close to 1 million registered households live in the poorest rural communities, despite Kwenda's recent expansion into a few peri-urban areas.

**Hence, a first step to respond to shocks in urban areas would be to start expanding the existing rural Kwenda to establish a routine safety net in peri-urban and urban areas—this would enable quick scale-ups in response to shocks in the future.** These shocks could be climatic or price-related (induced by structural reforms and exogenous shocks such as those observed during COVID-19 and the onset of the Ukraine war). It is important that the national safety net system is internally consistent, wherein the design parameters of the urban safety net should be broadly in line with those in rural areas, but with the necessary adaptations. This includes the targeting criteria, benefit level, duration, alignment of institutions in the delivery process, etc. However, it is important to also consider any critical differences between urban and rural contexts to ensure that the investments adapt to the needs of those in urban contexts. For example, urban households tend to be on the move more than rural households and are most densely populated, both of which have implications for the method, the ensuing cost, and the effectiveness of registration and payment processes. Additionally, coverage of information systems and especially social media platforms is substantially more prevalent in urban areas, making any social programming more sensitive as it is easier to spread misinformation and smear campaigns.

**Drawing on lessons from international experiences of urban shock response, an Angolan urban scale-up could include the following considerations:** While a shock response has greater urgency, these lessons could also inform the establishment of a routine safety net program, which is the first step in developing a shock-responsive program.

a. **Targeting:** a multi-level approach comprising geographic prioritization of households living in climate or economic shock-prone areas and prioritization of structural vulnerability associated with specific household characteristics such as gender of household head, age, disability status, and employment condition. Use of these vulnerability criteria is important in urban areas, more so than rural areas, due to the political economy considerations of creating dependencies among those with labor capacity, the density of urban geographies, and the political sensitivities of excluding households that may look like households in neighboring bairros.
b. **Geographic prioritization:** the Cadastro Social Único (CSU) could prioritize registrations of households in the locations where poor and vulnerable populations are concentrated—in urban Angola, there is a strong correlation between housing quality and poverty. So, the CSU could prioritize bairros with a greater share of slums identified through census data or innovative use of drone-based technology and open street maps. This is also in line with the geographic method used in rural areas for household registrations in the CSU.

c. **Household registration:** given the lack of an extensive national ID system, the government could consider starting with the national COVID-19 database (Registo Digital Individual para a Vacinação contra a COVID-19) that has basic individual data on 80 percent of Angolans above the age of 15, and supplementing it with an on-demand localized registration process to add basic socio-demographic details to each individual and to include Angolans not in the database (who may potentially be among the most vulnerable). A house-to-house registration process like in rural areas poses high risks in terms of logistics and the safety of staff in densely populated urban slums.
d. **Benefit level:** The benefit size could be set to a previously established benchmark such as the rural Kwenda cash transfer value (inflation-adjusted average extreme poverty gap 2018-19), the minimum wage, or the food basket.
e. **Monitoring the impacts of shocks:** For an expected economic shock, such as one resulting from structural reform, the needs can be modeled in advance by poverty economists with access to sufficient data. For an unexpected economic shock, rapid surveys using digital technology (such as High-Frequency Phone Surveys) can be deployed to gather information from certain population groups. For a climate shock, options could include electronic surveys or leveraging existing platforms such as the WFP's Hunger Index.
f. **Payments:** The banking system in Angola has a unique feature wherein individuals without bank accounts can withdraw cash from any ATM if they have the details for the transfer, which they can receive on their phone numbers. Payments could therefore be linked to SIM cards, which are linked to mobile wallet accounts. Beneficiaries could insert their SIM card into any phone to receive their payment details, which they could then use at payment points. This approach has been adopted in Angola by UNICEF in its shock response programs.
g. **Grievance redress and monitoring:** The rural GRM of Kwenda could be adapted to the urban context and institutional setup. In addition, a program-specific call center could be set up for the duration of the shock response. GRM and monitoring could be fortified by engaging civil society, whose prevalence is higher in urban areas and who may have specialized skills in this area.

**The primary purpose of this chapter is to consider how the design of Kwenda and the broader social protection system could be adapted for urban areas— to function as both a routine urban safety net and to be capable of scaling up in response to urban climate or price shocks.** This chapter draws on the analysis in the preceding chapters, particularly Chapter 3 on the characteristics of urban poverty and vulnerability. Unlike Chapter 4, the analysis in this chapter is not based on an assessment, as there are no large-scale urban safety nets in Angola. The chapter instead presents recommendations on how to design and implement an urban social protection approach by drawing on key insights from international experiences.[82] It concludes that the first step is to expand the existing rural Kwenda to establish a routine safety net in peri-urban and urban areas—a step that is justifiable on the basis of urban poverty and vulnerability. Moreover, it would provide a strong foundation for rapid scale-ups in response to climate and economic shocks in the future.

**Poverty and vulnerability affect many of Angola's urban residents, as was articulated in detail in Chapter 3, presenting a strong case for a government safety net.** The proportion of Angolans residing in urban areas has more than quadrupled over the past 50 years, from 15 percent in 1970 to around 67 percent in 2021.[83] Today, over 21 million people live in urban areas, and this figure is expected to triple over the next

[82] Includes the four case studies that were prepared for this report.
[83] World Bank indicators: https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS?locations=AO

three decades to reach 61 million by 2050.[84] Moreover, around one in three urban residents (35 percent) suffers from multidimensional poverty, including indicators such as access to education and health services and overall quality of life.[85] Urban areas are also characterized by high levels of informality, which represented 67.5 percent of urban employment in 2020.[86] Unemployment in urban areas is around two and a half times the rate of rural unemployment (42.6 percent to 17.0 percent, respectively).[87]

**Urban residents are highly vulnerable to economic and price shocks.** Price shocks may be induced by structural reforms such as fuel subsidy reforms or exogenous shocks such as those during COVID-19 and the onset of the Ukraine war. As noted in Chapter 3, rapidly increasing food prices are a major cause of poverty in urban areas.[88] In comparison with their rural counterparts, Angola's urban poor have a high dependence on physical cash (practically everything needs to be bought with money) and weaker community networks. A sudden rise in expenses, or an inability to earn income, can have an immediate impact on daily needs such as accessing food and health services or undertaking travel (including seeking employment).[89] In 2020, the combined impacts of COVID-19 and collapsing oil prices were expected to have acutely affected urban residents through job losses, reduced hours of work, and higher prices for imported food.[90]

**Climate change will also affect urban areas, primarily through flooding, heatwaves, and drought.** Climate change projections for Angola suggest there will be more severe and frequent weather-related disasters in the future. Urban areas are likely to be acutely affected, in part because rapid, uncontrolled urban expansion has caused heightened exposure to natural disasters. Built-up areas have quadrupled since 1975, including expansion into hazard-prone areas without adequate drainage. Land scarcity means that the urban poor often settle in these riskier areas, making them particularly vulnerable to climate shocks.[91] The urban populations most at risk of climate shocks in Angola are those households living and/or working in urban areas prone to flooding and in dwellings or structures located on low or unstable ground. Urban centers have the fastest-growing flood exposure, and buildings constructed with more inexpensive and less durable materials are disproportionately more exposed to flooding.[92] An estimated 1.2 million people live in areas exposed to flood risk (more than triple the number of people who were at risk in 2000), and coastal settlements will be affected by sea level rise, impacting half the national population.[93]

**The premise of this chapter is that an urban-specific approach to social protection could help to build household resilience and allow safety nets to be leveraged in response to price and climate shocks affecting urban areas.** As is the case in rural areas of Angola (Chapter 4), well-designed social protection

[84] World Bank 2022. *Angola's Cities: Seizing the Opportunity*.
[85] INE and Government of Angola. (2020) *Multidimensional Poverty in Angola*. https://ophi.org.uk/wp-content/uploads/Angola_PM_2020.pdf
[86] ILO 2021. *Angola: Study on the migration from the informal economy for formal economy.* https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---act_emp/documents/publication/wcms_823469.pdf
[87] UNDP 2020. https://www.undp.org/sites/g/files/zskgke326/files/migration/ao/afd5872b802f8e28b342bbb118c3f402d302aea3d71924f54b5a4ce6d4a3e714.pdf
[88] As explained in Chapter 3, further analysis on the dynamics between food prices and food insecurity is constrained by the lack of food price data and historical food insecurity information.
[89] Inge Tvedten, Gilson Lázaro and Eyolf Jul-Larsen (2018). "Comparing urban and rural poverty in Angola." Bergen: Chr. Michelsen Institute (CMI Brief no. 2018:05). https://www.cmi.no/publications/6676-comparing-urban-and-rural-poverty-in-angola
[90] World Bank and UNDP. 2020. https://documents1.worldbank.org/curated/en/264751607918142701/pdf/Confronting-the-Socioeconomic-Consequences-of-COVID-19-in-Angola-Outlook-and-Policy-Responses-to-an-Evolving-Multi-Dimensional-Crisis-Policy-Document.pdf
[91] World Bank 2022. *Angola's Cities: Seizing the Opportunity*.
[92] Angola Standardized Outputs Presentation, AFR DRM Analytics Team, P170031.
[93] World Bank 2022. *Angola's Cities: Seizing the Opportunity*.

systems can be prepared in advance of a shock so that timely and well-targeted support can be provided to those with acute needs when disaster strikes. This could help to minimize the short-term impact of a shock, whether climate or economic, and reduce the risk of long-term adverse effects. While there has been significant global focus in recent years on responses to climate shocks and COVID-19, social protection systems have also been used in many countries as part of responses to mitigate the impact of fuel subsidy reforms leading to price shocks. Some examples are included below in Box 5.1.

*Box 5.1: Expanding existing cash transfer programs to help mitigate the impact of subsidy reforms*

In **Brazil**, after the withdrawal of LPG subsidies in 2001, the government introduced a new conditional cash transfer program, the Bolsa Escola. The government also introduced a new LPG subsidy in 2002 to assist low-income families in purchasing LPG through a gas voucher. Eligibility was based on a means test. Both targeted programs were consolidated under a new national flagship conditional cash transfer program, the Bolsa Familia, in 2003.

In **Egypt**, in 2014, the Ministry of Social Solidarity (MoSS) was mandated to establish and implement two new cash transfer programs—Takaful and Karama ("Solidarity and Dignity")—with an emphasis on building effective targeting and efficient operational systems.

In **Ghana**, the government introduced several programs to mitigate the impact of the energy subsidy reforms on poor households. In 2013, the government raised the price of kerosene by 15 percent and LPG by 50 percent and substantially reduced large electricity subsidies. The reform's impacts were partly mitigated by an expansion of the cash transfer program (Livelihood Empowerment Against Poverty, or LEAP) from 100,000 to 150,000 households and a 17 percent rise in the minimum wage.

In **Indonesia**, in 2005, the government implemented significant fuel subsidy reforms in response to the global rise in oil prices that began in 2004. To mitigate the impact on poor and vulnerable households, the government introduced the Bantuan Langsung Tunai (BLT) program—a temporary unconditional cash transfer program also known as Direct Cash Assistance. In total, four payments were made to poor households over the span of one year, worth around US$30 each. In total, around 19.6 million households— more than a third of the households in Indonesia—received support. Following a further round of fuel subsidy reforms in 2008, the government implemented another round of compensation measures. The largest measure consisted of two payments through the BLT unconditional cash transfer system at a reported cost of US$1.52 billion, reaching 19 million households. Additional mitigation measures included subsidized rice, loans for small businesses, and educational support for the families of lower-ranking civil servants and the military.

In 2013, the government further implemented a large-scale petroleum reform combined with a US$2.9 billion package of compensation mechanisms targeted at low-income households. The unconditional cash transfer previously known as BLT was renamed the Temporary Cash Transfer Program (Bantuan Langsung Sementara Masyarakat, or BLSM). The BLSM provided households with Rp 150,000 (US$15) per month for 4 months. The program was renamed to highlight the temporary nature of the policy, since it attracted criticism in previous years for being short-term and not seeking to promote a long-term exit strategy from poverty. The 2013 BLSM transfers were targeted using the new Unified Database (UDB), a targeting registry developed in 2012. And, in 2014, shortly after

after the election, the Government of Indonesia launched significant fuel price hikes. Shortly after the price hikes, the government began a new round of BLSM payments. In total, monthly BLSM payments were made to the poor over 6 months.

In 2012, **India** brought the price of LPG sold to domestic consumers up to the market level. The government developed a cash transfer scheme, known as the PAHAL–Direct Benefits Transfer for LPG (DBTL) scheme, for about 165 million listed beneficiaries. The program was thoroughly revised in 2015. India's LPG subsidy is not targeted. It is available to all households, with the rich being asked to give up the subsidy voluntarily.

In **Pakistan**, coinciding with Pakistan's 2009–10 energy subsidy reform, the Benazir Income Support Programme (BISP) was developed to provide compensation to economically stressed segments of the population dealing with the spiraling prices of the essential commodities caused by subsidy reforms. The BISP provided support to the poor and vulnerable through monthly cash transfers to eligible households.

In **Yemen**, to mitigate the impact of subsidy reforms in 2010, the government managed to increase coverage by 50 percent of cash transfers that support poor households through the Social Welfare Fund.

*Source: Yemtsov, Ruslan; Moubarak, Amr. 2018. Energy Subsidy Reform Assessment Framework : Assessing the Readiness of Social Safety Nets to Mitigate the Impact of Reform. World Bank, Washington, DC. World Bank.x*

**The conceptual framework for the chapter is the ASP building blocks** that were used for Chapter 4: (1) Programs and delivery systems; (2) Finance; (3) Data and information; and (4) Institutional arrangements and partnerships. In addition, the analysis incorporates some key dimensions from international literature in relation to a robust shock-responsive social protection system—particularly coverage, comprehensiveness, adequacy, and timeliness.

**The methodology for this chapter consists of both primary and secondary research.** An initial draft was informed by a global review of literature on social protection and ASP in urban areas, including detailed insights through the case studies from Madagascar, Malawi, Mozambique, and Togo. In addition, primary data was collected through consultations held with government and development partners during an in-country mission from 27 February to 3 March 2023. The findings will be presented in stages of the delivery chain[94] starting with international evidence, followed by considerations for *'Angolanization'* of this evidence.

## Eligibility criteria and targeting methodologies

### *International evidence*

**In terms of targeting methodology, the international evidence points to a multi-level approach as the most robust technique for urban areas.** This approach often involves an initial definition of coverage/eligibility based on a geographic area, e.g., the poorest informal settlements. These geographic areas may also be defined using multi-dimensional poverty, such as in **Mexico**, **Romania**,[95] and **Bangladesh,** where urban programs do so to incorporate the multi-dimensional nature of poverty.

[94] Lindert et al., 2020.
[95] Gentilini et al., 2015.

**Mozambique** incorporated multidimensional poverty considerations into its social protection response to the COVID-19 pandemic. When identifying target areas for an intervention, the government used multidimensional poverty[96] (based on 2017 Census data) to estimate the average level of poverty per neighborhood in each risk area. A common second step is to define easily identifiable criteria at the household level based on indicators of vulnerability to shocks, such as children, older persons (e.g., aged over 65), or persons with disabilities. If time and resources permit, information can also be gathered on financial vulnerability, as occurred in **Malawi's** COVID-19 social protection response, where the first layer of targeting involved the identification of geographic "hotspots" in the country's four major cities—the areas considered to have the highest levels of urban poverty. The second layer of targeting was to identify households that were both financially and structurally vulnerable. Financial vulnerability was calculated based on sources of livelihood over the previous 12 months and home ownership status. Structural vulnerability was based on household size and the number of elderly members and children. Both scores were added together, and all households in a hotspot were then ranked to determine priority recipients.[97] See Box 5.2 for another example from Nigeria.

*Box 5.2 – Populating the Rapid Response Register in Nigeria*

In 2020, the Nigerian government decided to develop a Rapid Response Register to collect information on certain population groups: self-employed (small businesses, street vendors and petty traders), wage employed (low-wage employed individuals and families such as daily laborers and taxi drivers), and vulnerable individuals and families living in slum areas. First, poverty maps were used to identify priority slum areas through geographical satellite remote sensing technology, which located high density settlements with high proportions of poor people. Secondly, the government sent SMS messages to everyone within these priority neighborhoods, inviting them to apply and guiding them through an SMS-based registration process. Finally, eligibility was assessed by confirming through banks whether beneficiaries had an average account balance of less than N5,000.

*Source: Gentilini et al., 2021.*

**The combination of methodologies is an important consideration and is likely to reduce the risk of exclusion.** Geographic targeting alone can be helpful where urban poverty is highly concentrated, such as in the **Philippines**, but is less suitable where it is geographically expansive (e.g., **Addis Ababa**). While categorical targeting of vulnerable groups is an inclusive option, the prevalence of high mobility by urban dwellers—e.g., across cities or between rural and urban locations—may present challenges if it is the sole targeting methodology adopted for an urban program.

**Technology is greatly assisting the use of geographic targeting methods.** Satellite images are becoming increasingly granular and available at street level, and they are often integrated into the design of urban programs. In **Mozambique** and **Togo**, satellite imagery was used to identify "catchment areas" and the

[96] The multidimensional poverty index incorporates a range of indicators which provide insight on overall living standards, including safe sanitation, access to drinking water and electricity, quality of housing, ownership of durable goods, and energy source for cooking.

[97] Paul et al., 2021.

poorest cantons, respectively.[98] Satellite images can also be used in combination with other information. In **Nigeria** and urban areas of the **Democratic Republic of Congo** (DRC), data from mobile phone service providers was harvested from geographic areas that had been identified using satellite images.

**Methodologies that are common to many rural programs, namely Proxy Means Tests (PMT) and community verification, are usually less suitable for urban contexts**. While a PMT is currently used as a targeting methodology in urban areas of **Ethiopia**, the approach has many shortcomings in terms of identifying transient poverty and/or households with volatile incomes, both of which are particularly likely among poor urban residents. Involving community members in approving the identified households can be potentially problematic in situations with diverse urban population groups and limited social connections between households. In **Mauritania**, a community-based approach in urban areas was challenging as local knowledge of "who knew who" was weaker than in rural areas.[99]

**Globally, there is an increasing degree of flexibility for identification processes for urban safety nets.** In rural programs, identifying a household usually involves clear and verifiable documentation of who someone is and where they live. However, while rural households are often defined as "people living under the same roof", urban arrangements may include multiple families sharing a room or housing unit. Some urban residents are more mobile than rural households, and they might lack the identification that is usually needed for registration or local contacts who can vouch for their identity. Moving in search of opportunities can have an impact on enrolment processes. In **Burkina Faso**, for example, 10 percent of the pre-selected households for an urban food voucher program could not be found when the program started.[100] In times of a rapid-onset shock, such as a flood, it is also possible that identity documentation is lost or destroyed. While allowing some flexibility with identification methods can be beneficial, care is nonetheless required in terms of ensuring that the information is accurate (Box 5.3). Rather than requiring proof of formal residence in urban areas, eligibility criteria that are attached to a unique identifier for individuals, mapped to unique households, may help to address some of these constraints.

**Some countries have developed eligibility criteria linked to vulnerable groups.** Proxies for urban vulnerability can include eligibility criteria that relate to the categories of population groups likely to be vulnerable to shocks, such as informal workers, women, girls, older persons, and people with disabilities or chronic illnesses. In **Madagascar's** COVID response, households were assessed on both their category of work (prioritizing certain occupations such as taxi drivers, housekeepers, and washerwomen) and their poverty and food security risk, including prioritization for female-headed households. Conversely, people with disabilities were not included in the eligibility criteria for **Togo's** COVID-19 response, which focused on informal workers. Civil society groups highlighted their concerns that people with disabilities did not qualify if they were not listed as working in the informal sector. **Sierra Leone** resolved a similar situation by adopting a multi-pronged approach—one COVID-19 initiative focused only on people with disabilities, while a larger urban program sought to reach all informal workers.[101]

[98] Gentilini 2021.
[99] Gentilini et al., 2021.
[100] Gentilini et al., 2015.
[101] MAINTAINS case study on Sierra Leone COVID-19 response, 2021. OPM.

*Box 5.3: Identification processes for urban scale-ups can be flexible but must be accurate*

In **Mozambique's** COVID-19 response, some households were enrolled on the waiting list for the national safety nets program. These households had already been verified through routine processes, demonstrating the advantage of pre-registration, which is discussed in the text below. The government also wanted to reach other vulnerable households that were not yet on the waiting list or enrolled in a program. However, the transfers were to be paid into a bank or mobile money account, and this usually required formal identification. Acquiring or verifying identification was complex during the pandemic and would have caused delays in opening the accounts. To overcome the identification barrier, the central bank allowed commercial banks and mobile operators to accept the safety net program's beneficiary identification card as a legal document with which to open an account.

In **Togo**, the first phase of the COVID-19 response involved verification of the identity of prospective beneficiaries by entering their voter identification information on a digital platform (via mobile phones). Potential eligibility was assessed by cross-referencing the registrant's occupation against the voter registry, which is operated by the Independent National Electoral Commission. There were four reasons why the voter identification card was preferred over a national identification card: (i) higher coverage; (ii) incorporation of more precise information on the location of the individual; (iii) more up-to-date information; and (iv) information on occupation.

A different approach was followed in the second phase of **Togo's** response to COVID-19. Firstly, geographical targeting was supported by satellite imagery, which was used to identify characteristics of poor houses/areas. Secondly, within those areas, machine learning was used to track mobile money transactions, mobile phone balances, and internet usage. Individuals qualified for the program if their consumption was within the set daily consumption threshold.

The potential risks involved in identification processes are demonstrated by the case of **Malawi**. The initial approach adopted by the COVID-19 Urban Cash Intervention was ultimately found to be problematic. Enumerators carrying out a house-to-house survey had recorded the mobile phone numbers of prospective beneficiaries to serve as a form of identification and a means to transfer funds electronically. However, the mobile network operators (MNOs) were not involved in the survey process, and many of the mobile phone numbers provided to enumerators were found not to meet the MNO's Know Your Customer (KYC) requirements. The need for a KYC verification process led to delays in the delivery of transfers.

*Sources: Gentilini 2021; case studies; Paul et al 2021.*

### *Adaptation to Angola*

**Ahead of a future climate shock affecting urban Angolans, the government should identify the likely target populations for a safety net response, with eligibility primarily based on residence in eligible geographic areas.** One option for an urban shock response is to determine that all people living in a geographic area affected by a climate shock should be eligible for financial support through safety nets. Alternatively, if a universal approach is regarded as too expensive or inappropriate, a second layer of eligibility criteria could be introduced. To the extent possible, systems and methodologies used in urban areas could be consistent with the ones used in rural areas, though these also need to adapt according to the different conditions and household's needs in urban areas. One option would be to identify

households that are already vulnerable to poverty or were in poverty prior to the shock. For example, as highlighted in Chapter 3, female-headed households comprise a third of all urban households in poverty and those vulnerable to poverty. An alternative is to provide support to only those households whose dwelling or business premises have been damaged or destroyed by a flood, but this could be time-consuming, costly, and complex to verify.

**Similarly, in the event of a potential economic or price shock in urban areas, eligibility for safety nets could be based on residence in geographic areas with poor infrastructure, given its close relationship with urban poverty.** Given the context of poverty, vulnerability, and inequality in urban areas of Angola, identifying geographic areas that are likely to house the poorest and most vulnerable populations is considered a viable initial threshold for an urban scale up.[102] Price shocks, whether driven by international factors and/or domestic structural reforms, often have direct and indirect negative impacts that are experienced by a broad range of households. Again, to the extent possible, systems and methodologies used in urban areas need to be consistent with the ones used by Kwenda in rural areas. Structural vulnerability criteria may also be considered, given the evidence in favor of a multi-level approach in urban areas. However, the existing political dynamics suggest that there is unlikely to be sufficient support for an eligibility criterion that seeks to differentiate between (similar) households living in the same or even neighboring bairros or communities. Hence, vulnerability characteristics used to select eligible households are likely to be more successful if they are simple, clear, and recognized by the community as denoting high vulnerability.

**For economic and price shocks, the first step is to identify which geographic areas should be prioritized**. In line with the trends of urban poverty found in other Sub-Saharan African countries, the likely best option is to focus on specific bairros or communities. As noted in Chapter 3, poor housing conditions characterize poor and vulnerable households in Angola, suggesting that targeting such neighborhoods might be an effective way to reach poor and vulnerable households. With the advancement in technology, it could be possible to identify these locations using satellite imagery-based maps complemented with drone-based or open street mapping data (Box 5.4) and potentially validate them through local governance structures. Even if the CSU ultimately registers most urban households, it will be important to prioritize registrations in the locations where poor and vulnerable populations are concentrated. That said, the impact of shocks can be widespread. Chapter 3 of this report highlights this point, noting that in 2018, close to 70 percent of poor people in urban areas reported experiencing a lack of food in the past 12 months, and almost 80 percent reported worrying about food in the past seven days.

**The most reliable existing data available for geographic targeting at the bairro level is the 2014 Census**. Madagascar used Census data to identify the poorest geographic urban areas as part of its urban scale-up in response to COVID-19 economic shocks. However, a major drawback of Angola's Census is that it is about 8-9 year's old and could lead to targeting errors. A new Census is expected in 2024 and could inform the basis for any new targeting exercise from 2025 on.

[102] That said, caution is nonetheless required, as vulnerability may be more widespread than is commonly understood. As noted in Chapter 3, about 50% of both urban and rural households that are *not* considered poor or vulnerable also reported experiencing a food shortage, and close to 60% reported worrying about food.

**Identifying geographic areas at risk of climate hazards could make use of geospatial maps.** Technology is available to generate maps that draw on multiple information sources to predict future weather patterns and their impacts. Such maps, when used with other geographic and urban built area data, could identify those bairros or communities at high risk of floods or landslides.

*Box 5.4: Using advanced technology to rapidly conduct a housing survey in urban areas*

Physical observation of housing characteristics can be time-consuming and expensive, which limits the ability to conduct surveys at scale. However, advanced technology, including drones, street view cameras, and machine learning algorithms, can now be leveraged to efficiently capture housing and infrastructure data and support evidence-based decision-making.

The technology is able to capture the condition of houses in a given area as follows: First, high-resolution imagery of each home within the geographic area is systematically captured from above (via cameras on drones) and from the ground (via 360-degree, vehicle-mounted cameras). Nachune learning algorithms are trained to extract specific characteristics of each house, and these attributes can be integrated into a spatial database and visualized.

*Source: World Bank (2022). Capturing Housing Data in Small Island Developing States. Washington, DC.*

## Registration and information systems

### *International evidence*

**It is observed that the efficiency of urban registration and enrolment is substantially enhanced where pre-existing information can be leveraged, whether from a social registry or across the broader ecosystem.** The ability of authorities to register and enroll people in an urban program in a timely and effective manner depends on the extent to which there is pre-existing information in a social registry and/or other databases. Such information was leveraged in urban responses to COVID-19 in **Mozambique**, **Peru**, and **Bangladesh** (Box 5.5). Importantly, the **Bangladesh** example illustrates that databases beyond a national social registry can be leveraged. Likewise, in **Mali**, UNICEF identified beneficiaries for a cash transfer program by using the database of a medical assistance scheme (*Régime d'Assistance Médicale*), which held information on the socioeconomic status and living conditions of 70,000 individuals. Access protocols and privacy are important components of any information management system in urban or rural areas alike.

*Box 5.5: Scaling up urban safety nets by leveraging pre-existing information within social registries or other databases in the ecosystem*

In **Mozambique**, some COVID-19 initiatives leveraged data from pre-existing registries, including households on a waiting list for a social protection program.

In **Peru**, the social registry's large-scale national coverage provided a quick starting point for more than three million registered urban households to receive COVID-19 transfers. However, the data on many urban households was either missing from the social registry or up to a decade old, requiring a subsequent registration process for unserved households.

In **Bangladesh**, commencing in 2016, the National Urban Poverty Reduction Programme (NUPRP) began building a database of three million urban poor people with details of socioeconomic status based on multidimensional poverty indicators. Not all registrants were actively supported by NUPRP, but the database was available for use by municipalities and stakeholders across 19 cities. Government officials leveraged the database to respond to COVID-19 by providing social assistance to households not otherwise supported by NUPRP. In Chattogram, for instance, the city corporation reached a further 900,000 people in addition to the 500,000 that NUPRP was supporting.[103]

*Sources: Case studies; Roelen et al 2021; FCDO. 2022. Annual Review of Support to Bangladesh's National Urban Poverty Reduction Programme (NUPRP).*

**Many countries are preparing their social registry for shock by broadening coverage in advance of a disaster occurring.** International examples of social registries with a high degree of urban coverage include **Nigeria**, **Brazil,** and the **Dominican Republic**, where over 70 percent of the population covered by social registries are urban residents.[104] Registries in **Malawi**, **Sierra Leone**, and the **Philippines** also include urban poor people, although none of these registries have purposively included urban residents who are at risk of climate shocks. Depending on the nature of the shock, those most at risk are not only, or necessarily, the poorest households based on income. For instance, near-poor populations are also vulnerable to economic or price shocks, which may push them below the poverty line. Households living in at-risk areas, such as flood-prone municipalities or urban slums that are at risk of landslides, may be vulnerable to climate shocks even if they are not necessarily at risk of economic shocks. Local actors with contextual knowledge and experience may be able to assist in defining these at-risk areas. In **Madagascar**, respected community members played a major role in program pre-registration. Similarly, in **Cote d'Ivoire**, community leaders and neighborhood chiefs collected information, such as people's identification documents, vulnerability status, and phone number, which could be used to provide support in response to a shock.

**Expansions in urban areas have been more inclusive where the information in the social registry is as up-to-date as possible.** Where it has been infeasible to update a registry through a census-type approach, countries have opted for a dynamic/adaptive model (as described in Chapter 4). While a dynamic methodology would ideally be adopted as a means of maintaining updated information in a social registry

[103] FCDO. 2022. Annual Review of Support to Bangladesh's National Urban Poverty Reduction Programme (NUPRP): https://iati.fcdo.gov.uk/iati_documents/90000443.odt
[104] Gentilini 2021.

*before* a shock occurs, as this would avoid the need for a fresh registration process in circumstances where there is no or insufficient information on the target population, a dynamic approach can also be used *after* a shock. For instance, in **Togo**, an on-demand digital registration and enrolment platform was established for potential COVID-19 response beneficiaries to log their details (see Box 5.3 above). Within a few months of being launched in 2020, nearly 1.4 million individuals (35 percent of the adult population) were registered.

### *Adaptation to Angola*

**Once eligibility criteria have been determined, the social registry (Cadastro Social Único, CSU) should be populated with urban households at risk of being affected by either climate or economic shocks.** Expanding the registration of at-risk populations is one of the most important measures that can be taken to facilitate rapid enrolment in shock response initiatives. Note that registration—the collection and storage of household data—is different from the act of enrolling a household in a specific program.

**Kwenda urban scale-up could consider leveraging the Ministry of Health's COVID-19 database as the starting point for household registration, which has the advantage of pre-existing unique IDs, which is even more critical in urban than rural areas**. Registo Digital Individual para a Vacinação contra COVID-19 (ReDIV) is a real-time registration and vaccine roll-out monitoring system. Nationwide, it contains basic information (name, age, gender, phone numbers, and location proxied by vaccination booth location) for about 80 percent of individuals above the age of 15 years. All these individuals have a unique ReDIV identification number (ID). Everyone with at least two COVID vaccination doses can already download their vaccination certificate—with the unique ReDIV ID—through an online portal. However, as a large majority of individuals have received only one dose, it would be ideal if ReDIV could allow these individuals to also download a certificate containing their unique ReDIV ID. In rural Kwenda, the program has been issuing a unique program ID to households registered with the CSU. This approach is less favorable for urban areas, as it is easier for rogue elements to register themselves under different identities in the same city. Moreover, as the existing ReDIV ID is already linked to a broad location (urban versus rural), it would be possible to keep a check on rural-urban migration by being able to validate their locations. The assumption is that individuals would get the COVID-19 vaccine at a vaccination center closest to their residences or at least within the broader urban/ rural limits.

**However, using ReDIV in its current state has significant potential drawbacks, including a high risk that the most vulnerable are excluded.** The characteristics of the 20 percent who are *not* currently registered in ReDIV are unclear and could include members of vulnerable groups such as women, older persons, people with disabilities, child-headed households, and refugees. The coverage of women in ReDIV, for example, is lower than their representation in the overall population. It is therefore important to understand better who is missing from the database. Other disadvantages include a lack of geocoded locations, information on the welfare characteristics of registered individuals, and the mapping of individuals to unique households.

**Nonetheless, ReDIV could form the foundation of a database for urban shock response, but its gaps need to be addressed through on-demand processes and local outreach.** An urban program that prioritizes the use of any existing database with a minimum set of details on urban residents will reduce costs and fears of rural-urban migration, as explained above. To that end, ReDIV represents a strong opportunity to prepare for an urban safety net. However, its shortcomings would need to be addressed if it were to serve that purpose. An on-demand approach could be the ideal option. Registrations using this

method, as opposed to a door-to-door survey, provide a form of self-selection—only those who are 'in need' of being part of the CSU database will willingly stand in long queues for registration. These registrations could be undertaken at the same vaccination centers, if still operational and logistically feasible, or at other locations in the same neighborhood. A demand-based registration system could also be more cost-effective than a survey-based approach, as resource requirements (IT and human resources) will tend to be lower. At the same time, it would be easier to manage the safety of staff through the deployment of security officials in these known locations where sufficient barricading could also be set up. However, the risk of excluding the most vulnerable needs to be mitigated, such as through social worker outreach, employing local NGOs, and mobile registration, among others. This demand-based registration system is contrary to the current house-to-house registration system in rural Kwenda, but the high population density of urban areas poses logistical costs and risks, unlike in rural areas where houses are less contiguous and densely packed together.

**Over the longer term, the management of information should be dynamic.** This means introducing a method to keep databases, including the CSU, up to date so that they can be rapidly leveraged in the event of a shock. Options include digital tools and/or outreach by social workers. Dynamic methods should be deployed in advance of a shock, but they can also be scaled up in the immediate aftermath of a shock to capture post-shock needs.

## Transfer levels

### *International evidence*

**Although the cost of living is often higher in urban areas, many national safety net programs do not yet provide differentiated transfer levels. China** is an exception.[105] In **Botswana**, a uniform national payment for social pensions was 80 percent short of meeting basic subsistence costs in urban areas but only 20 percent short in rural areas.[106] Although it is sometimes speculated that safety nets create an incentive for urban migration, there is no international evidence of this. Research shows that the reasons for migrating are multiple, such as having better living standards, brighter prospects for upward mobility, closer proximity to jobs, and in some cases, fleeing violence, and not just the provision of safety nets.[107] Social assistance programs may act as only one of the enablers of migration but are not the main determinant in mobility decision-making.[108]

**Countries have made trade-offs in setting the transfer level and duration of urban initiatives.** Common methods for determining the transfer level include a proportion of indicators such as the poverty gap, a typical food basket, and the prevailing minimum wage, among others. The transfer level for **Malawi's** urban response to COVID-19 was pegged at the minimum wage after consideration of several options, including the cost of a food basket in urban areas (Box 5.6). The duration was set at three months. By contrast, the transfer level for **Madagascar's** COVID-19 response was only 10 percent of the consumption basket of an average poor household of seven. While low in comparison to **Malawi**, the duration of

[105] Cuesta et al., 2020.
[106] Cuesta et al., 2020.
[107] Adhikari, S., Gentilini, U. (2018.) *Should I Stay or Should I Go: Do Cash Transfers Affect Migration?* Policy Research Working Paper; No. 8525. World Bank, Washington, DC. http://localhost:4000//entities/publication/7b950491-fe89-5ebe-8f11-c58354b2c45f
[108] Recent analysis also indicates that the impact of social protection on internal migration does not seem to be related to a specific country context or event nor the level of urbanisation or history of internal migration. Himmelstine, C. (2023). "How do social protection programmes in the Global South affect migration decisions? A review of the literature." Migration for Development and Equality (MIDEQ). January 2023. https://southsouth.contentfiles.net/media/documents/MIDEQ_WP_social_protection_and_migration_XKckoDI.pdf

**Madagascar's** response was six months—relatively long for a COVID response, which was 2-3 months in other case study countries.

*Box 5.6: Setting transfer levels for an urban scale-up—the case of Malawi*

The potential transfer levels initially contemplated for **Malawi's** urban response to COVID-19 included various household expenditure benchmarks and a percentage of the existing national social safety net transfer. The Survival Minimum Expenditure Basket for urban areas was considered unrealistic, as the Malawian government does not usually agree to such a benchmark in humanitarian responses. Ultimately, it was decided to adopt a flat rate for each beneficiary household, namely the minimum wage. This was considered appropriate from a food security perspective, and indeed, it was slightly higher than the estimated food needs in urban areas at the time. Furthermore, WFP and ILO analyses suggested the transfer level and anticipated caseload would negate the need for a parallel emergency response to cover food needs over the lean season. The transfer level was also likely in line with the expectations of parliamentarians.

*Source: Roelen et al., 2021. ODI.*

**Some urban transfers also include variation based on intra-household composition, thus recognizing the multiple and intersecting vulnerabilities of different household members.** In **Togo's** response to COVID-19, the base amount was set at 30 percent of the minimum wage, while the transfer for women beneficiaries was 20 percent higher than the base amount. Adjusting transfer levels for different markets in different parts of the country is an approach often adopted in humanitarian assistance, but incorporating this methodology into safety nets may be challenging for many government systems and may also contribute to political economy complexities.

### *Adaption to Angola*

**The size and duration of transfers for an Angola urban program would depend on cash transfer objectives and the available fiscal envelope, but also on consistency with the rural Kwenda cash transfer.** When needs have been assessed, it will be necessary to decide to what extent those needs will be addressed with a cash transfer. The range of options includes indicators such as the poverty gap, food basket, minimum wage, or a figure equal to the erosion in real income of households in the face of a shock. The duration of such a transfer will also need to be chosen. These decisions will involve trade-offs regarding adequacy (transfer level and duration) and coverage (number and location of households). Differentiation by household size is another consideration, such as additional payments for women or school-age children. As noted in Chapter 3, children under the age of 15 make up most household members in poor and vulnerable urban households in Angola, and household sizes are higher in urban areas than in rural areas. Other considerations will include political economy implications, complexity of calculations, and fiscal space. A benefit formula that is completely out of line with the rural benefit formula could create confusion and grievances, and hence must be an important consideration.

## Communications and outreach

### *International evidence*

**Communications and outreach efforts to inform eligible households have been successful when they are tailored to urban settings and planned well ahead of time.** For example, in **Brazil**, **Mexico**, and

**Colombia**, authorities have communicated urban safety net programs through informal mechanisms such as local associations, schools, health centers, loudspeakers, and churches. The support of community and local leaders was leveraged in **Togo**, where postal officers also helped spread the word. In **Madagascar**, collaborating with development partner organizations helped to raise awareness. Comprehensive and advanced planning is an important pre-requisite for a successful communications and outreach effort. In **Sierra Leone**, communication preparations did not begin early enough, and there was insufficient time for government officials to implement a mass communication effort using print media and posters at banks and markets.[109]

### *Adaptation to Angola*

**A strategy should be developed for branding and awareness-raising for an urban safety net response to shocks, including methods, tools, and culturally appropriate mechanisms and content.** Bespoke approaches to communications and outreach are important for ensuring that an urban scale-up reaches the poorest and most vulnerable individuals. Some channels of communication, such as newspapers, may have limited effectiveness among poor and vulnerable households compared to other promising methods such as radio-based communication and leveraging support from community leaders and other local actors. Simple text messages could be another form of effective communication as they can be targeted and supply-driven (ReDIV already has some mobile phone details of individuals who have been vaccinated, and this information could be used for awareness-raising; however, for payments, it is important that the phone numbers are verified and updated). These are all in line with the rural Kwenda communications strategy.

**The branding of an urban safety net is a crucial consideration given the highly complex nature of urban habitation and the goodwill of rural Kwenda**. Moreover, it has established credibility through its robust targeting mechanism, accurate and accountable payment system, and accessible and responsive GRM. As necessary, the scale-up of safety nets in urban areas could establish a separate identity from Kwenda to ensure less confusion with the rural program and to also ensure that the goodwill of the Kwenda brand is not jeopardized. This would depend on the timing of the urban scale-up and the political economy considerations at play during that time.

## Payment systems

### *International evidence*

**The increasing global prevalence of mobile phones is being harnessed in urban shock response measures.** Digital approaches are particularly prevalent in urban areas, given that mobile phone penetration is often higher than in rural areas. Digital mechanisms, with or without internet capability, can enhance the timeliness and accountability of transfers and do not attract the same risk of physical theft that comes with transporting cash in vehicles to communities. Box 5.7 describes urban shock response experiences in **Mozambique** and **Sierra Leone**.

[109] Gentilini 2021.

*Box 5.7 – Payment systems used in urban scale-ups in Mozambique and Sierra Leone*

Digital systems were already prevalent in **Mozambique** in advance of COVID-19. Payments through mobile money operators or cash points had already been expanded in the wake of a cash transfer convoy being robbed. The COVID response included three different payment channels to cater for the different cohorts of beneficiaries: those with existing mobile money accounts; those without mobile money accounts but in possession of a national ID card; and those with neither. 40 percent of beneficiaries who did not have phones were able to use sub-distributors of mobile money operators and national post offices.

In **Sierra Leone's** urban COVID-19 response, third-party payment service providers were engaged to provide both over-the-counter cash (provided in the presence of Anti-Corruption Commission officers) and e-payments, where beneficiaries were given the option of receiving payments into a digital wallet that could be cashed out at their convenience. Payments were validated through the provision of photo identification.

*Sources: Case studies; Gentilini et al., 2020.*

**But the potential risks of urban digital payments also need to be considered and mitigated.** As in rural areas, digital transfer methods carry the risk of excluding vulnerable groups. In **Madagascar's** COVID-19 response, 40 percent of urban beneficiaries did not have phones. This was mitigated via offline cash availability through partnerships with different agencies, such as post offices and microfinance institutions (this also occurred in **Togo**). Another risk for digital payments is liquidity constraints, as demonstrated by the examples of insufficient liquidity in urban areas on payment days in **Malawi's** COVID-19 response. Additionally, urban residents can often be relatively mobile. This can create complexities not only in terms of identifying and enrolling beneficiaries, but also in terms of being able to provide benefits if they move to a different residence. Once eligibility is established, ensuring the portability of benefits across different locations is therefore important. Finally, there can be cybersecurity risks associated with increased digital service provision. In **Malawi**, after the COVID-19 Urban Cash Intervention (CUCI) was announced, scammers were able to collect and misuse people's private data by sending out fake SMS messages.[110]

### *Adaptation to Angola*

**Given the greater coverage of banks and mobile operators, an urban scale-up in Angola should be based on digital payments.** Since not all households may have access to bank accounts or phones, a deliberate effort will be needed to encourage households to sign up for these services. Phone ownership by itself is not necessary. The banking system in Angola has a unique feature wherein individuals without bank accounts can withdraw cash from any ATM if they have the details for the transfer, which they receive via their phone numbers. Payments could therefore be linked to SIM cards, which are linked to mobile wallet accounts. Beneficiaries could insert their SIM card into any phone to receive their payment details, which they could then use at payment points. This approach has been adopted in Angola by UNICEF in its shock response programs. This facility could go a long way toward making it easy for beneficiary households to withdraw cash. Despite the constraints faced by Kwenda in rural areas, about a third of all beneficiaries

[110] Roelen et al., 2021.

can directly withdraw money from their bank or mobile money accounts, with the remaining directly receiving cash from banking agents or business correspondents.

## Grievance redress

### *International evidence*

**Grievance Redress Mechanisms (GRM) have often faced capacity constraints, and international evidence illustrates the value of support from external actors.** The needs of urban beneficiaries with respect to grievance redress may differ, for instance, due to urban governance and/or community structures. The general principle is that GRMs should be grounded in an analysis of the local context and shaped to meet the needs of their residents. In **Mozambique's** COVID-19 response, WFP and civil society organizations supported GRMs in the form of call centers, with complaints escalated to relevant authorities. The GRM for **Malawi's** CUCI initiative faced significant capacity constraints, with varied effectiveness across locations. A lack of communication with beneficiaries meant that most were unaware of the different channels for making complaints.

### *Adaptation to Angola*

**Kwenda's rural GRM should be tailored to the specific needs of an urban program and have sufficient capacity to withstand the impact of shocks.** Kwenda already has an effective GRM system (including a toll-free number) that resolves issues on a near-real-time basis. The program could adapt and scale this up to urban areas. At the local level, committees could be formed per municipality/ bairro which could include NGO representatives and/or community leaders who could help with compiling and escalating complaints. ADECOS and CASIs, if available in urban areas, are an important link to the communities, as in rural areas. A program-specific call center could help with complaint resolution. It would be crucial that these centers are sufficiently staffed and the personnel who run them are trained well for them to actively resolve complaints. It is also essential for beneficiaries to be made aware of these centers.

## Monitoring

### *International evidence*

**Global experiences have demonstrated the need for urban scale-ups to incorporate adequate financial and technical capacity to collect, monitor, evaluate, and use data.** Civil society actors can play an important supporting role, such as in **Mozambique's** response to COVID-19, where the Mozambican Civil Society Platform for Social Protection was requested to undertake independent community monitoring. This helped to identify possible constraints in targeting, enrolment, and payment processes.[111] Conversely, in **Malawi**, an evaluation of the CUCI found that program monitoring was of limited effectiveness. Urban actors involved in implementation—City Council members and Ward Councilors—were not fully aware of their responsibilities, resulting in a lack of clear documentation that could report progress or barriers to implementation.

### *Adaptation to Angola*

**Clarity on monitoring responsibilities by Angola officials will be important for an urban scale-up, and an oversight role for civil society would also be valuable.** Specific indicators should be developed for the monitoring of urban shock response and incorporated into appropriate existing frameworks, including

[111] Viera et al., 2020.

clear roles and responsibilities for local officials. Civil society is relatively active in urban Angola and could be engaged to support the monitoring process.

## Data

### *International evidence*

**A scale-up of urban safety nets is likely to be more timely, efficient, and effective where there is good-quality macro-level data collection undertaken ahead of a shock.** Data collection can inform who should be included in a social registry or database with a view to subsequently leveraging it when a shock occurs. Relevant data includes poverty, vulnerability, and disaster risk assessments. Data from an established Early Warning System (EWS) can also be highly valuable if it provides alerts when a natural hazard event will affect urban areas.

**In the aftermath of a shock, good-quality data can help determine who needs to be reached with a shock response and with what degree of support.** If households affected by a shock are *not* already enrolled in a database, then data is needed to understand where affected people live and what their characteristics are. Once affected people have been identified, e.g., through census-type surveys or on-demand mechanisms, their requirements should be estimated through a post-shock needs assessment tool. **Senegal**, for example, has a tool that is used to assess the impact of floods on households and inform a vertical or horizontal expansion of safety nets.

### *Adaptation to Angola*

**A range of tools are appropriate for the three different types of shocks likely to affect urban areas of Angola.** For an expected economic or price shock, such as one resulting from a structural reform, the needs can be modeled in advance by poverty economists with access to sufficient data. For exogenous price shocks, rapid surveys using digital technology (such as High Frequency Phone Surveys) can be deployed to gather information from sample population groups. For a climate shock, options could include electronic surveys or leveraging existing platforms such as the WFP's Hunger Index. An EWS that incorporates urban areas could be used to inform which areas are most likely to be affected. EWS indicators can also be used to "trigger" a shock response, as is outlined in Chapter 4 on scaling up in rural areas. In due course, if fully developed, Angola's EWS could be linked to an urban safety net system, whereby payments are automatically triggered when certain events are realized.

## Financing

### *International evidence*

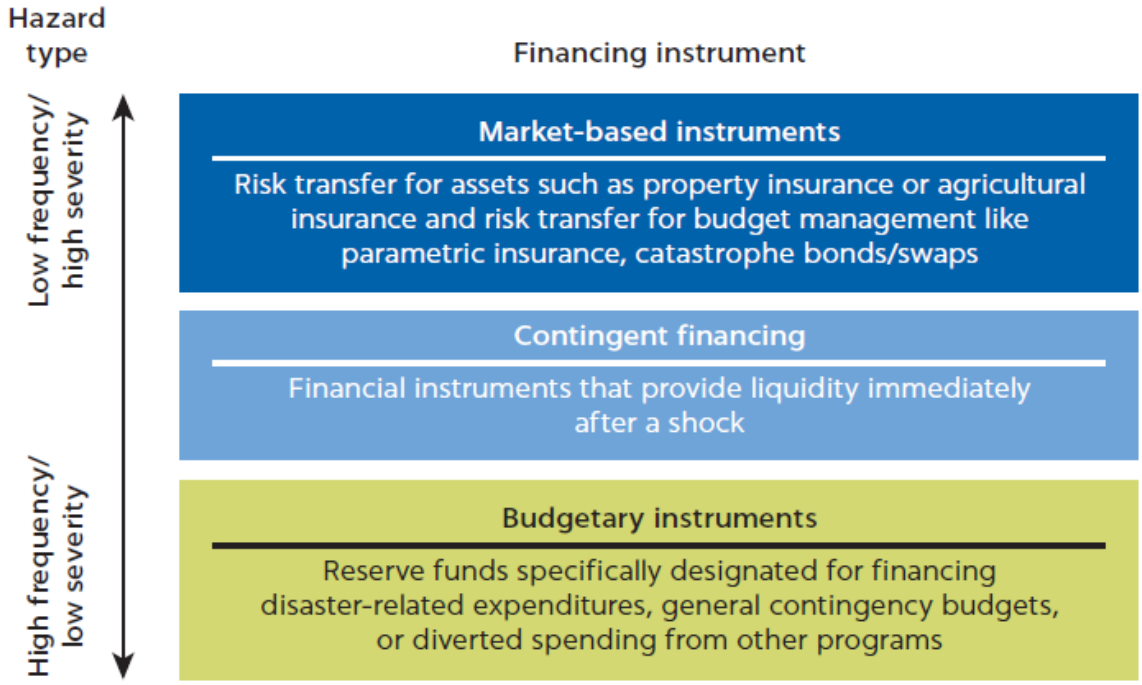
**Globally, urban contingencies are rarely incorporated into national-level analyses.** To date, international experiences on the financing of urban responses to shocks have largely depended on whether there is flexibility within existing contingency funds, even though these funds might not have specifically envisaged the precise nature of the urban shock for which they were ultimately used. **Madagascar's** urban response to COVID-19 was funded through an emergency component within the World Bank's existing social protection project. The same is true of **Sierra Leone's** urban COVID-19 response, where US$4 million had been set aside as contingency for an emergency as part of a broader funding package for the national

safety net program.[112] In **Colombia**, the *Ingreso Solidario* emergency cash transfer scheme, which focused on informal workers, was extended from three to 15 months by using an existing natural resource royalty fund that permitted contingency spending.[113]

### *Adaptation to Angola*

**Any future approach to Disaster Risk Financing (DRF) in Angola should incorporate urban considerations, and systems should be capable of delivering funds.** Appropriate financing sources need to be identified, i.e., determining which instruments are required to protect against events of different frequency and severity. This is ideally achieved through a risk layering approach that considers how to meet the financial cost of response using a menu of financial instruments and recognizes that each instrument has its own terms and conditions and, therefore, advantages and disadvantages (see Figure 5.1). The requirements for financing the scale-up of safety nets in urban areas are similar to those outlined for rural areas in Chapter 4. Chapter 6 provides more information on the potential costs of an urban scale-up of Kwenda and outlines the financial instruments that could be considered to pre-position resources to cover the costs of urban scale-ups. It is also crucial to ensure that urban systems and programs in Angola have sufficient coverage, infrastructure, and human capacity so that disaster risk financing can be channeled effectively and efficiently.

*Figure 5.1: Risk layering – financial instruments, by frequency and severity of shock*




*Source: Bowen et al, 2020.*

[112] OPM 2021, Sierra Leone: https://www.opml.co.uk/files/Publications/A2241-maintains/maintains-covid19-srsp-responses-sierra-leone-case-study-final.pdf?noredirect=1

[113] Roelen et al., 2021.

## Policies and institutional arrangements

### *International evidence*

**To date, there are relatively few international examples where urban-specific considerations have been included in social protection policy frameworks or strategies. Bangladesh** is one instance with an urban-specific social protection policy, although it does not yet incorporate adaptive social protection or shock response dimensions. Nonetheless, the lack of a specific policy framework is not necessarily an obstacle to designing and implementing an urban scale-up. Many countries have delivered successful urban shock responses based on careful planning and preparation, notwithstanding the absence of a specific policy.

**A crucial element of successful scale-ups in urban areas is vertical coordination, referring to institutional arrangements spanning different layers of a governance structure.** As urban safety nets are relatively new in many contexts, it is common for social protection coordination structures to be poorly prepared for urban programming. This can undermine the effectiveness of a shock response. Relatedly, urban officials are unlikely to be as familiar with safety nets as many of their rural colleagues, given the comparative scale of rural safety net programming. Establishing functional coordination frameworks for scaling up urban safety nets needs dedicated attention. It is advantageous, therefore, to focus on preparing coordination structures ahead of a shock. In **Madagascar's** urban response to COVID-19, officials were able to leverage a well-functioning pre-existing working group, which enabled rapid development and rollout. In **Malawi**, with the CUCI intervention being the first scale-up of safety nets in urban areas, there was a lack of clarity between central-level officials and subnational actors (local officials and local leaders) as to roles and responsibilities for implementation.

**Horizontal coordination between different line ministries is particularly crucial in responding to shocks, as there are usually multiple sectors involved.** The two ministries that are usually central to scaling up in urban areas are those with responsibility for social protection and disaster response, respectively. In **Togo**, the creation of a President-led, inter-ministerial coordinating committee for the COVID-19 response was seen as critical to the rapid and effective implementation of the urban initiative. Similarly, social protection and disaster response teams worked effectively in **Malawi's** response to COVID-19, and this was also done in collaboration with non-government stakeholders. It was recognized that this horizontal coordination during a shock response was a byproduct of pre-existing relationships that had been actively and purposefully nurtured in previous years.

### *Adaptation to Angola*

**An urban-specific institutional framework should be developed for social protection responses to shocks, incorporating both vertical and horizontal dimensions.** The fundamental point is to establish governance structures with local officials that will be involved in implementing any response, and it is crucially important that the coordination structures incorporate disaster risk management colleagues. Working solely within social protection structures will not yield the desired results. An appropriate model might be a city-level steering committee comprised of all city-level departments of related ministries/agencies, coordinated within the national social protection system (including FAS-IDL, MAT, and MASFAMU) and overseen by the President's Office through the Minister of State for Social Action. These structures should be established ahead of a shock, during "normal" times, to allow time for relationships to develop and strengthen. Relevant actors include the Ministry of Finance, FAS-IDL, MASFAMU, ADECOS, and CASIs (as focal points in the municipalities); the Ministry of Health (for the ReDIV

database); Banks, MNOs, and money transfer agencies for mobile money transfers; development partner organizations for technical support (e.g., identifying areas of geographical targeting and data sharing for income classification as per wards/municipalities); and civil society organizations (for communication and outreach and grievance redress at the local level).

**When feasible and appropriate, Angola may wish to develop a policy framework for scaling up urban safety nets in response to climate and economic shocks.** It is preferable for policy documents to match the context and reflect the priorities of the government. That said, developing a social protection strategy can be both time- and labor-intensive, and it is regrettably common across the region to see well-intentioned policy documents that are not fully operationalized. For this reason, it is proposed that content relating to scaling up safety nets in urban areas be incorporated in Angola's existing social protection strategy when that document is scheduled for update/review.

## Recommendations

**Angola's rural safety net system provides the basis for an expansion of routine safety nets to urban areas, and the government needs to start expanding to peri-urban and urban areas if it is to enable a quick shock response there.** The rural Kwenda design parameters and implementation mechanism provide a good starting point for an expansion of routine safety nets to urban areas. While it is important to consider the critical differences between urban and rural contexts to ensure that the investments adapt to the needs of those in urban contexts, it is also important that the national safety net system is internally consistent, wherein the design parameters of urban Kwenda are broadly in line with those in rural areas.

**Drawing on the experience of implementing Kwenda in Angola and urban safety net expansions in response to shocks internationally, there are important considerations for the design of an urban safety net in Angola.** These include: (a) a multi-level targeting approach comprising geographic prioritization of households living in climate or economic shock-prone areas and prioritization of structural vulnerability associated with specific household characteristics such as gender of household head, age, disability status, and employment condition; (b) as in rural Kwenda, the urban safety net could prioritize poorer bairros for geographic prioritization, i.e., given the dynamics of poverty in urban Angola, these are bairros with a greater share of slums, which can be identified through census data or innovative use of drone-based technology and open street maps; (c) initiate household registrations through the use of the national COVID-19 database (ReDIV) that has a unique ID and basic individual data for 80 percent of Angolans above the age of 15, and supplementing it with an on-demand localized registration process to add basic socio-demographic details to each individual and to include Angolans not in the database; (d) benefit size be set to an existing established benchmark such as the rural Kwenda cash transfer value, minimum wage, or the food basket; (e) payments be done to the biggest extent electronically given the higher prevalence of Banks and mobile money operators in urban areas; (f) relevant shock monitoring mechanisms be established such as new high frequency surveys or existing databases such as WFP's Hunger Index to inform shock response in urban areas; and (g) existing rural grievance mechanism systems be scaled up and adapted to the urban context.

# Chapter 6: Cost of scaling up safety nets

## Key messages

**In Angola, the cost of disaster response is largely borne by the government, given the limited humanitarian assistance and insurance penetration.** Statistical analysis conducted by the World Bank for the forthcoming Disaster Risk Financing (DRF) Diagnostic for Angola estimates the average annual cost of disaster response at US$ 75 million per year. To cover the costs of responding to disasters, the Ministry of Finance already has a general contingency budget for unforeseen expenditures, including those from shocks. In addition, the Ministry of Agriculture and Fisheries has an operational contingency budget line and a prearranged contingent emergency component available for post-disaster response. As the government is already financing disaster response, it could consider leveraging existing safety net systems as a more transparent and timely disbursement mechanism to reach households affected by shocks, therefore increasing public expenditure efficacy.

**The costs of adaptive safety nets can be significant, though they are largely dependent on their design.** The cost of an adaptive safety net will depend on design parameters such as geographic and household coverage, transfer amounts, and duration, determined by the needs created by shocks of different types and intensities, and policy priorities**.** To estimate the costs of an adaptive safety net system in Angola, assumptions were made around the design parameters, using as a reference the evidence gathered throughout the report related to socioeconomic data, existing safety net programs, and historical climate and price shocks. Based on these assumptions, the costs of an adaptive safety net system that responds to droughts in rural areas in Angola would range between US$ 13 million and US$ 29 million, with payouts expected on average every two years. The cost in urban areas would range between US$ 44 million and US$ 246 million for the same rural Kwenda transfer amount, with a duration of 12 months, depending on the eligibility criteria chosen to respond to a structural reform effort that may lead to increased prices (e.g., a fuel subsidy reform). Whereas, for price shocks resulting from exogenous factors such as external conflict or economic shocks, the cost of a scale-up would be about US$ 103 million, with payouts expected on average every five years.

**Therefore, pre-arranging financing is key to ensuring the availability of sufficient funds to effectively use safety nets to respond to shocks.** Adaptive safety nets, when linked to needed finance, promote early action by using pre-agreed and transparent rules and pre-positioning financing instruments linked to those rules. The government could consider using a risk layering approach to combine financial instruments—such as a dedicated contingency fund and a contingent credit—to provide enough liquidity to cover the costs of scaling up safety nets in response to shocks. For example, in Malawi, the government is using a risk-layering approach to cover the costs of their flagship cash transfer program by combining two financial instruments: a contingency fund and an insurance policy.

## Introduction

**Statistical analysis conducted by the World Bank for the forthcoming Disaster Risk Financing (DRF) Diagnostic for Angola estimates the average annual cost of disaster response at US$ 75 million per year.**

It also estimates that for severe shocks (with an average historical frequency of 1-in-50-years) the cost of disaster response can reach up to US$ 600 million.[114]

**The cost of disaster response in Angola is largely borne by the government, given the limited humanitarian assistance and insurance penetration**. Official development assistance linked to emergency response in Angola is very limited. Between 2011 and 2020, emergency development assistance covered only eight percent of the total cost (Angola DRF Diagnostic, forthcoming). In addition, the availability of insurance or other market-based instruments is still very limited. The insurance sector is small, with a total gross written premium of 0.6 percent of the GDP (2020), and the capital market is at an early stage of development, limited mainly to government bond issuance.

Currently, government options for mobilizing resources for shock response are:

(i) *Budget reallocation.* It is estimated that the Ministry of Finance can mobilize a maximum of US$ 9 million through budget reallocation (Angola DRF Diagnostic, forthcoming).

(ii) *Contingency budget*: the government has a general contingency budget for unforeseen expenditures, including those from climate shocks. This contingency budget is managed by the Treasury, and it has an allocation of 5 percent of non-oil revenues. This budget line is non-cumulative, and the perception is that its current levels (totaled US$ 340 million in 2020) typically meet funding needs.

**When looking at specific sectors, the Ministry of Interior and Ministry of Agriculture have dedicated disaster risk financing instruments**. The Ministry of Interior regularly allocates funds for post-disaster interventions under the scope of the Civil Protection and FireFighter Service. Historically, these appropriations averaged about US$ 1.1 million per year, but more recently, the availability of funds for this purpose has significantly decreased. Similarly, the Ministry of Agriculture and Fisheries has an operational contingency budget line of around US$1 million per year. This ministry also has a prearranged contingent emergency component available for post-disaster response of up to US$ 4.5 million via the Contingent Emergency Response Component (CERC) of the World Bank Smallholder Agriculture Transformation Project (MOSAP 3, 2022-2029).

**As the government is already financing disaster response in Angola, it could consider adaptive social protection as an effective disbursement mechanism to reach households affected by shocks**. An option for the government would be to deliver part of the post-disaster assistance that it already finances through Angola's social protection system, anchored around the Kwenda program. Given the value of using safety nets as post-disaster disbursement from emerging global experience, particularly following COVID-19, the government could consider linking pre-arranged finance to the social protection system to increase the efficiency and timeliness of post-disaster assistance. By leveraging existing Kwenda information, payment, and GRM systems, the government could improve the transparency, speed, and impact of disaster response.

**The objective of this chapter is to present estimates on the costs associated with setting up an adaptive social safety net system in Angola linked to the Kwenda program.** The chapter looks at the potential cost of scaling up Kwenda in rural areas to respond to climate shocks and, in particular, droughts. It also presents the estimated costs of expanding the Kwenda program in urban areas to respond to price shocks.

[114] This includes an estimation of the impact of droughts through food insecurity and floods through physical damage to property and assets.

As presented in Chapter 3, the rationale for focusing on these types of shocks in rural and urban areas is that food shortages are mainly caused by high food prices in urban areas, while these are mainly caused by agricultural-related shocks in rural areas (Figure 6.1). This suggests that in urban areas, Kwenda should be expanded to provide additional assistance when shocks to food prices occur, as they are likely to push vulnerable people in urban areas into poverty. In rural areas, where most poor and vulnerable households produce their own food, shocks to agricultural productivity are more relevant, and therefore Kwenda scale-ups could focus on responding to climate shocks that affect agricultural production. This, however, does not mean that climate shocks have no impact on urban areas or that price shocks are irrelevant in rural areas. Different scenarios could be estimated where Kwenda systems are leveraged to respond to climate and price shocks in both urban and rural areas, and from an operational perspective, the rules for responding to shocks could be designed to provide for such flexibility in responding to different types of shocks.

*Figure 6.1: Cause of food shortage in urban and rural areas in Angola*


*Source: Estimates by World Bank Poverty Global Practice based on data from IDREA 2018-19.*

**The cost estimations are based on several assumptions around key parameters that characterize a safety net scale-up, so these should be used only for the purpose of informing cost ranges.** The first step to estimating the resources needed to finance Kwenda scale-ups is to define key parameters that will determine the cost of a one-time program scale-up. This is, if there was a shock this year and the program needed to scale up, what would be the cost of an immediate and static one-time expansion? The parameters to determine the cost of a one-time scale-up program include regional coverage, the number of households covered, the cash transfer amount provided, and the duration of the assistance. The assumptions made around these parameters carry tradeoffs that affect the cost of program scale-up. For example, increasing the transfer amounts, duration of assistance, regional coverage, or number of households covered would lead to increases in the overall cost of a Kwenda scale-up. The values selected for each of these parameters were based on the analysis conducted for Angola, documented in this report, related to Kwenda's current implementation, socioeconomic conditions, and historical trends of climate and price shocks. These assumptions were discussed with the government and development partners. However, different scenarios from the ones presented could be simulated as policy priorities and/or the population's needs change.

**Once we know what the cost of a one-time scale-up is likely to be, we analyze historical data on shocks to estimate the probability of a shock occurring in the future and the potential future costs of Kwenda scale-ups.** We use data on past shocks in Angola—both climatic and price shocks—to analyze their frequency and severity over the past 20 years. We use this historical information to make predictions on what the frequency of shocks, and therefore Kwenda scale-ups, is likely to be in the future and estimate the amount of resources that the government would need on average annually to cover the cost of these future scale-ups.

**In addition to estimating the costs of different scenarios for adaptive safety nets in Angola, this chapter also puts forward recommendations for financing these costs in the final section**. This section presents the advantages of pre-arranging financing linked to the design of an adaptive safety net program. It also discusses alternatives to financial instruments that could be set up to provide enough liquidity to cover the costs of expanding a safety net when shocks occur. In doing this, it is important to be cognizant of the historic scale and composition of expenditures in social protection programs. See Box 6.1 for further details.

**It is important to note the limitations of the cost estimations due to the scope covered and the availability of the data.** This chapter only presents the cost associated with providing cash transfers through a Kwenda scale-up. The cost estimation does not include the costs associated with designing the adaptive mechanism, investments needed in current program delivery systems to support scale-ups, or operational costs such as government official salaries or payments to service providers. The cost estimations in this chapter are also driven by available data on climate disasters in rural areas and price shocks in urban areas, which tend to include only the most severe shocks and leave out more localized and moderate shocks. The costs of an adaptive Kwenda might be higher if more moderate shocks are also considered. Finally, the cost estimations in rural areas are based on the number of current Kwenda beneficiaries, a total of 982,741 (as of May 2023). As the program expands to reach its target of covering 1.6 million households, the costs of an adaptive system are also expected to increase.

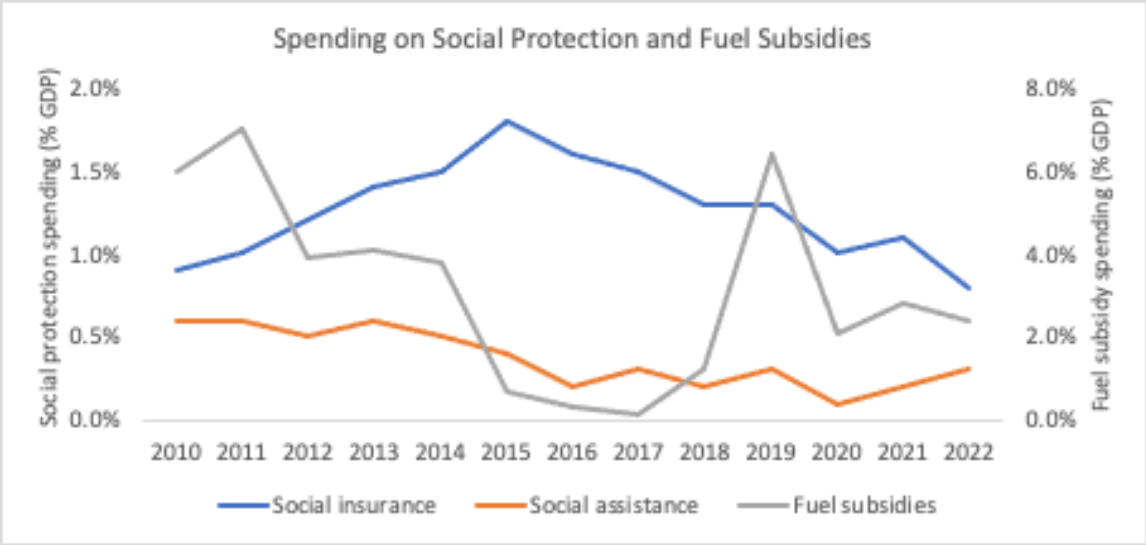
*Box 6.1: Angola Social Protection Expenditures and Composition*

**Over the last decade, Angola's spending on social protection programs has been low and decreasing over time, primarily focused on the elderly with little benefit to the poor.** About 1.3 percent of GDP has on average been spent on social insurance programs that primarily benefit a handful of elderly individuals who tend to be better off than most of the population. Estimations show that 0.4 percent of the Angolan population benefiting from the National Institute of Social Security's (Instituto Nacional de Segurança Social, INSS) old-age pensions received 40 percent of all social protection spending. (World Bank 2023) Spending on social assistance programs has only constituted 0.4 percent equivalent of GDP, on average since 2010, and only about 0.1 percent equivalent of GDP is spent on the Government's flagship poverty reduction program, Kwenda. The other social assistance programs include social care services, and non-contributory payments to victims and participants in the civil war.

**Spending on fuel subsidies is nine times as much as spending on social assistance programs; however, the fuel subsidy reform of June 2023 promises to reallocate some savings to the Kwenda program.** As shown in Figure 6.2 below, the spending on fuel subsidies is many folds higher than the spending on social assistance programs. The World Bank 2023 estimates that a 10-percent reduction in fuel subsidy spending would make it possible to increase Kwenda's current average annual budget by a factor of 2.35. The currently targeted 1.6 million households could receive transfers for almost 2.5 years instead of only twelve months. Another possibility would be an increase in program benefits from currently Kz

8,500 a month to Kz 20,000, or an increase in the caseload of the program. The Presidential Decree No. 131/23 of June 1, 2023, has adopted a fuel subsidy reform and committed to allocating Kz 75 billion per year (US$ 124 million per year) between 2023 and 2025 to increase the caseload, duration and value of Kwenda cash transfers.

*Figure 6.2: Spending on fuel subsidies far exceeds spending on social assistance programs*




*Source: Author's analysis based on World Bank 2023 data*

## Rural areas: Cost scenarios as per climate shock and food insecurity across provinces

**The cost estimation of Kwenda scale-ups in rural areas is based on historical data on climate shocks, particularly reported droughts.** Specifically, data on historical disasters from different sources (EM-DAT, ReliefWeb, DesInventar, Amnesty International, WFP, and FAO) was combined to identify the years and provinces affected by severe droughts. The databases used tend to register shocks that are quite severe and affect a large percentage of the population in a province, leaving out more localized shocks. The analysis covered the period from 2000 to 2022, as this data was available and shown to be more accurate for this period. This period, however, notably includes consecutive dry spells that expanded over two or three years. Hence, if an adaptive mechanism linked to Kwenda had been in place, it would have scaled up quite frequently.

**The cost estimates for program scale-ups in rural areas are also based on assumptions around key program parameters; in particular, costs were estimated for two different cases described subsequently**. The first case assumes that the Kwenda program expands only vertically, thus providing additional cash assistance to existing beneficiaries. The second case assumes that Kwenda expands both vertically and horizontally; thus, in addition to providing additional cash to existing beneficiaries, it also reached households that were not part of the regular program but that could fall into poverty due to the disaster. Both cases assume expansions only in Cunene, Huíla and Namibe—the three provinces in Angola that have been affected more often by droughts in the period between 2000 and 2022. The main results from the cost estimations are presented in Table 6.1.

*Table 6.1: Rural cost estimations – summary of results*

| | Annual average cost (% of 2022 GDP) | Maximum annual cost |
|---|---|---|
| Vertical expansion only | US$5.6 million (0.01%) | US$13.6 million (0.02%) |
| Horizontal and vertical expansion | US$12.1 million (0.02%) | US$29.8 million (0.04%) |

## Case 1: Vertical expansion only

**This case assumes that the Kwenda program expands only vertically to provide additional cash assistance to the existing beneficiaries.** Providing additional cash to existing beneficiaries would allow them to cover the additional expenses related to the losses experienced due to a disaster. Table 6.2 presents the assumptions around the parameters that could define a Kwenda scale-up to respond to droughts.

*Table 6.2: Vertical expansion – Assumptions on key parameters*

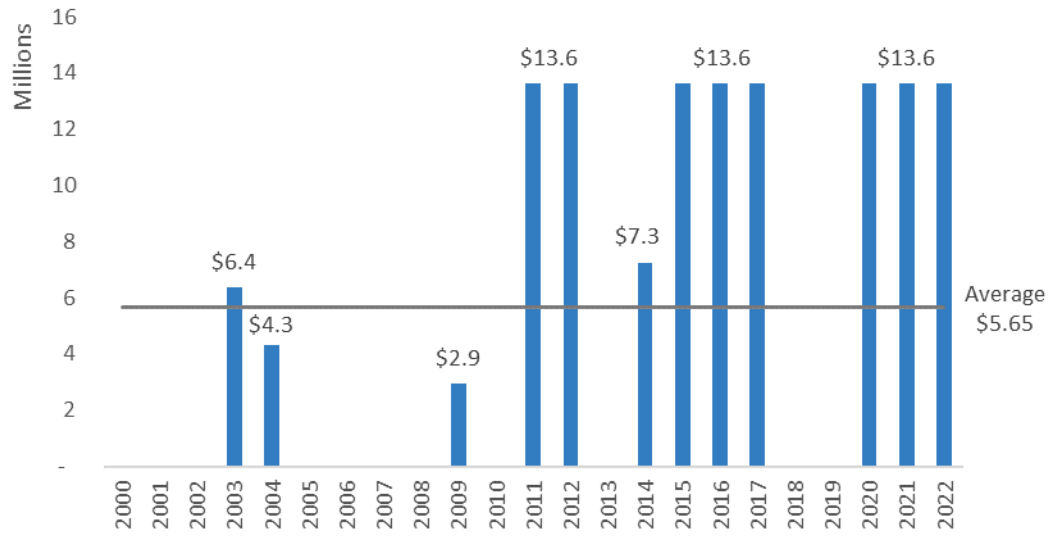
| Parameter | Value assumed | Rational |
|---|---|---|
| Transfer amount (per household per month)[115] | AOA 8,500 (US$16.6)[116] | This is the current value of the cash transfer provided through the core program. It is very close to the national poverty line and to the average food consumption in rural areas for households in the bottom 20 percent of the income distribution. |
| Duration (number of months) | 4 months | This is based on the duration of the lean season in Angola, which expands from November to February each year. This is when food insecurity is at its highest. |
| Regional coverage | Cunene, Huíla and Namibe | These are the three provinces that have been affected more often by droughts since the year 2000. |
| Households covered | 204,787 | This is the sum of the Kwenda beneficiaries in selected provinces - 64,948 households in Cunene, 95,717 in Huíla and 44,122 in Namibe (as of May 2023). |
| Frequency of shock (based on data available) | 1 in 2 | In the period between 2000 and 2022, there were droughts in selected provinces in 12 of the years covered. |

**Based on the parameters selected, the average annual cost over a period covering 2000 to 2022 would have been US$5.6 million.** The hypothetical historical costs of an adaptive mechanism that only expands vertically are presented in Figure 6.3. There would have been *8 years* where the scale-up would have been triggered in the three provinces, considered reaching a maximum cost of US$13.6 million. As mentioned

[115] This is the amount provided as part of the scale up. This would be provided in addition to the core program monthly cash transfer that Kwenda beneficiaries receive. It can be understood as a top-up amount to cover additional needs during disasters for existing beneficiaries.
[116] Exchange rate AOA to USD: 511 (November 2022).

previously, this period was characterized by three severe dry spells that covered multiple years: 2011-2012, 2015-2017 and 2020-2022. Based on the historical shock data utilized in the period from 2000 to 2022, there were 10 drought years in Cunene, 10 in Namibe, and 9 in Huíla.

*Figure 6.3: Vertical expansion - Historical cost estimation*




Source: World Bank estimations. Note: Years in the x-axis mark the beginning of the rainfall season, therefore, the year 2020, for example, represents the rainfall season going from October 2020 to May 2021. Food insecurity conditions associated with a drought in the 2020-2021 rainfall season are likely to be seen and recorded during the following lean season, starting in October 2021.

## Case 2: Vertical and horizontal expansion

**This case assumes that the Kwenda program expands both vertically and horizontally; thus, in addition to providing additional cash to existing beneficiaries, it also reaches households that are not part of the regular program.** The rationale behind a horizontal expansion is to allow programs to include additional poor households as well as those households that are vulnerable to poverty, i.e., households that are just above the poverty line in "normal" times, but when they are affected by a shock, they become transitory poor and hence need additional assistance to meet their basic needs. We therefore assume that the horizontal expansion of the program reaches all the households considered to be poor and vulnerable in the selected provinces—Cunene, Huíla, and Namibe.[117]

Table 6.3 Presents the assumptions made in this case around the parameters for a vertical and horizontal expansion of Kwenda to respond to droughts.

[117] Estimates on the number of poor and vulnerable households per province are based on data from IDREA 2019-18.

*Table 6.3: Vertical and horizonal expansion – Assumptions on key parameters*

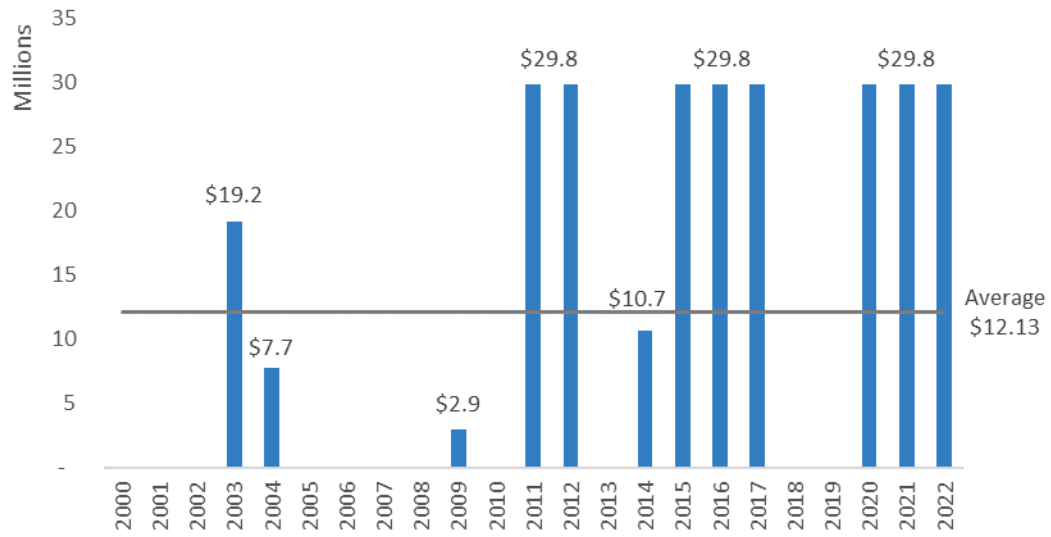
| Parameter | Value assumed | Rational |
|---|---|---|
| Transfer amount (per household per month)[118] | AOA 8,500 (US$16.6)[119] | We assume the amount to be the same for vertical and horizontal expansions. This is the current value of the cash transfer provided through the core Kwenda program. It is very close to the food poverty line and the value of a representative food basket. |
| Duration (number of months) | 4 months | This is based on the duration of the lean season in Angola, which expands from November to February each year. This is when food insecurity is at its highest. |
| Regional coverage | Cunene, Huíla and Namibe | These are the three provinces that have been affected more often by droughts since the year 2000. |
| Households covered | 448,112 | This includes the number of Kwenda beneficiaries in selected provinces that will be covered by a vertical expansion—a total of 204,787 poor households (as of May 2023). It also adds 243,325 poor and vulnerable households to be covered by a horizontal expansion in the selected provinces. |
| Frequency of shock (based on data available) | 1 in 2 | In the period between 2000 and 2022, there were droughts in selected provinces in 12 of the years covered. |

*Source: Author's Estimates*

**Based on the parameters selected, the average annual cost over a period covering 2000 to 2022 would have been US$ 12.1 million**. The hypothetical historical costs of an adaptive mechanism that expands vertically and horizontally are presented in Figure 6.4. There would have been *8 years* where the scale-up would have triggered in the three provinces, same as in the previous case. However, the maximum cost would have been higher, reaching US$ 29.8 million, given the larger household coverage assumed.

[118] This is the amount provided as part of the scale-up. For existing Kwenda beneficiaries covered by the vertical expansion, this amount would be provided in addition to the core program's monthly cash transfer. For vulnerable households covered by the horizontal expansion, this would be the total amount provided.
[119] Exchange rate AOA to USD: 511 (November 2022).

*Figure 6.4: Vertical and horizontal expansions - Historical cost estimation*




*Source: World Bank estimations. Note: Years in the x-axis mark the beginning of the rainfall season; therefore the year 2020, for example, represents the rainfall season going from October 2020 to May 2021. Food insecurity conditions associated with a drought in the 2020/2021 rainfall season are likely to be seen and recorded during the following lean season, starting in October 2021.*

## Urban Areas: Urban scenarios for basic safety nets and price shocks

**The cost estimation for establishing a cash transfer system in urban areas of Angola is informed by the current implementation of Kwenda in rural areas, as well as by urban population statistics and price shock data.** Specifically, data from IDREA 2018/19 was used to produce statistics on the total number of urban households, poor and vulnerable households, and households with two characteristics identified in Chapter 3 as determinants of urban poverty—female-headed households and those that have no access to basic services such as electricity (i.e., a proxy of poor housing quality, a key determinant of urban poverty). Also, given that price shocks are the main cause of food shortages in urban areas, food inflation data from WFP at the national level was also used to inform the urban cost estimation.

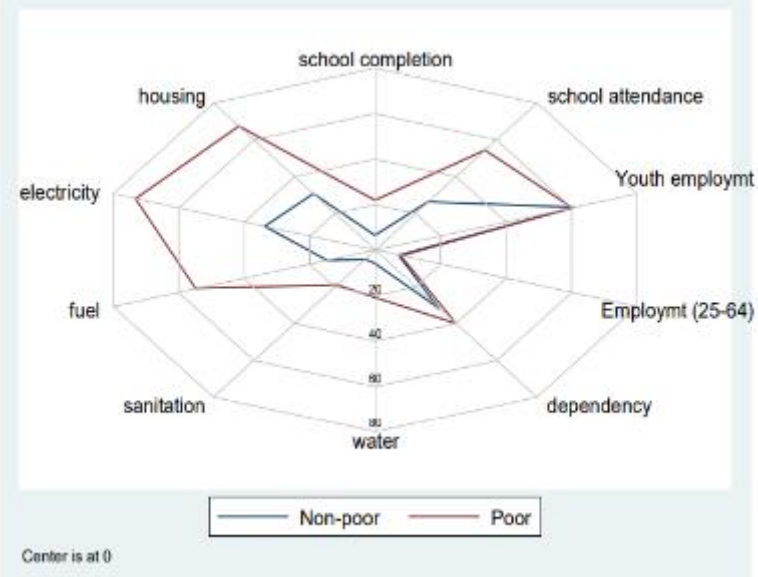
**The costs of implementing a safety net program in urban areas were estimated for two different cases: one where it responds to price shocks that are driven by structural reforms, and another where these shocks are exogenous.** In the first case, given that structural reforms are domestically determined, costing is based on assumptions for the one-time, predictable, or static implementation of an urban safety net program. In this case, cost estimates assume different options of eligibility criteria for households in urban areas, which changes the number of households covered by the urban safety net and the ensuing cost. The second case presents the potential costs of using an urban safety net program to respond to exogenous price shocks, for example, driven by international conflict or economic downturns. To estimate the historical costs of responding to exogenous price shocks using safety nets in urban areas, we use historical data on food prices to identify years where prices experienced a significant increase. The next sections describe each of these cases in more detail and present costing results.

## Case 1: One-time urban safety net in response to predictable price shocks

**This first case presents the potential cost of implementing an urban expansion in response to predictable price shocks driven by structural reforms.** As an example, if the government were to implement a subsidy reform, this would lead to largely predictable price increases, especially in terms of timing. These price increases could result in higher food insecurity in urban areas at a given time, and therefore, introducing a one-time urban safety net that provides assistance to the most affected households could help mitigate the negative impact of such a reform.

**The cost estimation in this case uses different scenarios for urban household coverage.** Household coverage in the case of a predictable price shock would largely depend on the expected impact that the structural reform could have on price increases and on policy priorities. The scenarios for household coverage in urban areas used in this section consider the targeting criteria currently used by Kwenda in rural and peri-urban areas, which is based on household's poverty conditions. In this sense, we consider five different targeting criteria for the cost estimation of an urban scale up to respond to a predictable price shock: (a) all poor urban households in the largest urban areas of Luanda, Benguela and Huambo; (b) all poor urban households; (c) all poor and vulnerable urban households; (d) all urban female-headed households; and (e) all urban households that lack access to electricity. The first three criteria are in line with the poverty targeting of rural Kwenda but assume perfect poverty targeting, and the last two are the two characteristics highly associated with poor urban households but introduce targeting errors. As discussed in Chapter 3, over one-third of poor or vulnerable households are female-headed in urban areas, compared to close to one-fourth of the households that are neither poor nor vulnerable. At the same time, the largest gaps between poor and non-poor households in urban areas are found in housing conditions such as construction materials, access to electricity, and cooking fuel. In particular, the difference in access to electricity between poor and non-poor households is quite large—while around 78 percent of poor households do not have access to electricity, this drops to around 35 percent for non-poor households (Figure 6.5).

*Figure 6.5: Deprivation by monetary poverty status in urban areas*




*Source: World Bank Angola Poverty Assessment, 2020. Based on data from IDREA 2018/19.*

**For the urban cost estimation, we assume two transfer amounts, one equivalent to that of rural Kwenda and another equal to the average food consumption of the poorest 20 percent of urban households, and a duration of 12 months**. We assume that the transfer amount is the same as in rural Kwenda, AOA 8,500 (US$16.6)[120] per household per month. An alternate amount could be the average food consumption in urban areas for households in the bottom 20 percent of the income distribution (AOA 22,000 = US$ 43).[121] For the duration, we assume that the urban expansion of the program would last 12 months, given that price shocks are closely related to economic cycles that tend to last longer. Finally, in terms of geographical coverage, we assume that the expansion is done nationwide, covering the urban population in all provinces. We also present a case where the scale-up only covers the three provinces with the largest urban poor population—Luanda, Benguela and Huambo.[122]

Table 6.4 presents the cost of a one-time urban safety net using different household targeting criteria described previously. It also presents the number of households that could be reached in each case.

[120] Exchange rate AOA to USD: 511 (November 2022).
[121] World Bank Poverty Team estimates based on IDREA 2018/19 data (2022 values).
[122] Estimates on urban population and households per province are based on data from IDREA 2018-19.

*Table 6.4: Urban one-time expansion costs – Different targeting criteria*

| Scenarios by targeting criteria | Number of urban households covered | Cost of urban scale-up (rural Kwenda transfer value) | Cost of urban scale-up (avg. food consumption of poorest 20 percent urban households) |
|---|---|---|---|
| All poor urban households in Luanda, Benguela and Huambo | 223,000 | US$ 44,512,720 (0.06%) | US$ 115,209,393 (0.17%) |
| All poor urban households | 517,000 | US$ 103,197,652 (0.15%) | US$ 267,099,804 (0.39%) |
| All urban poor and vulnerable households | 844,000 | US$ 168,469,667 (0.24%) | US$ 436,039,139 (0.63%) |
| All urban female-headed | 871,526 | US$ 173,964,186 (0.25%) | US$ 450,260,246 (0.65%) |
| All urban households without access to electricity | 1,236,611 | US$ 246,838,130 (0.37%) | US$ 638,875,160 (0.92%) |

*Source: Author's calculation*

*Note: values in parenthesis are cost expressed as a percentage of 2022 GDP*

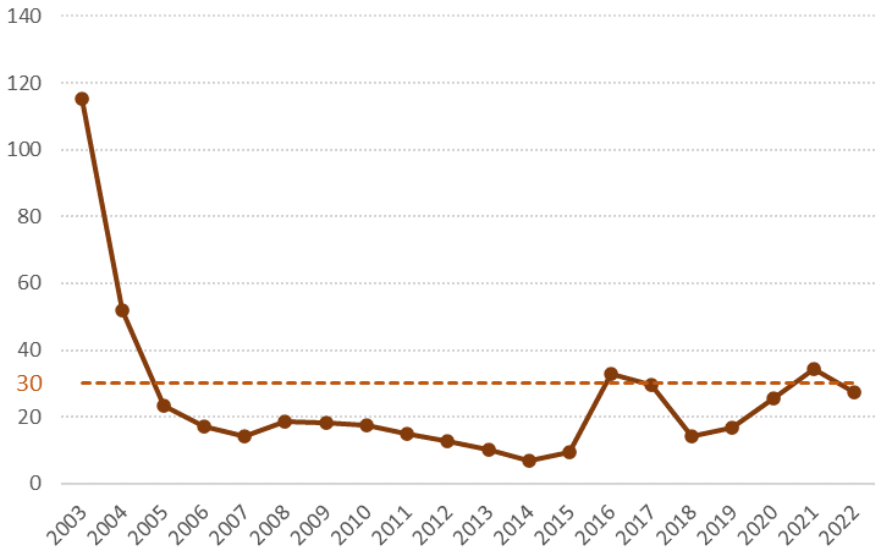
## Case 2: Safety net in urban areas to respond to historical exogenous price shocks

**This second case presents the potential costs of using an urban safety net to respond to exogenous price shocks**. Exogenous price shocks could be caused, for example, by international wars such as the Russia-Ukraine war, which have led to increases in food prices globally. Exogenous price shocks could also be a result of economic cycles that affect Angola and might be caused by a range of domestic or global conditions.

**Historical data on food inflation at the national level is used to analyze the frequency and severity of price shocks.** The data on food inflation covers a period from 2003 to 2022. Food inflation data is the year-on-year percentage change in the cost of purchasing a basket of goods. For this cost analysis, we assumed that a price shock occurred when the yearly average food inflation was above 30 percent with respect to the previous year. In the period between 2003 and 2022, this occurred four times (2003, 2004, 2016, and 2021). This would be a shock with a 1-in-5-year return period, which could be considered a severe shock. Figure 6.6 presents the yearly average food inflation. For this dynamic and historical cost estimation, we assume that the expansion covers all urban poor households in Angola, as this is in line with the long-term objective of Kwenda. Therefore, it is assumed that the expansion would cover around 517,000 urban poor households. Finally, we assume that the transfer amount is the same as in rural Kwenda: AOA 8,500 (US$16.6) per household per month. Based on these assumptions and parameters, the cost of each expansion would be around US$103 million.[123]

[123] If the cash transfer value per household per month was to be increased to the average food consumption in urban areas for households in the bottom 20 percent of the income distribution (AOA 22,000 = US$ 43.1), then the cost of a one-time expansion would be of around US$267 million and the average annual cost would be US$53.4 million.

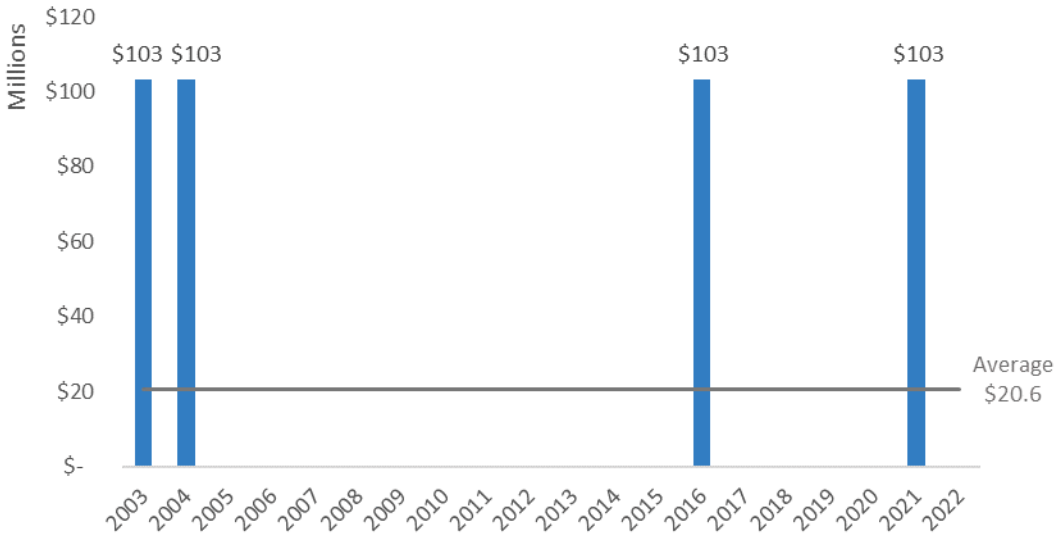
*Figure 6.6: Food inflation in Angola (yearly average)*




*Source: World Bank estimations using data on food inflation from WFP.*

**Based on the parameters selected, the average annual cost over a period covering 2000 to 2022 of an urban safety net that responds to exogenous price shocks would have been US$20.6 million per year**. The hypothetical historical costs of an adaptive mechanism that expands to cover poor households in urban areas in response to price shocks are presented in Figure 6.7. This cost is equivalent to 0.03 percent of 2022 GDP.

*Figure 6.7: Urban expansions and price shocks - Historical cost estimation*



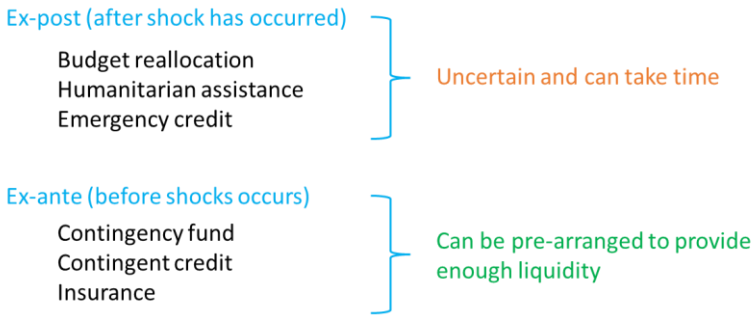

*Source: World Bank estimations.*

## Recommendations for financing safety nets scale-ups

**The estimated costs of scale-ups are significant when compared to Kwenda's annual budget.** The resources needed to cover the cash transfers of the Kwenda program for one year are around US$ 84 million[124]. The annual average costs of doing a vertical expansion only or a vertical and horizontal expansion in rural areas would represent around 6.8 percent and 14.7 percent of the annual Kwenda cash transfer resources. The urban scale-ups would be even more costly. The government would need around US$29.8 million to do a one-time vertical and horizontal expansion of Kwenda in three selected provinces in rural areas and US$103 million to do a one-time scale-up of Kwenda in urban areas. This translates to an annual average cost of a vertical and horizontal expansion in rural areas of $12.1 million and an annual average scale-up in urban areas of $20.6 million (using the rural Kwenda transfer value).

**Hence, pre-arranging financing would be key to ensuring the availability of funds to effectively respond to shocks.** This will support a more timely, cost-effective, and reliable disaster response. To meet the financial needs associated with safety net scale-ups, the government could mobilize resources either in advance (ex-ante) or once a shock has occurred (ex-post). Following a disaster, governments have a range of options for financing disaster-related needs. However, raising sufficient finance once a disaster has occurred can take time, and how much financing can be obtained is often uncertain. To access finance after a disaster, governments often rely on reallocating the government budget to meet urgent needs, appealing for international donor assistance, and arranging for emergency credit. Pre-arranged financing has some important benefits, such as increasing the speed of the response, making it more cost-effective, and reliable.

*Figure 6.8: Ex-post and ex-ante financing instruments*




*Source: World Bank.*

**Financing needed to cover the cost of adaptive safety nets systems can be pre-arranged by setting up different financial instruments.** There are several instruments that could be used for this purpose, such as contingency funds, contingent lines of credit, and risk transfer instruments. The governments of Kenya and Uganda established a contingency fund to expand their main cash transfer and public works programs, respectively, in response to droughts. In Malawi, the government is using a risk-layering approach to cover the costs of their flagship cash transfer program by combining two financial instruments—a contingency fund and an insurance policy. While the insurance policy pays claims to the government based on severe shortfalls in rainfall monitored through satellite data, the contingency fund is used to cover the cost of scaling up the program for more moderate droughts and other types of climate shocks.

[124] US$ 420 over a period of 5 years

**The government could optimize the use of public funds by implementing a risk layering approach that combines different risk financing instruments to pre-finance Kwenda scale-ups**. When resources are defined beforehand, it allows for better predictability, planning, and ultimately quicker disbursement. Moreover, by combining risk-financing instruments, the government could increase the cost-efficiency of scaling up Kwenda. Given the recurrent nature of shocks in the country (once every 3 years on average), the government could consider establishing, financed through the savings from the ongoing fuel subsidy reforms:

- **A contingency multi-year reserve fund** to provide immediate liquidity after a shock to cover the costs of Kwenda scale-ups in affected rural and urban areas. For such a fund to be effective, timely, and well-managed, the following areas should be defined: (i) explicit purpose and beneficiaries; (ii) fund's legal and institutional frameworks; (iii) its governance, transparency, and accountability principles; and (iv) the financing structure.
- **Secure a contingent line of credit** to complement the contingency fund and provide additional liquidity that can allow Kwenda to increase cash assistance and/or increase its number of beneficiaries when severe shocks materialize.

Risk transfer instruments, such as sovereign insurance products, might not be cost-effective instruments to respond to shocks that are as frequent as the ones experienced in Angola. Further analysis, however, would be required to determine the optimal combination of financial instruments that the government could consider to pre-finance Kwenda scale-ups to respond to disasters of different severities and frequencies.

**Adaptive safety nets, when linked to needed finance, promote early action by using pre-agreed and transparent rules and pre-positioning financing instruments linked to those rules.** Governments usually design an adaptive mechanism by defining key parameters, including how often and for what type of shocks the program will scale up, what geographical areas it should cover, how many people it should cover, and how much assistance it should provide. The choices around these parameters ultimately determine the cost of the adaptive mechanism. By being able to estimate hypothetical historical costs, governments can set up financial instruments that provide enough liquidity to cover the costs of using adaptive safety nets to respond to future disasters. By pre-defining rules and pre-arranging financing, adaptive safety nets promote an early response to shocks, helping to avoid household's use of coping mechanisms that can have a long-term negative impact on their livelihoods, reverting poverty reduction gains.

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# Annex I. Reported droughts in Angola

| NO. | PROVINCE | START | END/DURATION | SOURCE |
|---|---|---|---|---|
| 1 | Cunene | - | 90 days | DesInventar |
| 2 | Cunene | 1977 | 1978 | DesInventar |
| 3 | Benguela, Mocamedes, Huíla, Cunene, Cuando Cobango, Bie | 1981 | 1981 | EM-DAT |
| 4 | - | 1985 | 1985 | EM-DAT |
| 5 | Huíla, Namibe, Cuanza Sul, Benguela | 1989 | 1992 | EM-DAT |
| 6 | - | 1997 | 1998 | EM-DAT |
| 7 | Cuanza Sul | 2001 | 2001 | EM-DAT |
| 8 | Huíla | 2003 | 2013 | DesInventar |
| 9 | Cunene, Cuanza Sul | 2004 | 2005 | EM-DAT |
| 10 | Namibe | 2009 | 2010 | DesInventar |
| 11 | Bengo, Cuanza Sul, Benguela, Huíla, Namibe, Cunene, Moxico, Bie, Huambo, Zaire, Cuando Cubango | 2012 | 2013 | EM-DAT |
| 12 | Huambo, Huíla, Bie, Cuanza Sul | 2011 | 2012 (continues) | GIEWS |
| 13 | Bengo, Cuanza Sul, Benguela, Huíla, Namibe, Cunene, Moxico, Bie, Huambo, Zaire | 2011 | 2012 (continues) | CNPC, UNDP, EU, WB |
| 14 | Cunene, Huíla, Namibe | 2011 | 2016 | CNPC, UNDP, EU, WB |
| 15 | Benguela | 2013 | - | DesInventar |
| 16 | Cuando Cubango | 2013 | 45 days | DesInventar |
| 17 | Namibe, Cunene, Cuando Cubango | 2013 | - | FEWS NET |
| 18 | Cuando Cubango | 2014 | - | DesInventar |
| 19 | Cunene | 2014 | 60 days | DesInventar |
| 20 | Cunene | 2014 | - | DesInventar |
| 21 | Benguela, Cuanza Sul, Cunene, Namibe | 2014 | - | FEWS NET |
| 22 | Cunene, Namibe, Huíla | 2014 | 2015 | CNPC, UNDP, EU, WB |
| 23 | Cunene, Namibe | 2015 | - | FEWS NET |
| 24 | Southern Angola | 2015 | - | OCHA |
| 25 | Cunene, Huíla, Namibe, Benguela, Cuando Cubango, Cuanza Sul, Huambo | 2017 | 2017 | EM-DAT |
| 26 | - | 2019 | - | FAO, IFAD, WFP |
| 27 | Cuando Cubango | 2020 | 180 days | DesInventar |

| | | | | |
|---|---|---|---|---|
| 28 | Cunene, Huíla, Namibe, Cuanza Sul, Benguela, Huambo | 2020 | 2022 | EM-DAT |
| 29 | Cuanza Sul, Benguela, Huambo, Namibe, Huíla | 2020 | 2021 (continues) | IFRC |
| 30 | Cunene, Huíla, Namibe, Benguela, Huambo | 2020 | 2021 (continues) | Amnesty |
| 31 | Namibe, Cunene, Huíla, Cuando Cubango | 2020 | 2023 | FEWS NET |
| 32 | Cunene, Huíla, Namibe | 2021 | - | IPC |
| 33 | Cuanza Sul, Benguela, Huambo, Namibe, Huíla, Cunene | 2021 | - | UNICEF |

# Annex II. Data sources used in climate shocks analysis

| Table II.I: Reported Hazard and Remote Sensing Dataset | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Type** | **Product** | **Indicator** | **Historical availability** | **Temporal resolution** | **Data latency** | **Spatial resolution** | **Description of data** | **Pros** | **Cons** |
| Historical hazard data | DesInventar | Number of hazard events, people affected, and other impacts | 1917+ | month | year | province, municipality, commune | DesInventar is an initiative promoted by UNDRR and UNDP to enable the government-level collection of hazard impact data at the district level to aid with planning. | Widely used dataset for hazard and impact monitoring; partly relies on EM-DAT. | EM-DAT, one of the major sources for the DesInventar platform in Angola, depends on publicly accessible reports, which are limited for some countries. |
| Historical hazard data | EMDAT | Number of hazard events, people affected, and other impacts | 1981+ | month | year | province | EMDAT is one of the most comprehensive historical datasets on hazard events and associated impacts. The University of Louvain maintains the database, which is based on various publicly accessible reports. | Widely used dataset for hazard and impact monitoring. | Depends on publicly accessible reports, which are limited for some countries. |
| Historical hazard data | ReliefWeb | General information on historical droughts | 2012+ | Irregular | Irregular | country | ReliefWeb is a humanitarian information service provided by OCHA. ReliefWeb's editorial team monitors and collects information from more than 4,000 key sources, including humanitarian agencies at the international and local levels, governments, think tanks and research institutions, and the media. | Large database relying on over 4,000 sources. | Depends on humanitarian reports. May only detect large-scale droughts with humanitarian impact and not smaller-scale droughts that have local food security impacts. |
| Historical hazard data | FEWS NET | IPC Food Security Phase Classification | 2013-2022 | ad hoc | | NA | FEWS NET remote monitoring reports on Angola reporting on food security associated with drought. The reports have been produced ad hoc since 2013. | Detailed analysis of food security impacts associated with droughts. | Ad hoc data for Angola, so challenging to perform a time series analysis. |
| Historical hazard data | IPC | IPC Food Security Phase Classification | 2019, 2021 | ad hoc | | District | A database of IPC (Integrated Food Security Phase Classification) values, ranging from 1 (minimal food insecurity) to 5 (famine) for South Angola only. Data is available for 2019 and 2021. | Widely used global metric for food insecurity associated with droughts. | Short historical record. Available only for South Angola. Several uncertainties are associated with the IPC classification process. |
| Remote Sensing/ Weather Stations | CHIRPS | Rainfall | 1981+ | Daily, 5-day, 10-day | <24 hrs | 5.5 km | Climate Hazards Group InfraRed Precipitation with Station data (CHIRPS) is a 35+ year quasi-global rainfall data set. Spanning 50°S-50°N (and all longitudes) and ranging from 1981 to near-present, CHIRPS incorporates UCSB in-house climatology, CHPclim, 0.05° resolution satellite imagery, and in-situ station data to create gridded rainfall time series for trend | Relatively high spatial and temporal resolution, available over a long period allowing for time series analysis. Widely used and validated dataset over most of sub-Saharan Africa. | CHIRPS exhibits better in the warm season than in Winter, owing to its limited ability to detect snowfall. Nevertheless, CHIRPS is moderately sensitive to the precipitation from typhoon weather systems. Limitations are not relevant to Angola. |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | analysis and seasonal drought monitoring. | | |
| Remote Sensing/ Weather Stations | MOD13 NDVI | Vegetation Index | 2002+ | 16 days | 16 days | 250 m | Maintained by NASA. Crop monitoring with optical satellite images can be hampered by persistent cloud cover. However, special techniques, such as profile smoothing or data fusion, may offer a solution to overcome this problem through vegetation indices. | Longest NDVI time series on record and high spatial resolution. | Lower temporal resolution. |
| Remote Sensing/ Weather Stations | SMAP | Soil Moisture | 2015+ | 50 hours | <24 hrs | 36 km | Maintained by NASA. Previous studies have shown a good correlation between SMAP soil moisture and drought intensity, especially in arid and semi-arid areas. | Most accurate remotely-sensed soil moisture product available right now. | Short historical record (only available since 2015). |
| Near Real-Time Global Flood Product | LANCE MODIS NRT global flood product (MCDWD) | Flood Product | 2000+ | 1, 2, and 3-day composites | 3 hrs. | 250 m | The MODIS Near Real-Time (NRT) Global Flood Product is a dataset produced by NASA that provides near real-time flood detection. It uses imagery to identify areas currently experiencing flooding and includes information on the extent and severity of the flood. The NRT Global Flood Product is updated every 3 hours and covers the globe at a spatial resolution of 250 meters. | High spatial and temporal resolution. | Limited by cloud cover, which can obscure the view of the Earth's surface and make it challenging to detect flooding. |

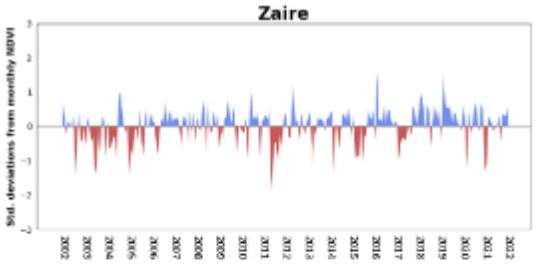
Table II.2: Socioeconomic Datasets

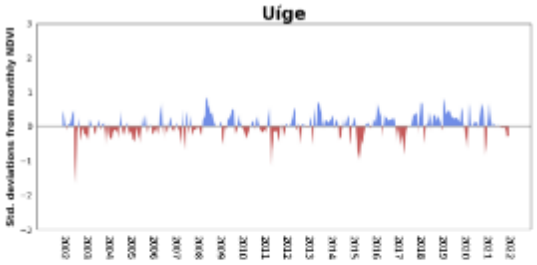
| Description of data | Source | Indicator | Date of publication | Temporal resolution | Spatial resolution | Continuity | Description of data | Pros | Cons |
|---|---|---|---|---|---|---|---|---|---|
| Analytical units | ESRI/WHO | Province, municipality, and commune boundaries | After 2014 | ad hoc | admin boundaries | ad hoc | Official administrative boundaries used by the Government after a change in 2014. | Official boundaries. | |
| Demographics | WorldPop | Population density | 2020 | ad hoc | 100 m | yes | Estimated total number of people per grid cell based on the 2020 population census/projection-based estimates for 2020, building footprints and gridded building patterns, and geospatial covariates. The mapping approach is the Random Forests-based dissymmetric redistribution, and the disaggregation uses the Random Forests population modeling R scripts. | High-resolution population density data. | |

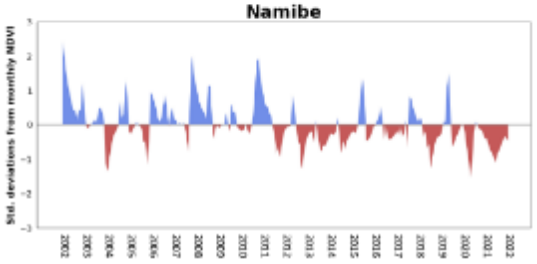
| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Demographics | Instituto Nacional de Estatística | Population density | 2018-2019 | ad hoc | province | | Survey on Expenditure, Revenue, and Employment in Angola carried out in 2018-2019. | Recent data on numerous relevant indicators. | Only available at the province level. |
| Demographics | World Bank | Population density | 2018-2019 | ad hoc | municipality | ad hoc | Municipal-level population estimates using an s2s approach are conducted using the 2014 Census data and data collected in 2018/19 through the Survey on Expenditure and Revenue (IDR) and the Survey on Expenditure and Revenue and Employment in Angola (IDREA). | Recent municipality-level data. | Missing information for a few municipalities. |
| Demographics | Data for Good at Meta | Relative Wealth Index | 2022 | year | 2.4 km | yes | The Relative Wealth Index predicts the relative standard of living. There are roughly 20 million 2.4 km² micro-regions on the earth's surface. This index estimates the relative wealth of the people living in each micro-region relative to others in the same country. This index uses nontraditional data sources, including satellite imagery and privacy-protecting Facebook connectivity data. The index is validated using ground-truth measurements from the Demographic and Health Surveys. | Based on a machine learning algorithm that has shown high accuracy globally. | Not validated in places with limited Internet connectivity, such as Angola. |
| Demographics | World Bank | Poverty | 2018-2019 | ad hoc | municipality | ad hoc | Municipal-level poverty estimates using an s2s approach are conducted using the 2014 Census data and data collected in 2018/19 through the the Survey on Expenditure and Revenue (IDR) and Survey on Expenditure and Revenue and Employment in Angola (IDREA). | Recent municipality-level data. | Missing information for a few municipalities. |
| Demographics | World Bank | Kwenda beneficiaries | | | municipality | | | | |
| Demographics | Instituto Nacional de Estatística | Poverty | 2018-2019 | ad hoc | province | | Several measures capture different aspects of poverty. The report is based on data collected in 2018/19 through the Survey on Expenditure and Revenue (IDR) and the Survey on Expenditure and Revenue and Employment in Angola (IDREA). | Recent data on poverty. | Only available at the province level. |
| Demographics | Instituto Nacional de Estatística | Multidimensional poverty | 2014 | ad hoc | municipality | one-off | The measure captures the severe deprivations that each person faces simultaneously using information from 10 indicators, which are grouped into three equally weighted dimensions: health, education, and living standards. The report is based on data collected in 2014 through the Census. | Widely accepted metric of multidimensional poverty. | Only available at the province level and for 2014. |
| Demographics | Instituto Nacional de Estatística | Drinking water, sanitary facilities, dependency, unemployment, and literacy | 2018-2019 | ad hoc | province | | Survey on Expenditure, Revenue, and Employment in Angola carried out in 2018-2019. | Recent data on numerous relevant indicators. | Only available at the province level. |

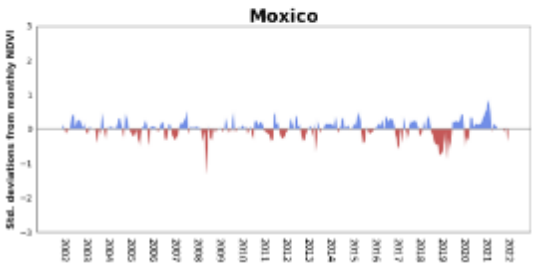
| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Market | Instituto Nacional de Estatística | Consumer price indices | 2015-2022+ | monthly | country | yes | Instituto Nacional de Estatística, Angola. The market price indices, including the consumer price index, are collected monthly at a provincial level, enabling monthly percentage change calculations. | Regularly collected data on numerous market price indices at a provincial level. | Only limited (national) data is available online; the provincial data would need to be requested. |
| Market | WFP | Food inflation | 2003-2022+ | monthly | country | Yes | Food inflation dataset from 2003 to the present. As measured by a price index, monthly inflation reflects the year-on-year percentage change in the cost of purchasing a basket of goods and services that may be fixed or changed at specified intervals, such as yearly. Headline inflation considers all goods, including food and energy, which tend to be volatile and are naturally more prone to inflationary spikes as compared to other goods and services. | Relatively long historical period. | Food inflation alone is insufficient to understand food security impacts, so it should be analyzed in the context of other trends. Inflation data is only available once a month, so it may not detect impacts associated with hazards. |
| Market | WFP | Food prices | 2008-2020 | monthly | Luanda | unknown | Food prices for different commodities were measured from 2008 to 2020, primarily for Luanda. | Prices on numerous relevant food items. Relatively long historical dataset for food prices. | Food prices alone are insufficient to understand food security impacts, so they should be analyzed in the context of other trends. Food prices are only available for Luanda once a month, so it may not detect impacts in other parts of Angola or those associated with hazards. |
| Food security | Instituto Nacional de Estatística | Food security indicators | 2018-2019 | ad hoc | province | | Survey on Expenditure, Revenue, and Employment in Angola carried out in 2018-2019. | Recent data on food security during 12 months. | Only available at the province level as one point for the past year, making the trend analysis impossible. |
| Food security | WFP | Food Consumption Score (FCS), Reduced Coping Strategies Index (rCSI), Livelihood Coping Strategies Index (LCSI) | 2020 | ad hoc | province | unknown | WFP shared a dataset with the Food Consumption Score (FCS), Reduced Coping Strategies Index (rCSI), and Livelihood Coping Strategies Index (LCSI) computed at the province level for November 2020. The survey is designed to be representative at ADM1 (province) and the national level only. This data should not be used to compute ADM2-level estimates due to the lower sampling size on admin 2 or lower. | Widely accepted metrics of food security. | No time series. |
| Livelihoods | FEWS NET | Livelihood zones | 2016 | ad hoc | livelihood zones | one-off | Livelihood zones were developed by FEWS NET in 2014 and updated in 2016. | Only available livelihood zone maps and vulnerability profiles. | Slightly outdated; information from 2014. |
| Agriculture/ Livelihoods | Instituto Nacional de Estatística | Agriculture, land ownership, livestock, and village activities | 2018-2019 | ad hoc | province | | Survey on Expenditure, Revenue, and Employment in Angola carried out in 2018-2019. | Recent data on numerous relevant indicators. | Only available at the province level. |

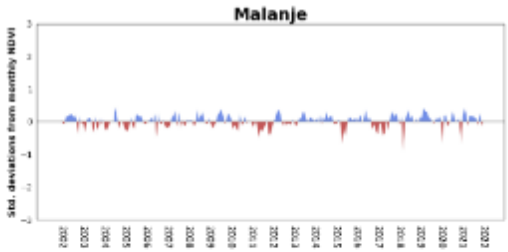
## Annex III. Timeseries NDVI anomalies per province



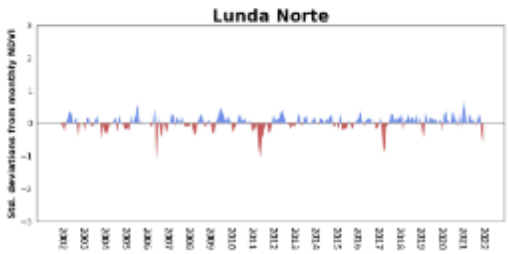



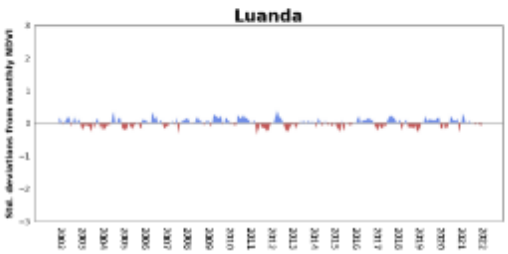



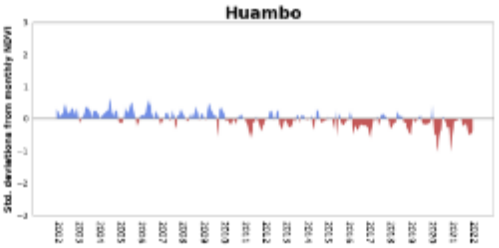



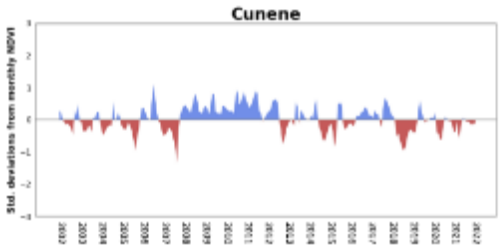


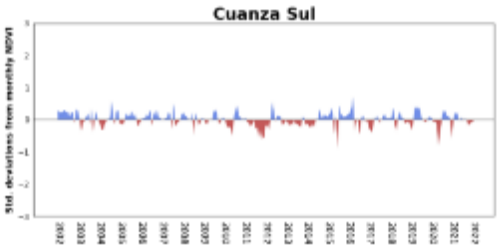


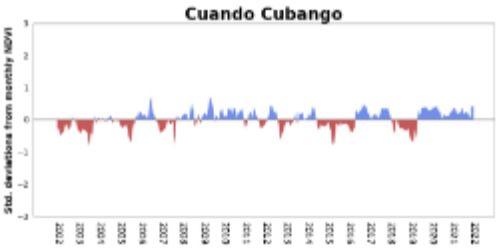

Huíla
Std. deviations from monthly NDVI

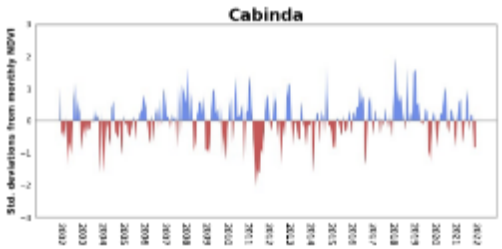

Huambo
Std. deviations from monthly NDVI

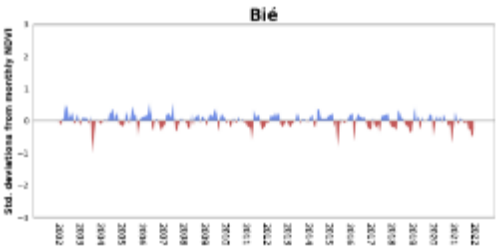

Cunene
Std. deviations from monthly NDVI

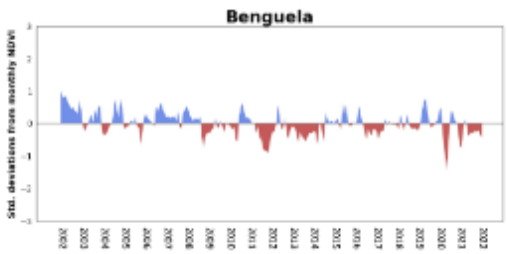

Cuanza Sul
Std. deviations from monthly NDVI

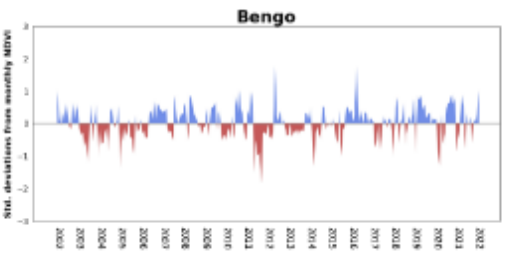

Cuanza Norte
Std. deviations from monthly NDVI


Cuando Cubango
Std. deviations from monthly NDVI


Cabinda
Std. deviations from monthly NDVI


Bié
Std. deviations from monthly NDVI


Benguela
Std. deviations from monthly NDVI


Bengo
Std. deviations from monthly NDVI

# Annex IV: Flood event identification

**Reported flood years**

The years below were identified as known flood impact events in two study focus areas, drawing on the EM-DAT / DesInventar databases. Years of more severe floods are underlined below.

*Benguela*: 2000, 2001, 2005, 2007, 2010, 2011, 2012, 2013, 2015, 2016, 2017, 2019

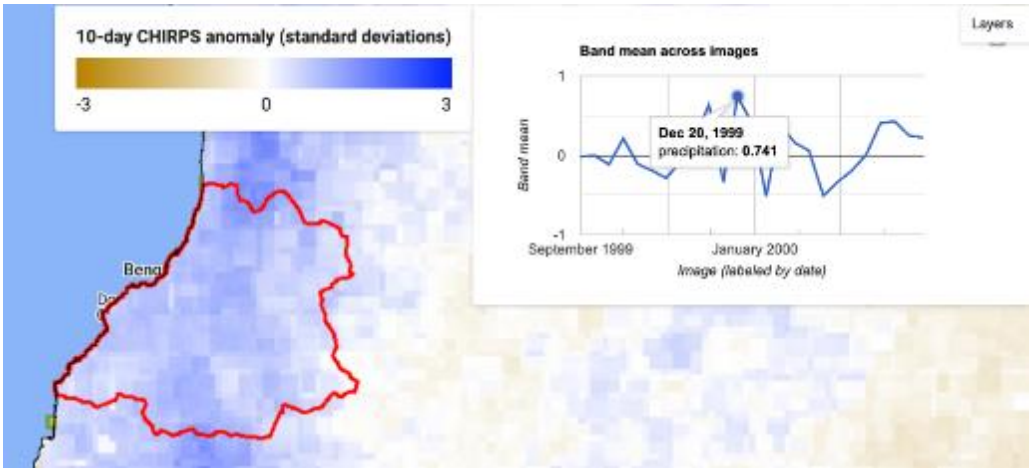
*Cunene*: 2001, 2008, 2009, 2010, 2011, 2014, 2016, 2020

**CHIRPS extreme rainfall analysis**

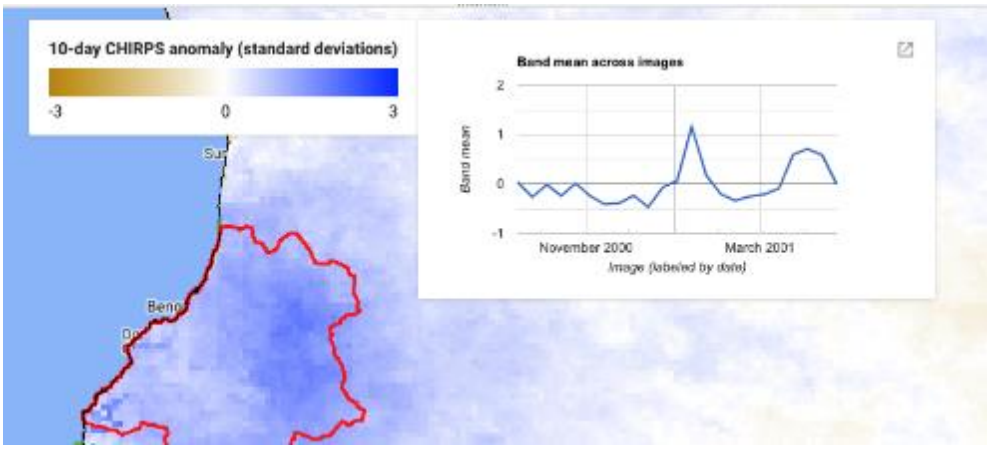
The following maps show the progression of CHIRPS rainfall during the critical historical flood events identified above. Rainfall is expressed here as an anomaly, i.e., the difference in standard deviations from the 10-day climatological average in that area. In general, we see that all the key flood events considered are associated with significant positive rainfall anomalies, most of which fall around the reported timing of the event.

*Benguela*

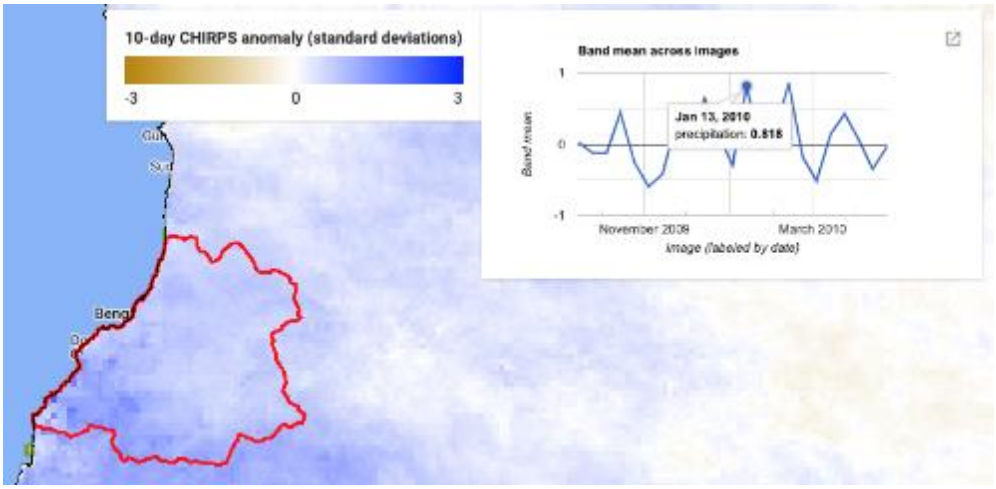
2000: Roughly coincident with early January 2000 reported impact.



2001: Roughly coincident with early April reported impacts.

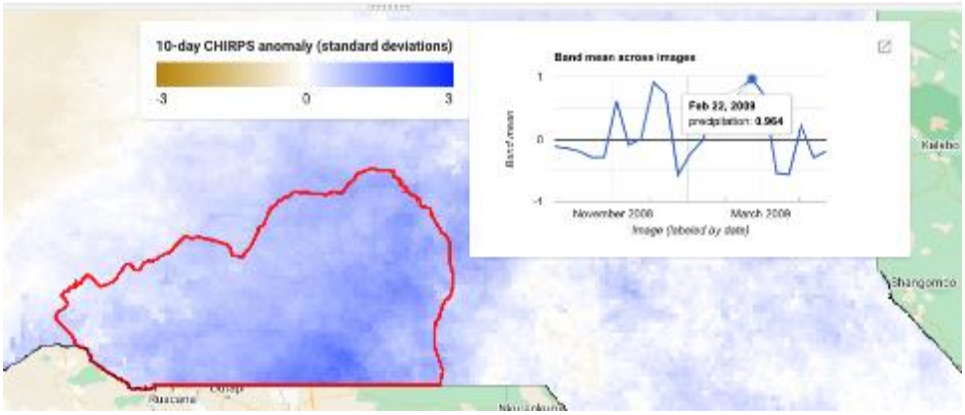



2010: Not coincident with early March reported impacts, although we do see anomalies earlier in the season.

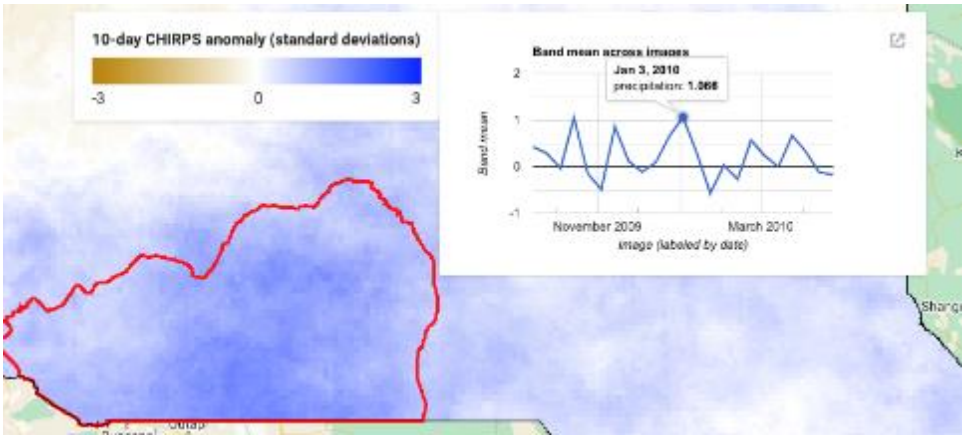



*Cunene*

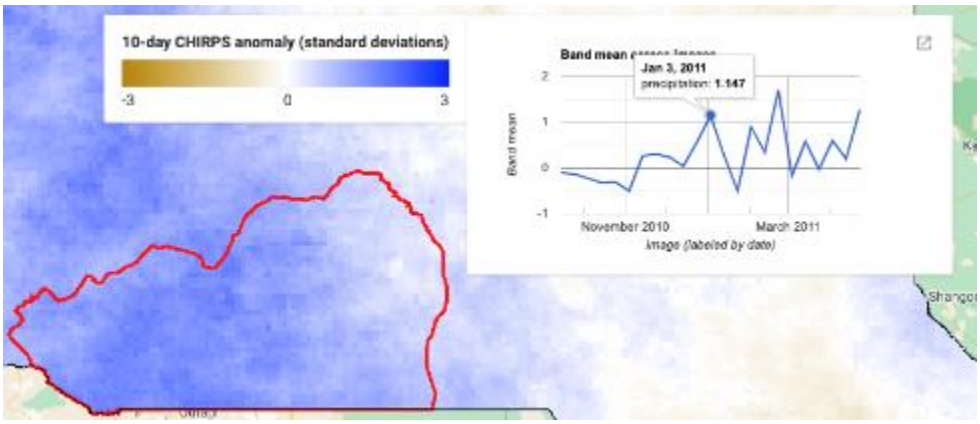
2009: Coincident with reports that start in early March.



2010: Somewhat coincident with reports that start in early March.




2011: Coincident with reports that start in late Feb.




**Flood event identification using MCDWD**

To understand which flood plains MCDWD can identify, we mapped the long-term tendency of surface water during the period between 2000 and 2021. The Cunene/Kunene River is identified clearly—the part around the Namibian border and its mouth in Namibe province. The Zambezi floodplain around Lunda Sul is also identifiable, along with a few other floodplains in inland areas. The Coporolo River in Benguela is not identified, which may be related to its ephemeral nature. The area around Luanda in the north presents a speckled pattern indicative of significant noise from cloud cover and/or coastal measurement imprecision.

The maps present the long-term surface water tendency from the MCDWD Islam et al. (2010) algorithm. The colors in the maps represent the following:

- Light blue – any water (>0% - <3% of images),
- Green – flood prone (3-10% of images),
- Red – seasonal water (10-70% of images),
- Dark blue – permanent water (>70% of images)

*Angola*


*Cunene*

*Coporolo*

# Annex V. Maps with Socioeconomic Indicators

## Livelihood

### AGRICULTURE

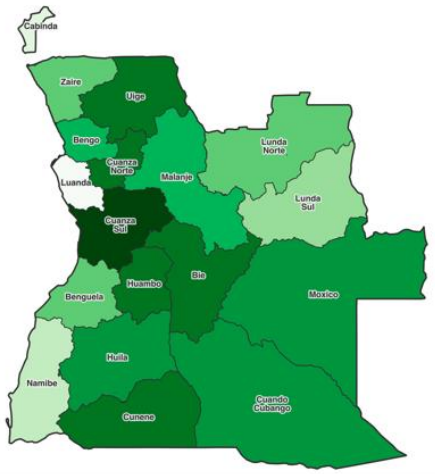
Data source: 2018/19 INE Survey on Expenditure, Revenue and Employment in Angola (IDREA)


**Agriculture, livestock, hunting, forestry, and/or fishing as a main economic activity for employed population aged 15 years or more**

**2%** **80%**

### LAND OWNERSHIP

Data source: 2018/19 INE Survey on Expenditure, Revenue and Employment in Angola (IDREA)




**Land ownership**

**2%** **82%**

### LIVESTOCK

Data source: 2018/19 INE Survey on Expenditure, Revenue and Employment in Angola (IDREA)

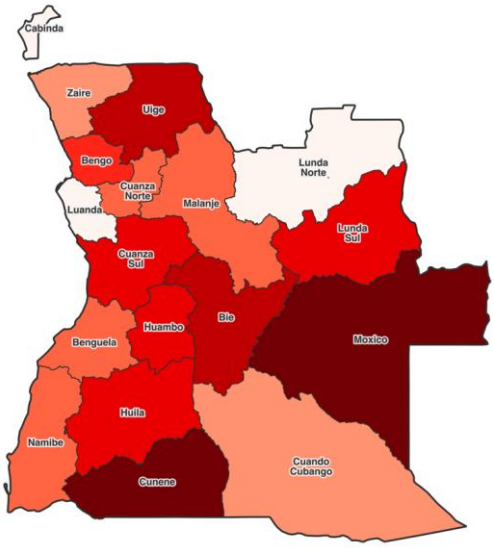

**Households engaged in livestock raising**

**4%** **83%**

## Poverty

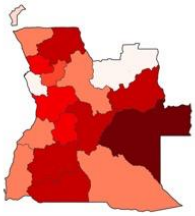
### POVERTY BY PROVINCE

Data source: 2018/19 INE Survey on Expenditure, Revenue and Employment in Angola (IDREA)



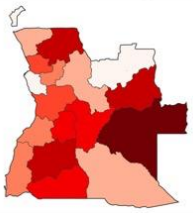

Poverty rate (Incidence: 0-100%)

20.1% 62.8%



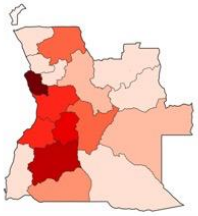
Poverty depth (0-100%)

3.7% 17.8%



Poverty intensity (0-100%)

1.3% 8.6%

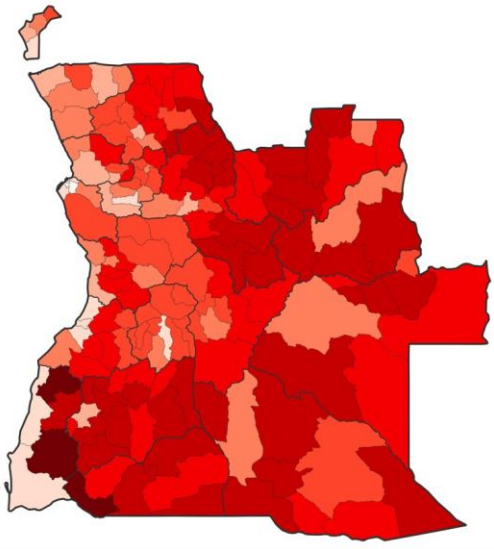


Number of poor

200,000 1,600,000

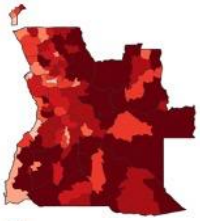
### MULTIDIMENSIONAL POVERTY INDEX (MPI) BY MUNICIPALITY

Data source: 2014 census



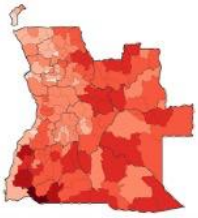
MPI (0-1)

0.029 0.753



Incidence (0-100%)

6.6% 99.8%

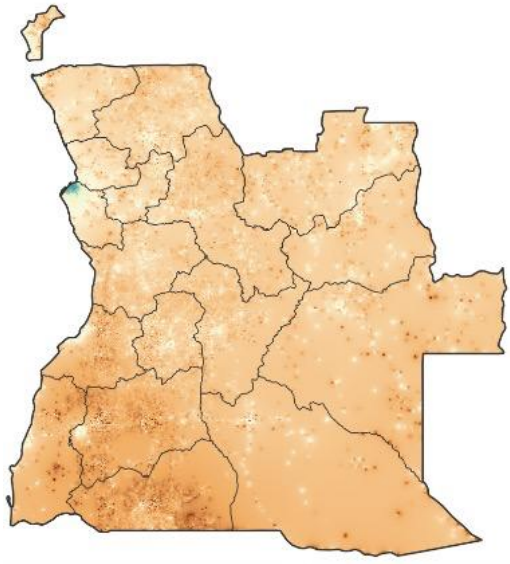


Intensity (0-100%)

43.5% 77.2%

## RELATIVE WEALTH INDEX (RWI)

Data source: 2021 Data for good

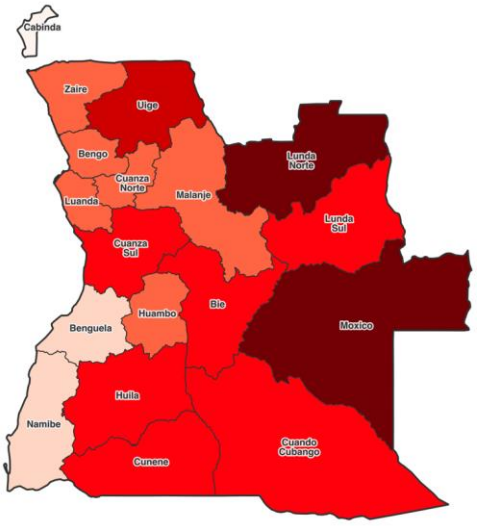


**RWI**

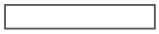
**-1.25** **1.56**

## DRINKING WATER

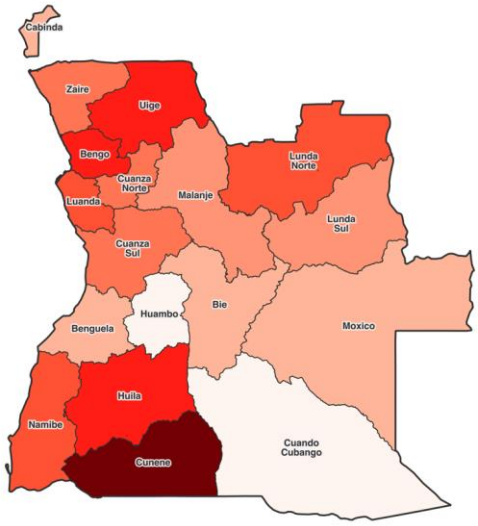
Data source: 2018/19 INE Survey on Expenditure, Revenue and Employment in Angola (IDREA)



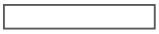

**Unsuitable main source of drinking water**



**16%** **75%**



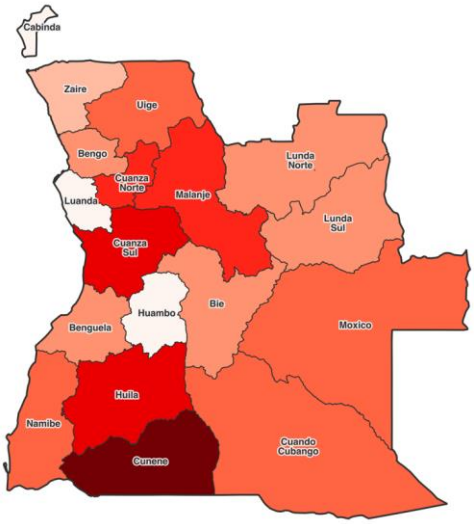

**More than 30min to fetch drinking water**



**10%** **67.6%**

## SANITARY FACILITIES

Data source: 2018/19 INE Survey on Expenditure, Reve

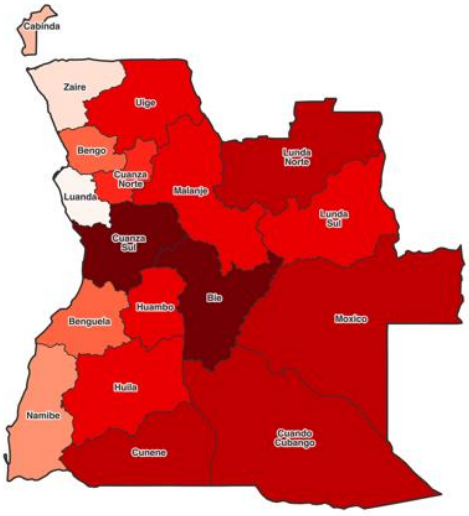



**Unsuitable sanitary facilities**

**2%** **84%**

## LITERACY

Data source: 2018/19 INE Survey on Expenditure, Revenue and Employment in Angola (IDREA)

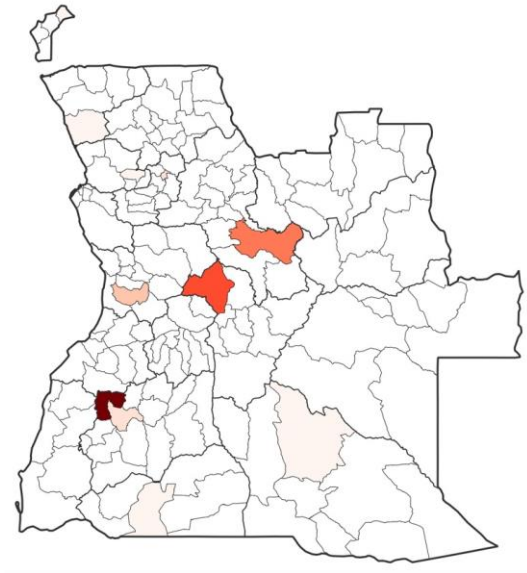



**Literacy rate (total: can read and write; aged 15 or more)**

**51%** **92%**

## BENEFICIARIES BY MUNICIPALITY

Data source: World Bank



**Number of enrolled households**

**0** **19,505**

# Annex VI: Household characteristics by poverty status additional tables

**Table VI.1 – Household characteristics by poverty status and rural/urban**

| | Urban | | | Rural | | |
|---|---|---|---|---|---|---|
| | **Poor** | **Vulnerable** | **Other** | **Poor** | **Vulnerable** | **Other** |
| **Demographics** | | | | | | |
| Dependency ratio | 115.3 | 122.3 | 64.4 | 121.6 | 102.9 | 43.6 |
| Share of children (<15 years) (%) | 51.7 | 52.7 | 37.6 | 52.3 | 47.2 | 28.0 |
| Share of elderly (>64 years) (%) | 1.9 | 2.4 | 1.6 | 2.5 | 3.5 | 2.3 |
| Household size (median) | 6 | 7 | 5 | 6 | 5 | 3 |
| Household size (mean) | 6.2 | 7.5 | 4.7 | 5.9 | 5.2 | 3.3 |
| **Household head** | | | | | | |
| Women head (%) | 35.4 | 37.9 | 27.4 | 28.1 | 27.2 | 29.6 |
| Women head with 3+ children (%) | 21.3 | 25.5 | 9.4 | 18.0 | 11.3 | 3.1 |
| Age head (mean) | 42.9 | 44.5 | 39.6 | 43.8 | 43.1 | 41.1 |
| Teenage head (15-18 years) (%) | 0.3 | 1.6 | 0.4 | 0.4 | 1.8 | 1.0 |
| Elderly head (60+ years) (%) | 8.6 | 14.1 | 6.8 | 12.9 | 16.3 | 11.4 |
| Education head (years) | 5.5 | 4.7 | 9.7 | 3.1 | 3.2 | 6.6 |

*Source: IDREA 2018/19*

**Table VII.2 - Poverty and Vulnerability by Province and rural/urban**

| | Urban | | Rural | |
|---|---|---|---|---|
| | **Poor** | **Vulnerable** | **Poor** | **Vulnerable** |

| | % | # People | # HH | % | # People | # HH | % | # People | # HH | % | # People | # HH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1000s | | | 1000s | | | 1000s | | | 1000s | |
| Cabinda | 8.2 | 53 | 10 | 7.7 | 49 | 6 | 27.5 | 44 | 8 | 15.7 | 25 | 3 |
| Zaire | 7.5 | 37 | 5 | 10.1 | 49 | 6 | 37.1 | 71 | 11 | 24.6 | 47 | 10 |
| Uíge | 29.8 | 136 | 21 | 11.5 | 53 | 7 | 46.8 | 567 | 92 | 27.2 | 330 | 49 |
| Luanda | 8.4 | 650 | 97 | 10.9 | 841 | 82 | 26.9 | 73 | 10 | 9.3 | 25 | 3 |
| Cuanza Norte | 23.8 | 76 | 13 | 18.7 | 60 | 10 | 60.5 | 107 | 20 | 17.1 | 30 | 7 |
| Cuanza Sul | 34.3 | 247 | 47 | 22.8 | 164 | 28 | 58.5 | 819 | 158 | 25.8 | 362 | 76 |
| Malanje | 30.4 | 156 | 25 | 22.3 | 114 | 16 | 58.7 | 353 | 60 | 22.6 | 136 | 30 |
| Lunda Norte | 18.9 | 112 | 19 | 31.4 | 186 | 32 | 39.6 | 152 | 29 | 38.7 | 148 | 28 |
| Benguela | 24.3 | 459 | 77 | 11.5 | 217 | 32 | 63.5 | 382 | 77 | 26.5 | 160 | 34 |
| Huambo | 31.0 | 307 | 49 | 20.4 | 202 | 30 | 58.6 | 780 | 138 | 26.6 | 354 | 78 |
| Bié | 26.2 | 167 | 27 | 25.7 | 163 | 24 | 52.5 | 539 | 100 | 38.6 | 397 | 86 |
| Moxico | 31.5 | 139 | 24 | 15.7 | 69 | 13 | 73.6 | 308 | 66 | 17.7 | 74 | 21 |
| Cuando Cubango | 31.1 | 105 | 20 | 20.3 | 69 | 10 | 61.3 | 163 | 33 | 27.2 | 72 | 15 |
| Namibe | 19.3 | 78 | 12 | 9.1 | 37 | 5 | 42.8 | 72 | 12 | 27.6 | 47 | 9 |
| Huíla | 28.0 | 236 | 36 | 7.9 | 66 | 9 | 54.3 | 1,080 | 160 | 36.1 | 718 | 128 |
| Cunene | 18.0 | 38 | 6 | 7.7 | 16 | 2 | 62.0 | 568 | 76 | 30.5 | 279 | 40 |
| Lunda Sul | 34.2 | 154 | 24 | 20.2 | 91 | 13 | 68.3 | 111 | 22 | 23.9 | 39 | 9 |
| Bengo | 18.4 | 37 | 5 | 6.8 | 13 | 2 | 48.8 | 113 | 20 | 21.3 | 49 | 10 |
| Total | **17.8** | **3186** | **517** | **13.8** | **2462** | **327** | **54.7** | **6302** | **1092** | **28.6** | **3292** | **636** |

*Source: IDREA 2018/19*

**Table VII.3 – Multidimensional Poverty Index deprivation and housing quality by poverty status and rural/urban (%)**

| | Urban | | | Rural | | |
|---|---|---|---|---|---|---|
| | **Poor** | **Vulnerable** | **Other** | **Poor** | **Vulnerable** | **Other** |
| **Deprivations (MPI)** | | | | | | |
| School completion | 25.9 | 20.8 | 6.0 | 57.2 | 49.8 | 23.0 |
| School attendance | 49.5 | 43.3 | 17.5 | 57.0 | 42.9 | 16.0 |
| Youth employment | 53.4 | 61.3 | 48.3 | 31.5 | 26.3 | 24.4 |
| Employment (25-64) | 8.2 | 11.0 | 5.5 | 7.7 | 6.3 | 4.1 |
| Dependency | 36.0 | 36.5 | 24.7 | 20.9 | 16.0 | 13.6 |
| Water | 22.4 | 22.7 | 4.5 | 70.4 | 71.4 | 46.2 |
| Sanitation | 21.6 | 15.5 | 4.6 | 71.2 | 68.5 | 49.6 |
| Fuel | 59.8 | 51.1 | 14.4 | 95.7 | 95.8 | 73.3 |
| Electricity | 77.6 | 62.7 | 30.6 | 98.4 | 98.7 | 90.1 |
| Housing | 71.4 | 60.5 | 29.4 | 98.2 | 98.4 | 86.7 |
| **Housing quality** | | | | | | |
| Dwelling | 55.4 | 64.3 | 82.7 | 23.6 | 24.4 | 36.2 |
| Walls | 32.2 | 41.5 | 73.1 | 3.0 | 2.3 | 14.5 |
| Roof | 98.4 | 99.7 | 99.4 | 65.3 | 71.4 | 85.3 |
| Floor | 43.0 | 57.0 | 86.6 | 5.2 | 6.7 | 28.7 |
| Water | 38.9 | 33.1 | 40.0 | 19.5 | 18.6 | 28.3 |
| Sanitation | 78.4 | 84.6 | 95.4 | 28.8 | 31.5 | 50.4 |
| Own toilet | 43.1 | 43.5 | 57.0 | 21.3 | 19.9 | 33.1 |
| Fuel | 39.6 | 48.8 | 85.6 | 3.5 | 3.7 | 26.5 |
| Electricity | 28.5 | 48.2 | 81.3 | 4.2 | 4.9 | 20.5 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Waste | 29.6 | 37.9 | 54.6 | 13.4 | 15.1 | 20.2 |
| Space | 48.7 | 44.3 | 72.9 | 51.1 | 59.5 | 86.2 |
| Water (<30 min) | 9.6 | 10.2 | 2.3 | 23.3 | 29.1 | 18.9 |
| Treatment | 77.7 | 77.3 | 95.5 | 29.6 | 28.6 | 53.8 |

*Source: IDREA 2018/19*

**Table VII.4 – Labor market outcomes by poverty status, gender, and rural/urban (population 15+) (%)**

| | Urban | | | Rural | | |
|---|---|---|---|---|---|---|
| | **Poor** | **Vulnerable** | **Other** | **Poor** | **Vulnerable** | **Other** |
| **Men** | | | | | | |
| Employed | 57.0 | 50.4 | 62.8 | 78.8 | 81.8 | 80.3 |
| Unemployed (Broad) | 32.2 | 33.5 | 23.7 | 15.2 | 11.7 | 11.1 |
| Inactive (Broad) | 10.8 | 16.1 | 13.5 | 6.0 | 6.5 | 8.7 |
| Unemployed (Strict) | 18.6 | 19.9 | 14.8 | 3.2 | 2.3 | 3.6 |
| Inactive (Strict) | 24.5 | 29.7 | 22.4 | 18.0 | 15.9 | 16.2 |
| **Women** | | | | | | |
| Employed | 58.8 | 54.0 | 50.2 | 80.5 | 80.5 | 77.9 |
| Unemployed (Broad) | 28.9 | 29.0 | 32.1 | 11.8 | 12.0 | 15.4 |
| Inactive (Broad) | 12.3 | 17.0 | 17.7 | 7.7 | 7.5 | 6.6 |
| Unemployed (Strict) | 11.9 | 13.3 | 17.7 | 0.7 | 1.4 | 4.9 |
| Inactive (Strict) | 29.2 | 32.6 | 32.1 | 18.7 | 18.1 | 17.2 |

*Source: IDREA 2018/19*

**Table VII.5 – Employer type by poverty status, gender, and rural/urban (population 15+) (%)**

| | Urban | | | Rural | | |
|---|---|---|---|---|---|---|
| | **Poor** | **Vulnerable** | **Other** | **Poor** | **Vulnerable** | **Other** |
| **Men** | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Public | 7.1 | 9.0 | 16.1 | 3.0 | 6.0 | 14.4 |
| Private | 19.8 | 19.5 | 25.4 | 5.9 | 5.1 | 11.3 |
| Self-employed (w/o workers) | 20.2 | 13.4 | 13.8 | 36.0 | 30.8 | 37.2 |
| Self-employed (w/ workers) | 3.8 | 4.2 | 6.4 | 5.7 | 8.9 | 5.8 |
| Subsistence/unpaid | 6.1 | 4.3 | 1.0 | 28.3 | 31.0 | 11.7 |
| Not employed | 43.0 | 49.6 | 37.2 | 21.2 | 18.2 | 19.7 |
| **Women** | | | | | | |
| Public | 1.8 | 1.6 | 6.39 | 0.4 | 0.3 | 2.2 |
| Private | 8.0 | 8.7 | 11.3 | 2.5 | 1.4 | 3.7 |
| Self-employed (w/o workers) | 33.8 | 30.2 | 26.8 | 33.5 | 31.5 | 51.1 |
| Self-employed (w/ workers) | 2.9 | 4.7 | 3.3 | 3.2 | 5.9 | 2.9 |
| Subsistence/unpaid | 12.4 | 8.8 | 2.6 | 40.9 | 41.4 | 18.1 |
| Not employed | 41.2 | 46.0 | 49.8 | 19.5 | 19.5 | 22.1 |

*Source: IDREA 2018/19*

**Table VII.6 – Sector of employment by poverty status, gender, and rural/urban (% population 15+)**

| | Urban | | | Rural | | |
|---|---|---|---|---|---|---|
| | **Poor** | **Vulnerable** | **Other** | **Poor** | **Vulnerable** | **Other** |
| **Men** | | | | | | |
| Agriculture/fishing | 18.4 | 11.2 | 3.1 | 69.1 | 67.1 | 45.3 |
| Extractive | 1.3 | 1.9 | 1.2 | 0.2 | 1.3 | 1.6 |
| Manufacturing | 3.0 | 3.5 | 4.3 | 1.2 | 1.4 | 2.3 |
| Construction | 7.6 | 5.4 | 8.8 | 1.6 | 1.4 | 4.7 |
| Commerce | 7.3 | 7.8 | 12.0 | 2.1 | 2.8 | 6.1 |
| Transport/coms | 3.3 | 4.1 | 8.0 | 1.0 | 1.4 | 3.6 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Public administration | 4.0 | 6.6 | 10.5 | 1.8 | 3.1 | 9.3 |
| Domestic work | 0.8 | 0.2 | 0.5 | 0.1 | 0.0 | 0.1 |
| Private security | 3.4 | 2.9 | 1.7 | 0.2 | 0.4 | 0.8 |
| Other services | 7.6 | 6.7 | 12.8 | 1.5 | 2.7 | 6.3 |
| Not employed | 43.4 | 49.8 | 37.3 | 21.3 | 18.5 | 19.9 |
| **Women** | | | | | | |
| Agriculture/fishing | 26.9 | 17.0 | 5.6 | 75.4 | 73.1 | 56.5 |
| Extractive | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Manufacturing | 1.0 | 1.5 | 1.4 | 0.7 | 0.5 | 1.0 |
| Construction | 0.1 | 0.3 | 0.2 | 0.1 | 0.0 | 0.3 |
| Commerce | 22.3 | 27.2 | 26.8 | 3.4 | 5.8 | 15.31 |
| Transport/coms | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 |
| Public administration | 0.4 | 1.1 | 3.6 | 0.1 | 0.1 | 1.0 |
| Domestic work | 5.4 | 4.2 | 4.5 | 0.4 | 0.1 | 1.00 |
| Private security | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| Other services | 2.2 | 2.4 | 7.7 | 0.3 | 0.5 | 2.4 |
| Not employed | 41.5 | 46.2 | 49.9 | 19.6 | 19.7 | 22.3 |

*Source: IDREA 2018/19*

**Table VII.7 – Food insecurity by poverty status and rural/urban**

| | **Urban** | | | **Rural** | | |
|---|---|---|---|---|---|---|
| | **Poor** | **Vulnerable** | **Other** | **Poor** | **Vulnerable** | **Other** |
| Worry about food | 79.2 | 75.4 | 65.9 | 64.5 | 57.0 | 56.8 |
| Food shortage | 69.9 | 59.9 | 53.3 | 54.8 | 50.8 | 49.2 |

*Source: IDREA 2018/19*

# Annex VII. Overview of Angola's social protection system

### *Policy and institutional arrangements for routine social protection*

**Angola has an established legal framework for social protection.** The Basic Law of Social Protection, Law 7/04, Article 2, establishes three pillars as follows: Basic Social Protection, Mandatory Social Protection and Complementary Social Protection. The first pillar relates to non-contributory social protection (i.e., social assistance / social safety nets, financed through taxation), and the second and third pillars relate to contributory social insurance (i.e., linked to employment and financed by contributions from workers and employers). The scope and coverage of social safety nets are contained in Article 5, which states that basic social protection "covers the resident population that is in a situation of lack or reduction of the means of subsistence and cannot fully assume its own protection". Article 4 elaborates on some of the core objectives of social safety nets, including national solidarity; ensuring the welfare of individuals, families, and the community, preventing situations of deprivation, dysfunction, marginalization, and guaranteeing minimum levels of subsistence and dignity.

**The key policy framework for foundational social safety nets is the National Policy for Social Action (PNAS).** The PNAS and the related Operational Strategy were approved by the Government of Angola on 8 February 2021 through Presidential Decree No. 37/21. The PNAS aims to protect and promote the rights of the most vulnerable households that are unable to overcome on their own "the difficulties caused by poverty, violation of rights, exclusion, hunger, abandonment, shocks and unforeseeable events." The PNAS provides the policy foundation for social safety nets by outlining the need for "protection of people, families, and communities who are in a situation of poverty and marked vulnerability or who need the State's support on a temporary or permanent basis".

**A number of other policy frameworks also provide a foundation for social safety nets in Angola**. The Angola National Development Plan 2018-2022 contemplates a "minimum income program" as "one of the most decisive instruments to reduce poverty". The Integrated Plan for Local Development and Combating Poverty 2018-2022 (PIDLCP), which is based on three fundamental axes (rural and urban productive inclusion; universal access to public services; and social transfers), provides for the "allocation of social pensions in cash or kind to families in extreme poverty." Two other relevant documents include Presidential Decree No. 125/20 of May 4, which established the Kwenda social safety nets program (described in more detail below), and Presidential Decree No. 175/20 of June 19 which created an Intersectoral Commission to oversee Kwenda.[125]

**Coordination of social safety nets at the subnational level involves many different actors, underscoring the importance of decentralization for effective and efficient implementation.** Municipalities have a leading role in the implementation of social programs, and the decentralization of social programs and their management by municipalities can greatly influence effectiveness and efficiency. Subnational-level actors include the Provincial Governor, who oversees institutional and political coordination; the Deputy Governor for Political, Social, and Economic Affairs, responsible for coordination at the operational level; the Provincial Department of FAS-IDL, who coordinates the implementation of Kwenda in the Province; and the Provincial Office for MASFAMU, who monitors the provincial strategy for Kwenda's

[125] Local Development Institute, 2022. *Operations Manual – Kwenda Program*. Republic of Angola.

communication at the provincial level, gathers information for monitoring and evaluation purposes, schedules provincial coordination meetings, and supports the Municipal Directorates for Social Action and CASIs.[126]

### *The design and implementation of Kwenda in "normal" times*

**Kwenda was established in 2020 by Presidential Decree and is Angola's flagship safety nets program.** Originally designed as a compensatory cash transfer program for fuel subsidy reform in 2019, Kwenda was reoriented to rural areas when subsidy reforms were delayed due to COVID-19, leading to a fundamental shift from the original focus on semi-urban and urban areas. The World Bank is providing technical and financial support to Kwenda, which is currently proposed to run for four years (2020 to 2023) with a budget of US$420 million.[127] The program has a target of benefiting 1.6 million households—the estimated number of poor households in Angola, equivalent to approximately 9.5 million people.[128]

**Kwenda's design is partially based on a pilot UNICEF cash transfer program.** Valor a Criança was established in 2019 to transfer Kz 3,000 monthly to 35,000 households with children younger than five years.[129] It was limited to only a few provinces due to financing constraints, and despite encouraging results, it was phased out in October 2022 as the European Union ceased to finance it. The household data collected as part of Valor a Criança has been transferred to SIGAS and could be a valuable input to the CSU in the future.

**Kwenda is fully implemented by the government**. At the national level, the program's governance structure includes oversight of FAS-IDL by an inter-ministerial steering committee. At the community and municipal level, ADECOS (Community Health and Development Workers) and CASIs (Integrated Centers for Social Action) play important roles, including assisting with registration, payment, and grievance redress, and facilitating access to interventions related to nutrition, birth registration, gender-based violence, and more.[130] Geographic areas were selected for Kwenda based on certain criteria: (a) municipalities with the highest concentration of poverty, using poverty maps developed by the National Institute of Statistics; and (b) the poorest micro-areas within the selected municipalities, according to consultations with the municipality administration and CASI staff.[131]

**All households in each micro-area are initially registered, and those who meet certain exclusion criteria are deemed ineligible.** All families are registered through a door-to-door survey, which is undertaken by ADECOS using a smartphone encrypted directly to Kwenda's management information system, *Sistema de Informação Integrado de Protecção Social* (SIIPS). Once the registration is complete, a number of exclusion criteria are applied to households that would not be eligible for the program, such as those already receiving some form of pension or civil servants. After this, there is community validation of

[126] Local Development Institute, 2022. *Operations Manual – Kwenda Program*. Republic of Angola.
[127] World Bank (2019). *Angola – Strengthening the National Social Protection System Project.* Project Appraisal Document. http://documents.worldbank.org/curated/en/609711563588128020/Angola-Strengthening-the-National-Social-Protection-System-Project
[128] World Bank 2023 (forthcoming). *Draft note on the strategy for institutionalization of Kwenda.* August 2022.
[129] World Bank (2023). Public Finance Review – Angola.
[130] World Bank 2023 (forthcoming). *Draft note on the strategy for institutionalization of Kwenda.* August 2022.
[131] World Bank 2023 (forthcoming). *Draft note on the strategy for institutionalization of Kwenda.* August 2022.

beneficiary lists, followed by verification by local officials. Once these processes are complete, all beneficiaries on the list are entered into SIIPS and are issued a beneficiary card as proof of their enrolment in Kwenda.[132] As of August 2022, Kwenda was being implemented in 35 municipalities across all 18 provinces of Angola, and 829,500 households had been registered, most of whom live in the poorer provinces.[133]

**Program beneficiaries currently receive cash transfers in four quarterly payments over a 12-month period.** The program is designed to operate in selected municipalities for a year and then move to new municipalities. The monthly transfer value is AOA 8,500 (equivalent to US$19/20), irrespective of household composition.

**Kwenda's payment system has three main transfer modalities**: (a) electronic debit cards (with options to cash out at ATMs or Point of Sale); (b) mobile money; and (c) cash.[134] Kwenda uses several different payment modalities across communities to ensure accessibility. Where banks or mobile network operators are not operational, payments are made through three business correspondents (local organizations with the necessary payment infrastructure in place). As part of the beneficiary enrolment process, all beneficiaries receive a beneficiary ID card and a debit card payment or a phone with a SIM card where the benefits can be deposited.[135]

**Digital mechanisms are the most popular payment modality in Kwenda**.[136] Almost two-thirds of Kwenda beneficiaries (63 percent) receive their payments through digital means, and the majority use a debit card to cash out at ATMs (54 percent of beneficiaries). Where there is no network coverage or fixed ATMs within the specified distance, local bank agents use POS machines and provide physical cash (8 percent of beneficiaries). Only 1 percent use mobile money. Due to infrastructure and connectivity challenges in many program areas, 37 percent of beneficiaries receive their payments directly in cash.

**Kwenda has established an innovative Grievance Redress Mechanism (GRM) in all Kwenda municipalities**. The Kwenda GRM provides beneficiaries and others with a means of registering their needs and concerns on issues such as program exclusion, payment irregularities, suspected corruption, or incidents of gender-based violence. Well-functioning GRMs play a critical role in delivering cash transfers by enhancing accountability, transparency, and responsiveness, and Kwenda's GRM allows for near real-time registration of queries and complaints. As of July 2022, 81 percent of queries and complaints were resolved within five days of receipt.[137]

### *Information management for social protection*

**Information management for social protection has been fragmented to date.** Different social protection programs in Angola have developed and used their own approach to managing and storing data on the socioeconomic characteristics and demographics of beneficiaries and records of transfers provided. There are at least six databases in existence, including two that have been developed by the government – SIIPS (for Kwenda) and SIGAS, the Social Action Information and Management System (used by CASIs); UNICEF,

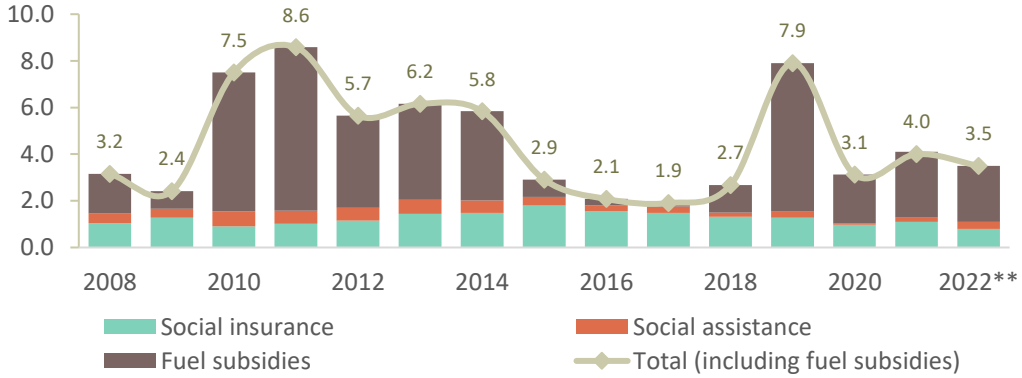
[132] Local Development Institute, 2022. *Operations Manual – Kwenda Program*. Republic of Angola.
[133] World Bank 2023 (forthcoming). *Draft note on the strategy for institutionalization of Kwenda.* August 2022.
[134] World Bank 2023 (forthcoming). *Draft note on the strategy for institutionalization of Kwenda.* August 2022. Mobile money accounts were introduced for the first time during the COVID-19 pandemic.
[135] World Bank 2023 (forthcoming). *Draft note on the strategy for institutionalization of Kwenda.* August 2022.
[136] This paragraph is based on World Bank 2023 (forthcoming). *Draft note on the strategy for institutionalization of Kwenda.* August 2022.
[137] World Bank 2023 (forthcoming). *Draft note on the strategy for institutionalization of Kwenda.* August 2022.

for Valor a Criança; and individual databases for three WFP initiatives in the south of the country. (WFP has not yet introduced its proprietary beneficiary management system, SCOPE, for its programs in Angola, although this is envisaged in the future.)

### *Financing of routine social protection in Angola*

**Public expenditure on contributory and non-contributory social protection in Angola is relatively low, having declined over the past decade as a proportion of GDP.** Population growth and pressures for fiscal consolidation have contributed to a decline in Angola's spending on social protection since 2013 as a share of GDP (see Figure 6.9 below).[138] The composition of spending on fuel subsidies has dwarfed other social protection expenditures over the years. Social insurance expenditure is directed to old-age contributory pensions for former formal sector workers and combatants of Angola's Civil War. The social insurance system thus overrepresents higher incomes, older people, those living in the capital city, and men, and leaves most of the poor and young outside of the system.[139]

*Figure VII.1: Social protection spending in Angola (% of GDP)**




*Includes fuel subsidies. **2021 and 2022 social insurance and assistance are budgeted spending, not actual spending; the average execution rate was 87 percent in 2019 and 2020. 2022 fuel subsidies estimates based on actuals until May 2022.

*Source: World Bank 2023 (forthcoming). Public Finance Review, Angola. Based on data from BOOST, INE, Sonangol, Orçamento Geral do Estado (OGE) 2021 and 2022*

**While spending on social assistance is very low, the introduction of Kwenda has both consolidated and increased the expenditure on safety nets.** Previously, government expenditure on social assistance was limited and fragmented, but the introduction of large-scale cash transfers through Kwenda (expected to reach 1.6 million households) has the potential to reverse that trend. That said, currently only 0.14 percent of GDP is spent on Kwenda (estimated 2020-23 average), significantly less than the average contribution to social assistance in sub-Saharan Africa of 1.3 percent.[140]

[138] World Bank 2023 (forthcoming). Public Finance Review, Angola.
[139] World Bank 2023 (forthcoming). Public Finance Review, Angola.
[140] World Bank 2023 (forthcoming). Public Finance Review, Angola.