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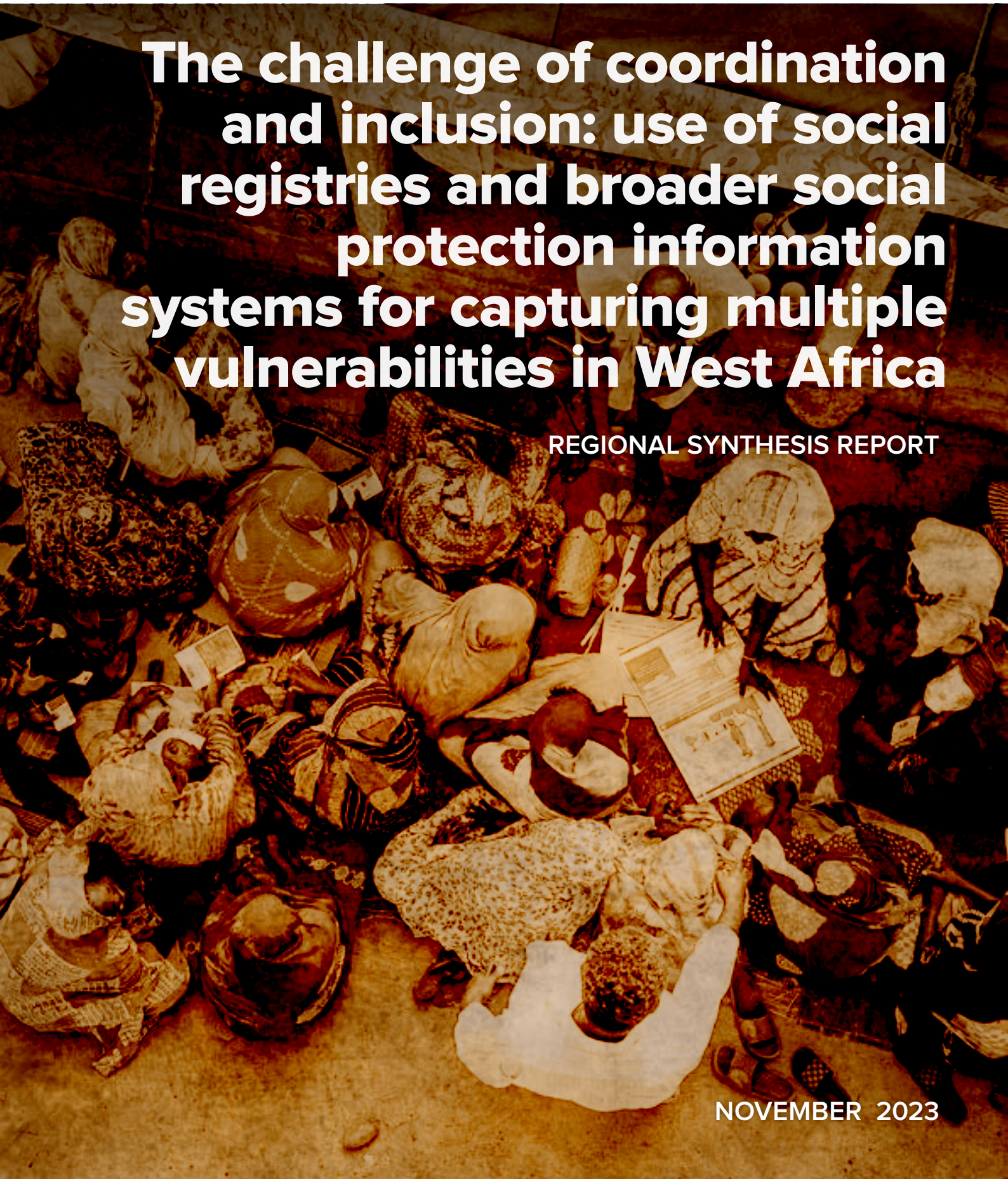
The challenge of coordination and inclusion: use of social registries and broader social protection information systems for capturing multiple vulnerabilities in West Africa

REGIONAL SYNTHESIS REPORT



NOVEMBER 2023

The challenge of coordination and inclusion: use of social registries and broader social protection information systems for capturing multiple vulnerabilities in West Africa

REGIONAL SYNTHESIS REPORT

Valentina Barca, Corinna Kreidler,
Sebastian Silva-Leander, Saidou Ouedraogo,
Lavinia Blundo, Rodolfo Beazley and Ana Ocampo.

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Photo: WFP/Peter Matthsson

Reader's guide

This report is designed to respond to the needs of different audiences who require in-depth information on different topics. Its structure, outlined below, enables readers to access the sections that most interest them.

- The **executive summary** offers an overview of insights. On its own, it is not sufficient to give a deep understanding of the topic and the 'why' of certain statements, but it provides important touchpoints and food for thought for those who are unable to engage with the full report.

- **Section 1** provides the context and summarizes the methodology for the research, including the driving questions.

- **Section 2** provides a data-informed snapshot of regional trends for West and Central Africa, including deeper insights from selected case studies. It has valuable information on the overall 'status' of social registries and broader information systems in the region.

- **Section 3** presents a subset of the insights obtained from quantitative analysis of data from Senegal and Niger. The purpose is to look at how existing social registries and broader information systems can be used – or further adapted – to improve the efficiency and quality of data-informed targeting of chronically food insecure households. (This is discussed in depth in a separate paper; Silva-Leander and Barca, 2024).

- **Section 4** discusses the policy and operational implications associated with the strengthening and targeting of information systems, especially to increase focus on vulnerability, and food security and nutrition (FSN). This section consists of two parts. The first part contains a set of actions that could support the strengthening of information systems serving the social protection sector, with emphasis on ensuring a stronger focus on FSN and vulnerability. The second part reflects on options to enhance data-informed targeting (especially leveraging social registry data), again with a focus on FSN and vulnerability concerns.

Photo: WFP/Marwa Awad

Executive summary

Most countries in West and Central Africa are distinguishable by high levels of poverty, exacerbated by a range of risks – drought, floods, conflict and displacement to name a few. Many are disproportionately affected by climate change, which deepens underlying vulnerabilities and worsens the inextricable linkages between poverty, food insecurity and malnutrition. Against this backdrop, there is growing commitment from governments to address these challenges by developing their social protection systems.

This analysis, which covers 19 countries from the region (Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Côte d'Ivoire, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, São Tomé and Príncipe, Senegal, Sierra Leone, The Gambia and Togo), aims to document recent trends – and strategic implications – with regards to the development of social registries and supporting digital information systems. They are the most prominent elements of the underlying 'delivery systems' for the social protection sector and support key functions along the delivery chain. Importantly, they inform 'targeting' decisions about who should be eligible for assistance, providing the basis for decisions on who is enrolled and supported.

Overall, the analysis finds the following:

1. Emerging regional trends of social protection information systems

Institutional and strategic set-up

Core functions:

- Compared to less than a decade ago, the expansion of social registries in the region has been exponential. Of the 19 countries studied in the region, 17 have either developed a social registry recently (since 2015) or are developing one, as is the case in Togo and Liberia. Guinea-Bissau and Central African Republic do not have a social registry yet.

- Social registries all pursue the same principle: unifying the gateway functions of registration and assessment of needs and conditions across multiple programmes. Crucially, several countries in the region (e.g. Senegal, Mauritania; in the future, Burkina Faso) stress that the integration of these gateway functions does not imply that all user programmes apply the same eligibility criteria and targeting methodology (e.g. poverty targeting supported by proxy means tests; PMTs). Each user programme can apply its own eligibility criteria and filters to the registry data, with a view to subsequently enrolling those who are eligible. This is crucial to the inclusive functioning of a social registry; however, it hinges on the availability of data points in the registry that are relevant for a variety of programmes.

- In only two countries (Mauritania and Liberia) does the social registry also play an integrated beneficiary registry (IBR) function, with Ghana following in this direction. This is a missed opportunity. In most countries in the region it is not possible to gain an overview of who is receiving what across different social programmes (contributory, non-contributory and beyond) to coordinate across these programmes while avoiding (unwanted) duplications. This impedes planning, monitoring of programmatic complementarities across programmes and integrating other functions along the delivery chain (e.g. payments, grievances).

Institutionalization, capacity and funding:

- Information systems serving the social protection sector are increasingly embedded in policy, strategy and legislation, which testifies to a high level of institutionalization of the agenda. For example, in 14 countries these are discussed either clearly (10) or indirectly (4) in the Social Protection Policy or strategy. Nine countries have the social registry embedded in legislation – many of these as of relatively recently.

- A variety of institutional arrangements to host and manage the social registries and broader information systems exists across the region. Each arrangement is driven by politics and historical path dependence, yet it is the arrangement that ultimately affects the extent to which the units responsible for the information system are able to truly fulfil the coordination function they are meant to play.

- Despite the positive engagement with policy, few countries in the region fully invest in a team of core government staff at national level and, especially, decentralized level: Expertise is focused on ensuring the medium-term sustainability of the information systems. The exception is a handful of countries (e.g. Ghana, Mauritania, Nigeria, Senegal) that have been positively shifting in this direction.

- The majority of social registries are financed externally, which constrains domestic institutionalization and sustainability across the region. Only eight countries supplement World Bank funding with some domestic sources, especially for staff and data collection (Burkina Faso, Chad, Côte d'Ivoire, Guinea, Mauritania, Nigeria, Senegal and Togo).

Use of registry data:

- The number of programmes that use the data stored in social registries in the region remains very low – considering the investments made to date. Having a large amount of data makes no sense if the data are not used to inform programming and, ultimately, expand coverage to comprehensively address different lifecycle risks while protecting from covariate shocks. Mauritania and Senegal are the only countries where data use has significantly increased in recent years. Each country has 25 different user programmes across government and non-government actors.

- Data use, for the most part, has not only been scarce, but also relatively light-touch in terms of strategic uses of the data. Worryingly, in many cases, the data that are used by other programmes are not the full registry data but just a subset of data from the main cash transfer programme (i.e. households identified as 'poor' via PMTs). In other cases, especially for emergency responses, the registry itself is taken as a pre-identified

list of 'households in need', rather than interrogated based on the useful data it provides. Furthermore, data are primarily being used for targeting, but not sufficiently for better management and data-informed decision making.

Interoperability and data-sharing:

- Interoperability (and simple data-sharing) between social registries and other government databases is either nascent (in Ghana and Mauritania) or non-existent. This is largely owing to a highly underdeveloped data ecosystem.

- The legal landscape for data protection in the region has improved over the years: At least nine countries have legislation in place. In most of these countries, authorities or commissions for the protection of personal data are active. The overall protection of data by design is still cause for concern, however, especially in Fragile and Conflict-Affected countries.

Design and implementation aspects affecting key outcomes

- The process for prioritization of coverage (sometimes referred to as 'deployment strategy') varies widely across countries at macrogeographic, microgeographic and household levels. This has important implications for potential data use. At one end of the spectrum are countries that aim to cover 100 percent of the population nationally (with a progressive schedule): Ghana, Liberia, The Gambia (and also Burkina Faso as a longer-term goal). In the middle are countries that have explicitly set a national coverage target (e.g. X percent of the population) and a strategic data-informed strategy to prioritize coverage so as to reach that target. At the other end of the spectrum are countries with relatively patchy and non-strategic geographic coverage, either due to historical reasons or programme priorities. In selecting households for inclusion in the registry, the majority of countries adopt community-based prioritization processes based on allocated quotas. Only a couple of countries (e.g. Mauritania and Burkina Faso in urban areas) adopt data-informed approaches.

- Resulting coverage (to date) varies across countries. The highest coverage is achieved by Mali (37 percent), followed by Senegal (30 percent), Benin (27 percent), Mauritania (25 percent), Liberia, Nigeria and The Gambia (all at 24 percent). These numbers mask substantive regional variations and do not reflect de-facto usability of the data.

- Across the region, the primary approach to data collection is a static so-called 'census sweep'. Data-collection teams travel round the country to collect data at set intervals. This contrasts highly with the desired 'dynamism' required for social registries to fulfil their functions, given that both poverty and vulnerability – and especially vulnerability to food insecurity and malnutrition – are highly dynamic. Fragile and Conflict-Affected countries pose additional challenges for keeping the system flexible to respond to patterns of violence and displacement. All of this would require shifting to more on-demand approaches, such as those being piloted in Mali. Moreover, only six countries provide specific timeframes for updating data, ranging between every two and four years.

- The social registry questionnaires (determining what variables are captured and stored) are very long on average, containing between 52 questions (Senegal) and 248 questions

(Mali and Niger1), with most countries' questionnaires having over 100 questions. Many of the questionnaires include questions that are 'unrealistic' and less useful for administrative data that is not kept continuously up to date. Interesting and positive approaches have been emerging to shorten social registry questionnaires, especially in the aftermath of Covid-19; for example, in Niger.

- More countries – with Ghana, Mauritania, Nigeria and Senegal at the forefront – are investing in quality assurance processes and platforms for their data, including third-party monitoring. Worryingly, however, only six countries (Ghana, Liberia, Mali, Mauritania, Nigeria and The Gambia – in creation in Cameroon) have also developed a functional grievance/redress mechanism for the system. Use of biometrics in the region has increased (collected in five countries), but it can have both favourable and unfavourable outcomes.

2. Strategic implications for the strengthening of information systems, especially to increase the focus on vulnerability and food security and nutrition

There are several strategic implications of the assessment of existing systems and regional trends. The main ones are summarized here, with more detail provided in the full report.

Building the information system and data protection

- **Abiding by the digital development principles in the process of digital transformation** for the social protection sector to make the process inclusive and entirely focused on user needs, while avoiding some of the pitfalls of technology-focused projects.[1]

- **Linking to the broader data ecosystem, via interoperability and/or data-sharing.** This is not a short-term option in most countries in the region, but it is fundamental to engage in the discussions on the digitization of major government information systems and in setting up the groundwork (open standards, protocols, etc.) for future data-sharing.[2]

- **Reinforcing data protection.** National legislation is insufficient to guarantee this human right and should be strengthened.[3]

1 See sector-specific guidance: Digital Convergence Initiative. 2023. Applying the Principles for Digital Development in Social Protection. Accessed 20 November 2023.

2 See, for example, work by the Social Protection Convergence Initiative. Accessed 20 November 2023.

3 See useful SPIAC-B endorsed guidance. 2022. Implementation Guide – Good Practices for Ensuring Data Protection and Privacy in Social Protection Systems. Accessed 20 November 2023.

Broadening strategic ambition, strengthening related legislation, capacity and financing

- **Broadening ambition to extend beyond the functions of a social registry (and the focus on targeting).** IBR function (rarely pursued in the region) can play a role in understanding overlaps, synergies and gaps across multiple programmes operating in a country. The integration of other operational functions along the delivery chain can also bring about significant gains from a coordination and value for money perspective.

- **Ensuring that the breadth of the vision is reflected in policy, strategy, legislation and organizational structure:** intentionally pursuing all strategic objectives (Figure 1) and setting up the system to do so, while also ensuring future-proofing and cross-sectoriality.

- **Investing in required capacity at central and decentralized levels.** The medium-/long-term ambition should be to have a network of permanent staff working at local level as the human 'face' of the system – as touchpoints for reflection of local concerns – and to ensure accountability and inclusive updating.

- **Securing increased domestic financing.** This requires estimating, transparently sharing and discussing, and eventually committing to, the total cost of ownership of the information system over the long term – in light of value for money considerations regarding counterfactuals and benchmarks in other countries.

Figure 1: Potential benefits of social protection information systems

Inclusion:

- **Responsiveness and dynamic inclusion**
- **Coordination, synergies and linkages**
- **Equity:** Supporting investment – based on objective, comprehensive and comparable information across social groups and administrative jurisdictions

Efficiency and effectiveness:

- **Reduced burden on people**
- **Reduced burden on staff and government systems,** e.g. automation of payrolls
- **Evidence-informed decision making and management**
- **Reduced duplication in processes**

Accuracy and integrity:

- **Management of error and fraud:** Supporting improved processes for identification, verification, validation, processing and analysis to better manage and prevent error and fraud

Accountability and citizen empowerment:

- **Transparency to beneficiaries, civil society, the government and funders**
- **Oversight, reporting and planning**
- **Feedback, grievances and appeals**
- **Knowledge:** Improving understanding of poverty and vulnerability
- **Digital innovations:** Enabling broader digital innovations

Focusing on broader relevance, usefulness and actual use of the data

- **Moving the focus beyond poverty targeting.** Even where targeting is the main function pursued, it is similarly important to ensure that the system can support eligibility determination for a wide range of programmes aiming to serve different population groups and address different idiosyncratic (e.g. lifecycle) and covariate (e.g. shock-related) risks. This means dissipating the myth that social registries 'are only for poverty-targeted programmes' and ensuring that the data and systems can in reality support this.

- **Reinforcing strategic coverage.** This is not about aiming for 100 percent or 'very high' coverage, but ensuring coverage that is data-informed and aligned to needs – ideally, with flexibility to reflect spikes in terms of needs rather than fixed-list and quota-driven approaches. This is particularly the case for coverage that encompasses a focus on vulnerability and FSN-related risks. What ultimately matters is where data are collected (e.g. risk-informed geographic coverage) and whose data are collected – as well as who is being left out and why. The overall process needs to be inclusive, justified and transparent.

- **Strengthening dialogue with (current and potential) users, to truly address their data needs and concerns.** Too often, social registries in the region are being treated as an end in themselves rather than a means to an end. Only data that are used are useful data. Ideally this would include regular meetings and annual stocktaking exercises across key programmes and actors, both governmental (across sectors) and beyond.

- **Increasing relevance of the data** by making questionnaires shorter and more realistic (in relation to authentic data use and data obsolescence); by exploring possibilities for modularity and differentiated strategies for different population groups and geographic areas (while ensuring standardization and avoiding fragmentation of questionnaires); and by considering further variables that are either missing or could be strengthened (via direct data collection or data-sharing).

- **Improving data currency and dynamism in any way possible,** depending on country trajectories and capacities, for example, via mobile registration teams complementing static data collection; via grievance mechanisms; via user feedback; via targeting exercises of new programmes; via on-demand applications; via interoperability with other government datasets.

- **Using social registry data more for planning.** Social registry data are administrative, not statistical, data and their source cannot be a national census survey, as some countries appear to be planning, as this contravenes the Fundamental Principles of Official Statistics. On the other hand, these administrative data can be used better for statistical analysis to inform budgeting, planning, ongoing management, etc.[4]

4 See useful guidance: Barca et al. 2023. We Have the Data, Let's Use it Better: Pushing the Boundaries of Social Protection Administrative Data Analysis and Use. Accessed 20 November 2023.

3. Social registries as agnostic tools: a food security and nutrition perspective

Social registries should remain neutral in relation to targeting methods. To support targeting for a broad range of social programmes (and beyond), the social registry should permit and cater for different data-driven targeting methods. Necessarily, this requires questionnaires informing social registries to include variables needed for different methods, not only one method – typically PMTs.

Of course, an arbitration is needed between the data needs for potential targeting methods and the length of the questionnaire, to ensure sustainability and cost effectiveness. However, an in-depth analysis of the data requirements of different data-informed targeting methodologies has shown a strong overlap in terms of the variables used: catering for different programmes (ensuring a broader use beyond 'poverty targeting') does not imply a dramatic increase in the number of variables to be collected by the social registry.

More broadly, poverty and food security targeting are often framed in opposition, stemming from a misunderstanding of different methods. In practice, while poverty targeting tends to rely on data-driven approaches (such as PMTs) that are facilitated by social registries, often integrating some level of community-based targeting, food security targeting tends to rely more heavily on community-based targeting – though some data-driven methods, such as scorecards, are increasingly used. Where food security targeting (at household level) has shifted towards more data-driven approaches, the variables used are in reality those that are typically found within the social registries in the region.

Food security programmes could, therefore, shift towards different and more strategic approaches to using social registry data. For this purpose, a separate analysis (forthcoming) has been conducted to investigate how current data-informed targeting approaches could be improved to better identify those vulnerable to food insecurity and malnutrition, and how these could be operationalized through social registries.

Overall, the following key messages emerge:

- Geographic targeting is a fundamental first layer in targeting vulnerability and food insecurity – whether for ad hoc emergency response programmes, recurrent lean season assistance or routine programmes. In some contexts of widespread need, it may even make sense for geographic targeting to be the only layer – given that it can be quick and cost-effective (e.g. blanket targeting of households in identified areas). From a data perspective, geographic targeting itself does not draw on social registry data, but it can be more easily rolled out (e.g. immediate triggering of support to households in the selected area) if the areas that are geographically targeted have high coverage in the registry, by design.

- In contexts of forced displacement, needs are often highest in those areas that are insecure and thus difficult to access. This leads to a trade-off between ensuring that social registry data are usable and used by a wide variety of programmes, including by humanitarian actors, and ensuring methodological rigor of the data-collection process. Excluding highly insecure areas from the registry might be an operational necessity, but simultaneously infringes on the equal

right of each citizen to be potentially included in social protection. This needs explicit mitigation via coordination with humanitarian actors.

- Data from social registries can play an important role for targeting methods beyond PMTs and 'poverty targeting'. Most methods that can be used for household and individual level targeting in data-constrained countries (i.e. where means testing etc. is not possible because of low quality and low coverage tax data) can usefully draw on social registry data. Many of them (e.g. categorical, scorecard/multidimensional approaches, variations on PMTs) share similar variables, with differing levels of complexity in the way in which data are processed to determine targeting outcomes.

- Social registries are – and should be designed to be – agnostic as to how the data they contain are used to inform targeting, especially given their usefulness across a range of approaches. In short, harmonizing the approach to registration (i.e. data collection) does not imply a need to harmonize (or worse, homogenize) targeting design. To be agnostic, their design choices and data structure also need to be agnostic.

- Flexibility of the information system is crucial, especially in crisis contexts, where the capacity to flexibly adapt targeting design, building on the data, systems and capacities available, is more important than highly accurate targeting designs. The 'universality of delivery systems' – and the strengths of the underlying systems beyond the data themselves, including to bring in new caseloads – becomes more important than any given targeting design at any point in time.

- The dynamics of the context need to be reflected in the dynamic nature of the registry. Especially in Fragile and Conflict-Affected contexts, the registry needs to be designed in a conflict-sensitive way and needs to ensure that access to registration and portability (in case of displacement) of registration and related benefits are included in design choices and operational practice.

Photo: WFP/Ndaka Glory

Photo: WFP/Joel Ekström

1. Introduction

1.1. Context

Most countries in West and Central Africa are distinguishable by their high levels of poverty – over half of their population lives below the national poverty line.[5] The region is further marked by a range of risks that exacerbate underlying vulnerabilities and deepen the inextricable linkages between poverty, food insecurity and malnutrition. Several countries in the region are also Fragile and Conflict-Affected; hundreds of thousands of their citizens are displaced and numerous countries host significant numbers of refugees. Climate change dis-proportionately affects a large part of the region and is expected to exacerbate further existing levels of poverty and heighten the frequency of, and vulnerability to, external shocks.

If adequately designed and implemented, social protection has a role to play in addressing some of these drivers of poverty and vulnerability. Many countries in the region, however, struggle to guarantee adequate and institutionalized levels of protection.

Nonetheless, there is growing regional interest and commitment from governments to develop social protection systems. Much of this commitment is focused on developing the underlying 'delivery systems' to foster expansion.

5 povertydata.worldbank.org. Accessed 20 November 2023.

In recent years, the development of social registries and broader digital information systems that serve the sector has played a prominent role in many countries in the region, receiving notable attention and investment.

It is in this context that this research was designed to offer a snapshot of progress to date and reflections on future directions.

1.2. Methodology

This report aims to assess the use (and the potential use) of social registries, alongside broader social protection information systemsto support registration and targeting for a broad array of social assistance programmes, including those that do not necessarily target the poor but the 'vulnerable', and particularly those with food security and nutrition goals.

The study focuses on 'routine' social protection programming by governments (supported by partners) and pays attention to vulnerability to food insecurity and malnutrition. It thus examines the usefulness of the registries for lean season assistance but does not address the data needs of other types of emergency response (e.g. sudden-onset disasters, such as floods). Nor does it concentrate on the needs of elements of disaster risk-management.

Note: For clarity on the definitions used in this report, refer to Chirchir and Barca, 2020.

The study aims to answer the following two questions:

i) If social registries are tools for inclusion and coordination, what should be their institutional set-up and the minimum amount of information they should contain?

ii) Considering that poverty and vulnerability are linked but do not overlap perfectly, how to better design social registry data structure and targeting tools, in order to better capture overlapping vulnerabilities, in particular to food insecurity and malnutrition, in order to be of use for a broader set of actors without overburdening the system?

The following layers of analysis were adopted:

- A standardized inventory was drawn up of registries and broader information systems serving the social protection sector in the 19 countries that compose the WFP "Regional Bureau for Western Africa" (RBD) region (Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Côte d'Ivoire, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, São Tomé and Príncipe, Senegal, Sierra Leone, The Gambia, and Togo). This was populated via a comprehensive review of relevant literature (both grey and academic, both published and unpublished, snowballed) accompanied by key informant interviews in 15 of the 19 countries. Of these interviews, nine were conducted remotely.

- In-depth institutional assessments were carried out in three countries (Burkina Faso, Chad and Senegal), supplemented with assessments financed via a complementary UNICEF project in Mali, Mauritania and Niger. The assessments included a literature review (as above) and key informant interviews conducted in-country over the course of a week.

A technical data assessment was made of poverty versus approaches to targeting that focus on vulnerability.

Photo: WFP/Studio 2K

2. Emerging regional trends: social registries and broader information systems

This section discusses emerging regional trends with regards to the development of social registries and broader information systems serving the social protection sector in the region. It draws on the regional mapping exercise (Blundo et al., 2023) as well as the country case studies in Senegal (Barca, Kreidler and Ouedraogo, 2023), Chad and Burkina Faso (Kreidler et al., 2023a/b) and Niger, Mali and Mauritania (Barca and Alfari, 2022a/b/c).

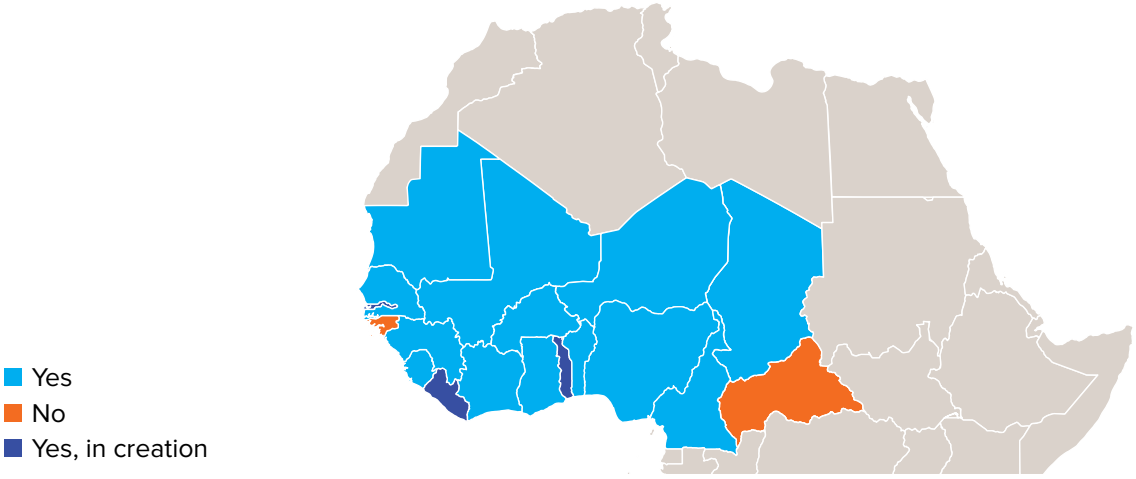
2.1. Trends, vision and policy/ legal backing

2.1.1. The expansion of social registries in the region

Compared to less than a decade ago, the expansion of social registries in the region has been exponential. To a large extent, the expansion is due to increased funding and technical support from the World Bank and intensified discussion of social registries in adaptive/shock-responsive social protection.

Of the 19 countries studied in the region, 17 have developed a social registry in recent years (since 2015) or are developing one (Liberia and Togo). Guinea-Bissau and Central African Republic do not have a social registry yet (Figure 2).

Figure 2: Existence of social registry, by country



The joint UN social protection programme in Guinea-Bissau (UNICEF-WFP-UNFPA), financed by the Sustainable Development Goals (SDG) Fund, includes a component with the objective to explore the feasibility of developing a social registry. Meanwhile, the Government in Central African Republic has expressed the need for a unified social register, which is being guided by the World Bank (alongside accompanying work on a data protection law).

The timeline for these is relatively recent, as shown in Table 1 below, which also showcases the range of names selected by each country.

Table 1: Name of the social registry and year of official[6] creation

Country	Name of the social registry	Year created
Ghana	Ghana National Household Registry (GNHR)	2015
Mali	Registre Social Unifié	2015, officially launched 2019
Mauritania	Registre Social	2015
Senegal	Registre National Unique	2015
Nigeria	National Social Register	2016
Niger	Registre Social Unifié	2018
Chad	Registre Social Unifié	2019
Côte d'Ivoire	Registre social unique des ménages pauvres et vulnérables	2019
Guinea	Registre Social Unifié	2019
São Tomé and Príncipe	SIPS - Sistema Integrado de Proteção Social	2019
The Gambia	Gambia National Social Registry (GAMNSR) also referred to as SRIS (social registry information system)	2020
Burkina Faso	Registre Social Unique	2021
Benin	Registre Social Unique	2022
Cameroon	Registre Social Unifié du Cameroun (RESUC)	2022
Liberia	Liberia Household Social Registry (LHSR)	2022
Togo	Registre social des personnes et des ménages (RSPM)	2022, in creation
Sierra Leone	SPRINT (Social Protection Registry for Integrated National Targeting)	No data

While the names across countries vary, the principle of these registries is the same: to integrate the gateway functions of registration and assessment of needs and conditions across multiple programmes, as discussed in Leite et al., 2017; Chirchir and Barca, 2020 and Lindert et al., 2020. Whereas previously each new programme

6 In several countries, the social registry was initiated ahead of the official creation date through, for example, a prior programme-specific registry or prior policy discussions and pilots.

would collect new data to identify its eligible caseloads, the trend has been to capitalize on that investment to create a common foundation across programmes that could be progressively institutionalized and improved over time.

The extent to which the integration has been happening/successful has varied widely, as further explored later in this report, particularly in section 2.2.3 on data use and user programmes.

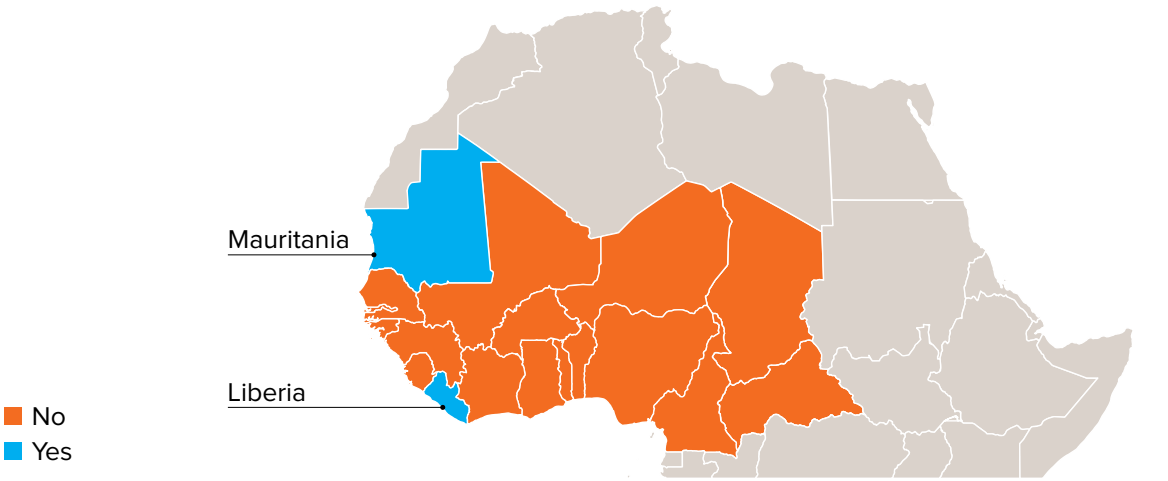
Crucially, several countries in the region (e.g. Senegal; Mauritania; in the future, Burkina Faso) stress that the integration of these gateway functions does not imply that all user programmes use the same eligibility criteria and targeting (e.g. poverty targeting supported by proxy means tests (PMTs)): Each user programme can apply its own eligibility criteria and filters to the registry data, in view of subsequent enrolment of those who are eligible. This is vital to the inclusive functioning of a social registry and is a topic that will be explored in more detail throughout this report.

2.1.2. An unfinished agenda on integrated beneficiary registries

Across the region, only two countries (Liberia and Mauritania) performed any integrated beneficiary registry (IBR) functions, with Ghana following in this direction. In other words, in most countries in the region it is not possible to have an overview of who is receiving what across different social programmes (contributory, non-contributory and beyond). Neither is it possible to coordinate across programmes and avoid (unwanted) duplications or planning and monitoring programmatic complementarities.

In countries where an overview of benefits is starting to be possible, it is primarily thanks to the integration of the payment platform across multiple programmes. In Mauritania, this integration is fostering increased coordination as well as significant reductions in transactional costs (down from 8 percent to less than 3 percent as performed in-house rather than through a contracted financial services provider).

Figure 3: Existence of integrated beneficiary registry, by country

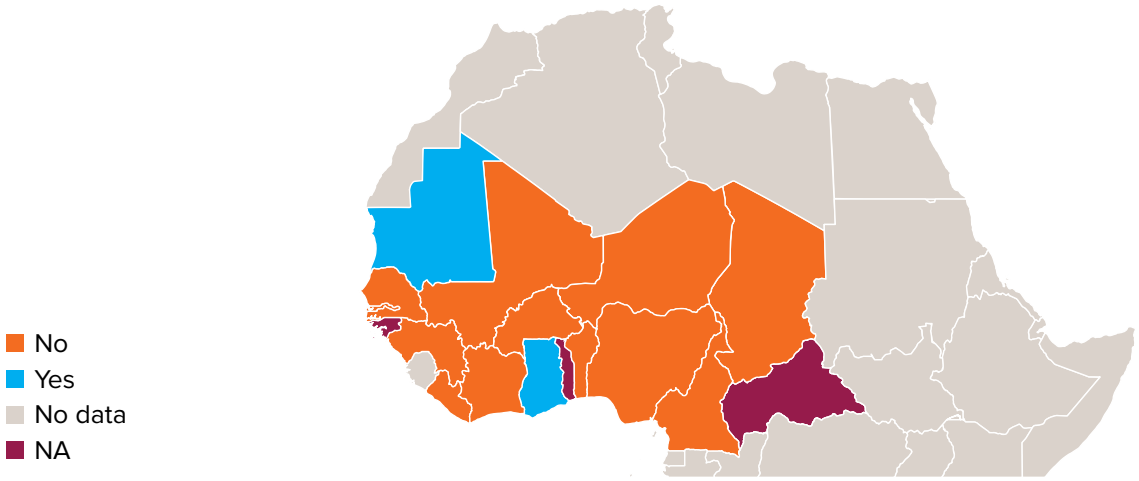


Interestingly, this is in contrast with the stated policy objectives across several of the countries in the region (section 2.1.4). For example, in Benin, Chad, Mali and Senegal, and Burkina Faso in the future, one of the main objectives of the information system (as defined on paper in strategic documents) is a coordination and monitoring and evaluation (M&E) function across all social programmes. Fulfilling this function entirely without an IBR is not possible.

2.1.3. The broader data ecosystem: interoperability and/or data-sharing

Across the region, interoperability (and even simple data-sharing) between social registries and other government databases is either nascent (in Mauritania and Ghana) or non-existent (Figure 4). For the most part, this is due to a highly underdeveloped data ecosystem in most of the countries, where even databases such as civil registration[7], ID, taxation and land cadastres have very low coverage, are often undigitized – or only partly digitized – and are not necessarily abiding by common data standards. In many countries, this is exacerbated by lack of investment in broader digital infrastructure (e.g. connectivity) and cross-government coordination on digital public goods.

Figure 4: Interoperability, by country



Having said this, interviews across several countries revealed interoperability as a policy priority going forward (e.g. in Burkina Faso, Ghana, Liberia, Nigeria, The Gambia) – once these broader issues are resolved (likely in the medium term).

7 For example, birth registration ranged between 25 and 68 percent in the countries for which we had data, with death registration (crucial to social protection) lagging dramatically behind at between 3 and 10 percent.

Some positive signals are nevertheless emerging from countries where some of these investments in the broader data ecosystem are starting to be made. For example, in Mauritania, secure data-sharing processes between UNHCR and the Government of Mauritania have been established to ensure data on refugees inform the identification of eligible households for routine government programmes, following data protection principles (Box 1). A similar process is underway for interoperability with Mauritania's disability registration system, which is also a priority in progress in Senegal (Box 2). In Ghana, nascent interoperability is demonstrated via the common payment platform (now live) and a case management information system called Social Welfare Information System (SWIMS).

Box 1: The integration of refugee data in Mauritania's Social Registry

Since 2012, Mauritania has experienced an influx of Malian refugees fleeing violence in their country. Joint UNHCR-WFP targeting of these populations was carried out in 2019. The Mauritanian Government, thanks to the IDA18 regional sub-window for refugees and host communities, requested the support of the World Bank and the UNHCR-WFP targeting hub to ensure the inclusion of refugees in its registry system, within the Tekavoul social assistance programme and beyond.

Based on an agreed methodology that differed from the standard social registry approach to data collection, from April to June 2021, the Mauritania Government conducted a complete (100 percent) census data-collection process, involving 14,012 refugee households that were found in and out of M'bera camp in Bassikounou during this timeframe. The collected census data included demography, engagement in livelihoods activities, food access, coping strategies, household expenditures and community participation, among other aspects.

The data were leveraged to create a vulnerability indicator for all interviewed households, as opposed to using socio-demographic predictors of vulnerability as is often practised with humanitarian data-informed targeting approaches. The vulnerability indicator was constructed following a multidimensional approach and combining five key aspects.[8] Initially, only those with higher scores were going to be included in the social registry but, subsequently, the decision was made to include data on all, acknowledging the particular vulnerability of refugee populations.

However, the challenge of keeping the registry data current exists. Approximately 4,800 refugee families have arrived in Mauritania since June 2021 (mostly from Sudan) and are not included in the registry.

Sources: Barca, 2023; building on UNHCR and WFP, 2021; UNHCR and WFP, 2022

8 The Vulnerability Score includes weighted values for the Food Consumption Score, education (years of education + attendance, dependency ration, disability/illness and working capacity.

Box 2: The evolving landscape of disability registration in Mauritania and Senegal

Both Mauritania and Senegal have been investing to ensure the inclusion of people with disabilities (PwDs) in their policies and programming. An important prerequisite for this is a strong information system that helps to identify and serve PwDs according to their differential needs. Ideally, this would link to other social protection information systems, such as social registries, to ensure disability inclusion across all social sector schemes (Barca et al., 2021). In recent years, both countries have taken several steps in this direction that are worth documenting.

- In **Mauritania**, following a successful process for identifying and supporting PwDs in Nouakchott during the Covid-19 response, a national disability registry and supporting information system is being created, with the support of UNICEF, updating prior systems and procedures. Based on a solid diagnostic of the status quo (SISTA, 2021), a team has been tasked with the creation of new business processes and a software application to manage the data. The registration process is accompanied by the creation of a 'disability card', with a validity of two years (a very short timeframe given efforts involved), and integration of this data with the Registre Social is being pursued.
- **Senegal** has instituted a process for registration of PwDs, including the issuance of an equal opportunities card for people living with a disability (Carte d'Égalité des Chances; CEC). CEC is discussed in policy within the Strategie Nationale de Protection Sociale (National Social Protection Strategy, SNPS) 2015-2035 and was launched in 2015, having been previously embedded in the 'Loi d'Orientation Sociale' of 2010 and in decree n°2012-1038. There are currently 70,510 card holders, with a target increased to 90,000 and an ultimate ambition to reach the entire population of PwDs in the country, estimated at 800,000. Both key informant interviews and strategic documents (e.g. the Plan d'actions (CEC, 2021)) showcase intentions to establish interoperability with the Registre National Unique (RNU) and, with awareness, this could help harness further support for PwDs in the country (especially if CEC data are reversed into the RNU to help all user programmes better identify PwDs). First ad-hoc attempts at data-sharing with the RNU were made during the first Covid-19 response and in 2022 (key informant interviews).

Of course, there are still aspects that can be strengthened in the disability data systems across the two countries. First, shifting to a more functional and less medical approach to disability classification. Second, addressing the range of access barriers faced by PwDs.

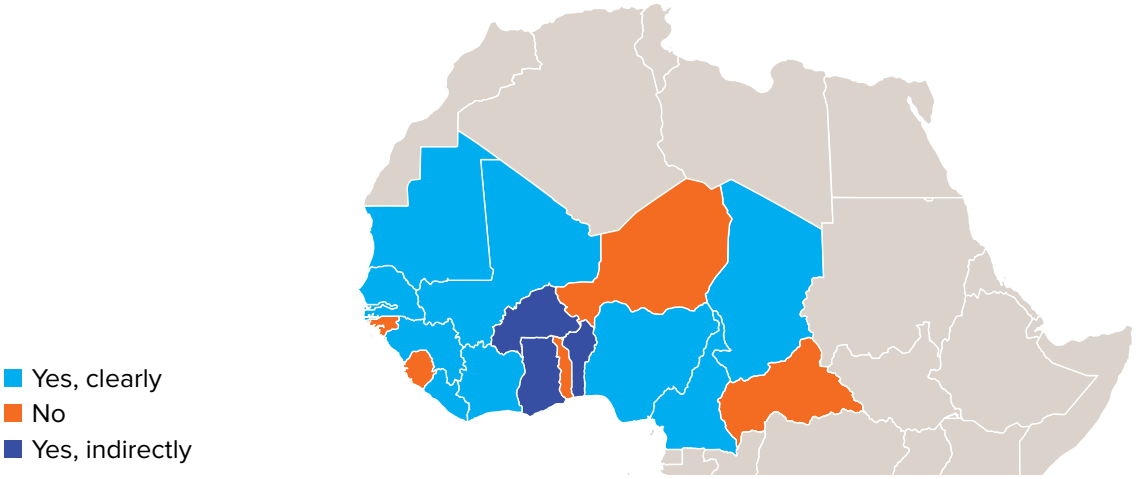
Source: Barca and Alfari, 2022c and Barca, Kreidler and Ouedraogo, 2023 (building on sources cited above)

2.1.4. Embedding social protection information systems in policy, strategy and legislation

Information systems serving the social protection sector are strongly embedded in policy, strategy and legislation, which testifies to a high level of institutionalization of the agenda. This is interesting to note, considering that international institutions (primarily the World Bank) played a large part in the push to set them up (see also section 2.2.2).

In 14 countries in the region, information systems are discussed either clearly (10) or indirectly (4) in the Social Protection Policy or strategy (Figure 5). In the five countries where information systems are not mentioned at all (Central African Republic, Guinea-Bissau, Niger, Sierra Leone, Togo), the Social Protection Policy or strategy is either outdated or not validated yet – signalling a likely shift in a similar direction in years to come.

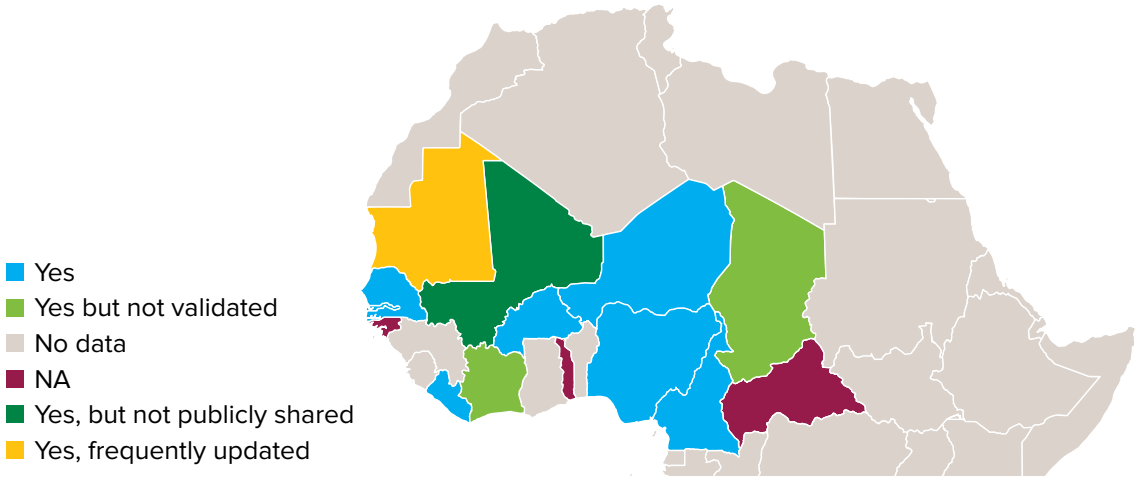
Figure 5: Discussion of the information system in Social Protection Policy/Strategy, by country



Similarly, out of the 15 countries for which we have information and that have a social registry, 9 have the social registry embedded in legislation – many of these as of relatively recently (Figure 6). For example, despite a long history, the comprehensive presidential decree institutionalizing the RNU[9] in Senegal was passed in 2021, with all the other countries passing legislation between 2018 and 2022. For a few countries where legislation has not been passed yet (e.g. Ghana, The Gambia), the reason is because draft bills have been submitted, but not yet officially passed.

9 See full decree here for reference. Accessed 20 November 2023.

Figure 6: Embedding of social registry in legislation, by country



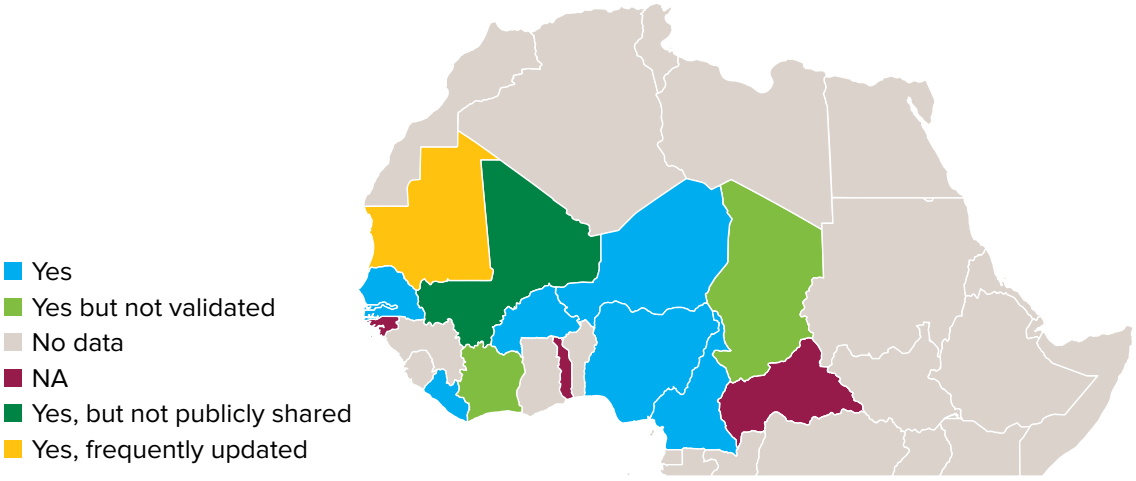
Beyond just 'having' legislation, the ways in which the role of the information system – and its social registry function, in particular – have been embedded in legislation varies widely across countries. In particular, the following main variations emerge:

- **The extent to which legislation broadly frames the functions and technical aspects of the information system,** setting the foundations for its transparent use and sustainability over time, in relation to a more light-touch discussion only of specific facets (e.g. institutional housing). As an example, there is a strong contrast between Niger's three decrees (2018, 2019, 2022) focused on establishing its Registre Social Unifié (RSU) Steering and Technical Committees, as well as other institutional aspects, and Senegal's 2021 decree, with sections pertaining to a) its functions; b) its institutional housing and governance structure; and c) its operating procedures (data collected and approach to collection and updating, data access processes, data protection and security, data interoperability, etc).
- **The extent to which legislation establishes an obligation to use the registry –** currently only established by law in Senegal and Mali (possibly forthcoming in Ghana). For example, Mali's Decree No 2022-0276 pt/rm of 9 May 2022 dictates in its Article 3 that the RSU will be the 'gateway' for all social interventions and that the RSU questionnaire is the unified method for registering households across all categories (indigents, repatriates, vulnerable etc.). Of note is the situation in Chad, where the legal obligation for different actors is only to use the same questionnaire.
- **Whether obligations for updating data are clearly stated.** This is crucial to the realistic chance that non-dynamic data (see section below) are somewhat kept up to date even though enforcement is strongly dependent on a number of external factors.

Legislation alone can determine many of the 'rules of the game', but not the fine detail of operations – ultimately guiding

practice. This detail has been increasingly embedded in manuals of operations across the region, with 11 countries having developed one (Figure 7) – to differing degrees of detail and finalization/validation (e.g. Côte d'Ivoire and Niger are at final stages, the one in Chad is outdated). Ideally this document would evolve over time, with increasing maturity of the system, as has been the case in Mauritania. In countries that have invested in technical guidelines and protocols, the list of areas covered is broad. For example, Nigeria has a set of 16 guidelines complementing the National Social Register 'handbook', ranging from data-collection checklists to standard operating procedure on interoperability, data updates and data quality assurance, to system security issues – among others.

Figure 7: Embedding of procedures in a manual of operations, by country



2.2. Institutional and strategic set-up

2.2.1. Institutional housing and capacity

A variety of institutional arrangements to host and manage the social registries and broader information systems exists across the region (Figure 8).

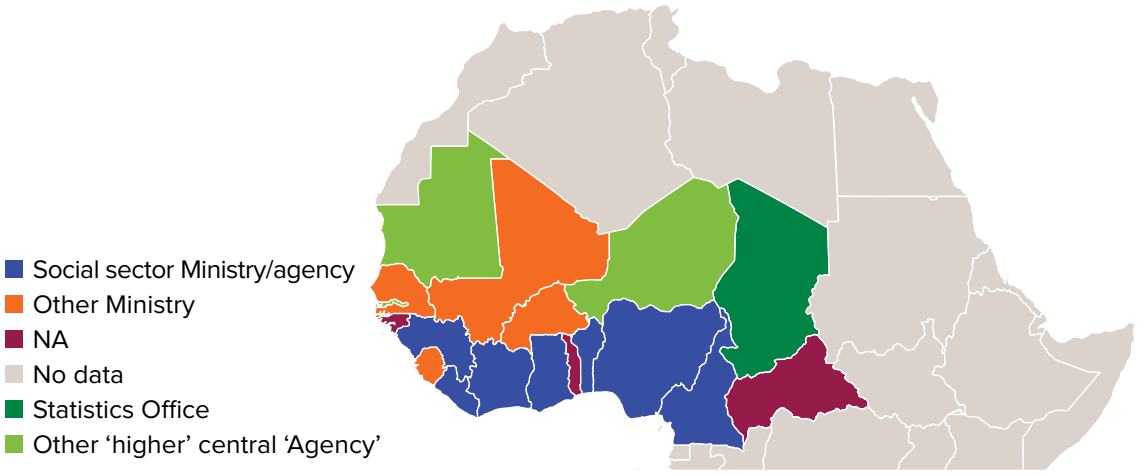
- In seven countries, the registries broadly sit under a social sector ministry or agency (Benin, Cameroon, Côte d'Ivoire, Ghana, Guinea, Liberia and Nigeria).
- In four countries, the registries sit under other line ministries that are tasked with social protection functions (the Ministry of National Solidarity and Humanitarian Action in Burkina Faso; the Directorate for Social Protection and the Solidarity Economy (DNPSES) under the Ministry of Health and Social Development (MSDS) in Mali; the General Delegation for Social Protection and National Solidarity (DGPSN) within the Ministry of Community Development, Social and Territorial Equity of Senegal (MDCEST) in Senegal; the National Social Protection Secretariat, housed within the National

Commission for Social Action (NaCSA), which is a semi-autonomous government agency that operates under the Ministry of Planning and Economic Development in Sierra Leone).

- Three registries sit under a higher 'central' agency. For example, in Mauritania, as of the creation of TAAZOUR in 2019 under the President's Office, the registry has been housed within the newly created Direction Generale du Registre Sociale et Systeme d'Information (DGRSSI). Similarly, in Niger, the Registre Social Unifié is housed as a new unit within the Dispositif national de prévention et gestion des crises alimentaires (DNPGCA), under the Prime Minister's Office. The Gambia National Social Register is hosted by the National Social Protection Secretariat (NSPS), established in 2020, under the Office of the Vice President.

- Chad's Registre Social Unifié is hosted by the National Statistics Office.

Figure 8: Institutional housing of the social registry, by country



Each institutional arrangement is driven by politics and historical path dependency, yet the arrangement ultimately affects the extent to which the units responsible for the information system are able to fulfil the coordination function they are meant to play – acknowledging that data is power. As an example, in Senegal, the Registre National Unique has a strong leverage because the use of its data is mandatory. However, the full weight of this central function is not yet used in terms of convening power and tool for harmonization and establishing synergies and linkages. In Chad, the housing of the Registre Social Unifié in the National Statistics Office gives the registry a strong reputation as a neutral actor and a reliable source of statistical data. However, it has its limitations in terms of a more strategic and comprehensive tool for achieving broader policy objectives and effective support of people in need.

A separate, yet equally crucial, aspect to contrast is the extent to which investments in national capacity have occurred across the region. Very few countries have been doing this systematically, building a team of core government staff at national and decentralized levels that are key to

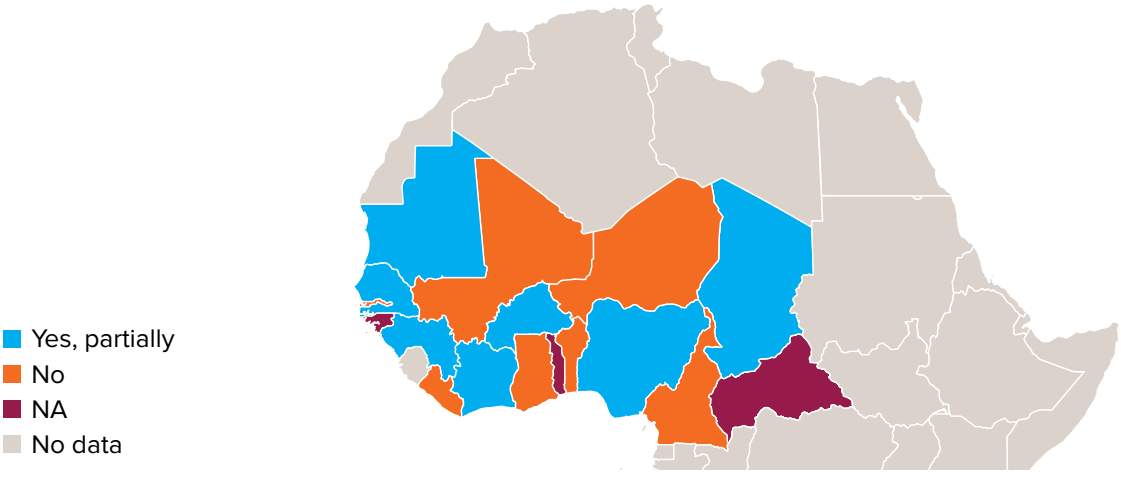
medium-term sustainability and to the development of systems that can be dynamic (via on-demand updating) and human-centred.

A handful of countries, however, have been positively shifting in this direction. As an example, Mauritania finances 25 staff positions at central level, with very high technical capacities – to the extent that most of its data platforms are built in-house[10]. This contrasts with 16 central-level positions in Nigeria and between 3 and 5 in Mali, Chad, Ghana, Senegal and Niger. At a decentralized level, Senegal leads the way with years of investment in six regional coordinators and a network led by six local non-governmental organizations (Opérateurs Sociaux; OS), covering the entire country through a total of 6,000 community-based agents (relais communautaires) and 600 supervisors. Over the years, OS have played a fundamental role in the validation and scale-up of the Registre National Unique, as well as fostering community participation, accountability and broader convergence for the sector 'on the ground'. In recognition of this role, further efforts of institutionalization are underway, with recent attempts to place the OS model within government structures and, specifically, as 'frontline services' within decentralized branches of the MDCEST.[11]

2.2.2. Financing

The majority of social registries are financed externally, which constrains domestic institutionalization and sustainability across the region (Figure 9). Only seven countries supplement World Bank funding with some domestic sources, especially for staff and data collection (Côte d'Ivoire, Mauritania, Nigeria, Chad, Senegal, Burkina Faso and Guinea for 2021). Nigeria is an interesting case. Here, there is increasing financing from government in terms of some core capacities that are supporting the registry, alongside a core budget amounting to USD 7 million per quarter for operational costs at the national level and USD 1.5 million per quarter for states, including incentives for state participation via full (output based) federal financing, with additional incentives for poorer states.

Figure 9: Domestic financing of the social registry, by country



10 This not only reduces overall costs but also eliminates the multiple risks of vendor lock-in.

11 This was piloted in three locations in 2022 (Matam, Louga and Saint-Louis), with five more locations added in 2023 and the intention to scale nationally.

This analysis was unfortunately not able to dig into the fine detail of the total cost of ownership of systems in the region (see section 4.1.4) to provide estimates of cost and infer cost efficiency and cost effectiveness. Transparency on this would be crucial going forwards, especially along important comparable dimensions, for example, cost of interview per household (which can be reduced by shortening questionnaires and developing more localized data-collection approaches).

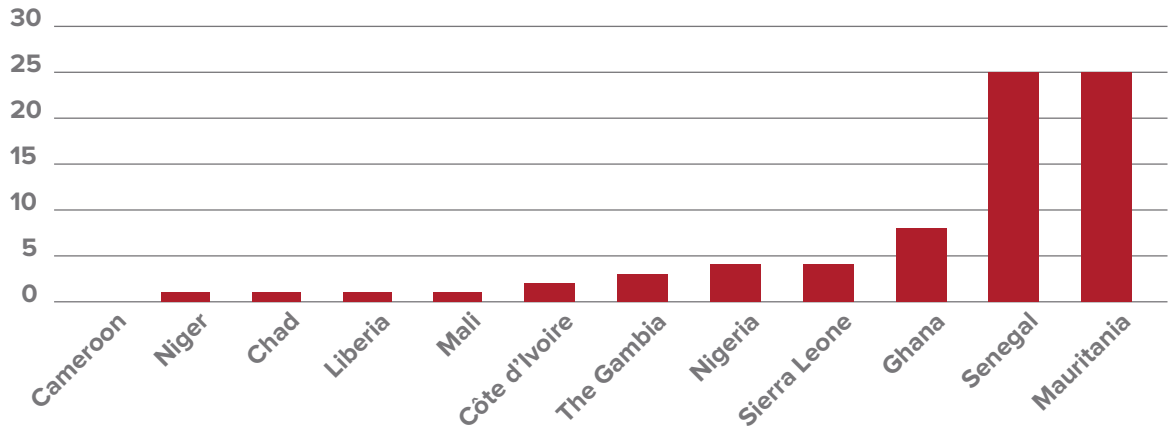
2.2.3. Data use and user programmes

As discussed in section 2.1.1, the key function of social registries developed in the region is to support eligibility determination across multiple social programmes (rather than each programme collecting its own data). The data could also help inform planning and budgeting, providing a measure of the 'demand' for social protection in the country (Leite et al., 2019).

Having a large amount of data makes no sense if the data are not used to inform programming – and ultimately expand coverage to comprehensively address different lifecycle risks while protecting from covariate shocks.

Having said this, the number of user programmes of the data stored within social registries in the region is still very low – considering the investments to date (Figure 10).

Figure 10: Number of user programmes



Senegal and Mauritania are the only two countries where data use has significantly picked up in recent years, with some 25 different user programmes each, across government and non-government actors. This is primarily due to 'threshold effects' (sufficient coverage of the data and trust in its quality, etc), but also to explicit pursuit of data use. They are followed (at quite a significant distance) by Ghana (8), Sierra Leone (4), Nigeria (4) and The Gambia (3). In Niger, Chad, Liberia and Mali the only real 'user' of the data is the flagship cash transfer programme – the original reason for which socioeconomic data were being collected in the first place (in fact, in Niger and Mali programmes are de-facto data contributors).

This is against a landscape where many countries (Senegal, Mauritania, Burkina Faso, Chad, Côte d'Ivoire, Ghana, Liberia, Nigeria and The Gambia, Niger and Mali) have developed comprehensive data-sharing protocols to ensure access to data by potential user programmes is legally protected; a positive trend that has nevertheless not triggered increased data use – except for where this has been explicitly pursued (see, for example, Box 3).

Box 3: Strategic pursuit of data use in Mauritania

There are several factors that have facilitated higher levels of data use in Mauritania.

- A technical sub-unit within the Registre Social (RS) institutional structure is specifically focused on data use, i.e. increasing understanding of, and demand for, the RS data, while addressing any issues arising that were hindering access.
- There are explicit targets around data use, including within the key targets of the World Bank SSN II project agreements (these have already been exceeded, as the target was 15).
- There has been a focus on ensuring the usefulness of the data for all potential users, rather than forcing people to use the data without seeing the benefits. This has involved extensive consultations and joint work over the years; for example, WFP has been leveraging the data to assist with its lean season support.
- The creation of a well-structured Data-Sharing Agreement (noting only 14 of all the data users had signed this in October 2022[12]); a manual developed to guide users focused on shock response (RS, 2019[13]).
- The explicit addressing of data protection concerns.

12 These were: Oxfam, WFP, Elmaouna program, Société Nationale de Distribution des Poisson, Médecins du Monde, Save the Children, Action contre la Faim, Inayaa, World Vision International, Croissant-Rouge de Mauritanie, RIMRAP, UNHCR, Veterinarians Without Borders, the Youth Employment Project (Lefebvre, 2022).

13 "The main objective of this guide is to define the measures and procedures required to enable optimal use of the Registry at scale in order to improve the consistency, timeliness, and efficiency of targeting for shock response programs, while maintaining a satisfactory level of accuracy in identifying eligible households and transparency and accountability to the population" (RS, 2019).

Of course, the number of user programmes is not all that counts. What matters is the ultimate coverage by these programmes with regards to the needs in the country, and how strategically data is being used to inform that coverage and expansion strategies over time.

From this perspective, the role of social registries in the region is still disappointing, with some positive experiences emerging.

- On the one hand, data use for the most part has not only been quite scarce, but also relatively light-touch in terms of strategic uses of the data.
  - In many cases, the data that are used by other programmes are not the full registry data, but just the subset of data from the main cash transfer programme (i.e. households identified as 'poor' via PMT methods).
  - In other cases, especially for emergency responses, the registry itself is taken as a pre-identified list of 'households in need', rather than interrogated based on the useful data it provides. (This is practised by some actors in Senegal).
- On the other hand, countries such as Senegal and Mauritania have been pushing the frontier of data use by new types of programmes. For example:
  - partnerships with social health insurance programmes pursuing Universal Health Coverage via the full subsidization of access for the 'poorest' households
  - ongoing discussions with humanitarian and disaster risk management (DRM) actors, both governmental and non-governmental, to systematize ex-ante how registry data will be used (see Box 4)
  - experimentations with programmes from other sectors, leveraging specific data-points in the registry to establish eligibility (e.g. Senelec, agricultural).

Box 4: El Maouna, a government programme designed to leverage Registre Social (RS) for shock response in Mauritania

The El Maouna programme has been implemented by the Commission à la **Sécurité Alimentaire (**CSA) since 2017 to enable households to cope with shocks that affect their wellbeing, particularly during droughts. The number of households supported each year and the geographic targeting of the programme depend on the severity of food insecurity (currently determined via the Cadre Harmonis**é** methodology, yet planned to be based on the outcomes of the Early Warning System that is being developed). As an example, the programme reached a cumulative 59,265 (de-duplicated) households between 2020 and 2022.

As discussed in its 2019 manual, the programme has been explicitly designed to leverage RS data, following the geographic targeting phase. The eligibility criteria are updated each year, aligned with other humanitarian actors under the lead of the CSA. These prioritize vulnerability, leveraging categorical variables such as main occupation, possession of livestock and non-productive assets (not the PMT). WFP, as an example, has been drawing directly from the social registry to target its lean season response, using the registry to guide targeting, confirm vulnerability and effectively do proof of life, annually.

When it comes to data use to inform targeting, Figures 11 and 12 visually contrast the very different situations across Senegal and Niger. Items in pink are routine programmes and arrows/writing in blue indicate seasonal or shock-responsive expansions. It is clear from the visuals that Niger's large data-collection efforts to date are not being supported by sufficient data use – and support to populations in need.

Figure 11: Data use, visualizing coverage of programmes leveraging the data (Senegal)

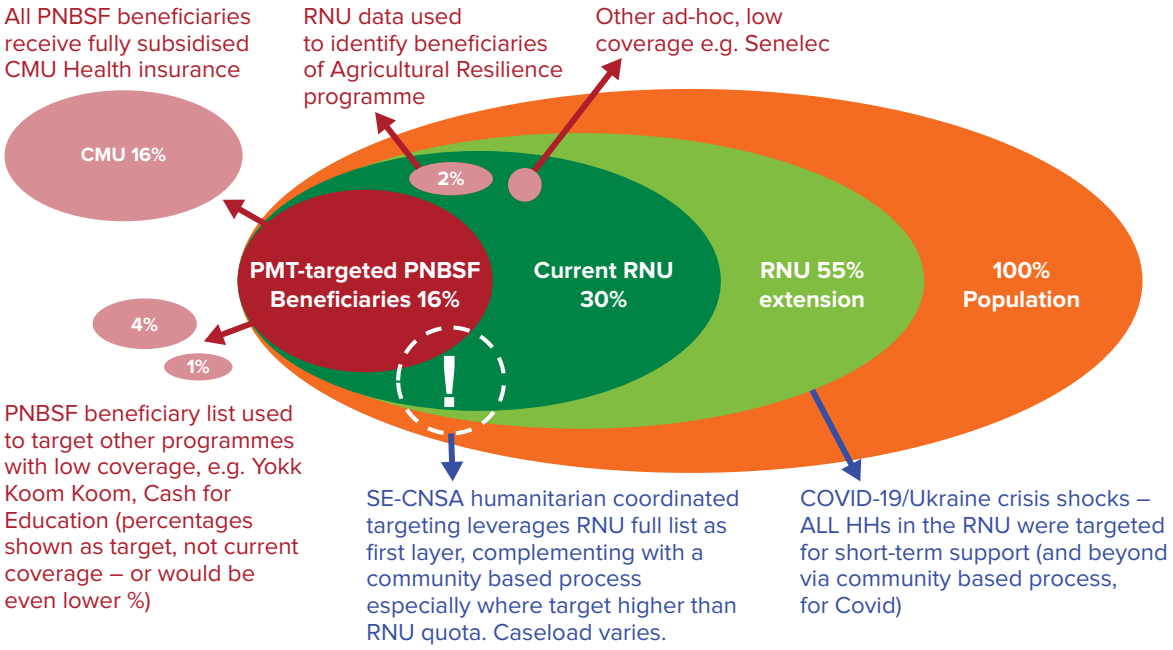
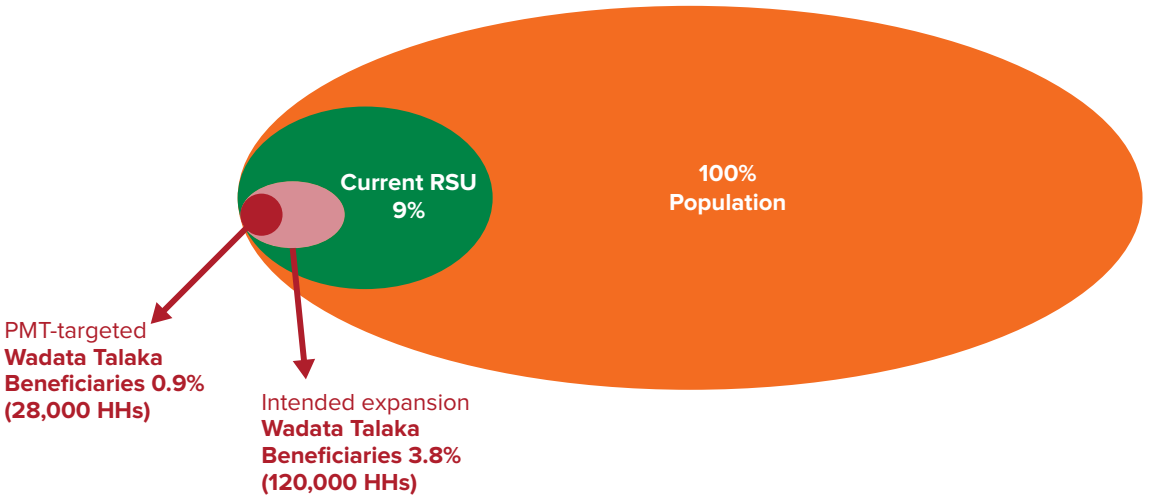


Figure 12: Data use, visualizing coverage of programmes leveraging the data (Niger)



From a broader 'data use' perspective (beyond supporting targeting), what really matters is also how value is extracted from the data to inform monitoring and evaluation, and decision making, aspects which are still underdeveloped in the region compared to potential (see, for example, lack of IBR function, discussed in section 2.1.2).

2.2.4. Communications, website and visual identity

Once again, as a 'visible' sign of institutionalization, ten countries across the region have a website for the ministry or agency in charge of the social registry, or the registry itself. These vary widely in terms of the type and depth of information they provide. In a handful of countries, the website is fully operational and up to date, including extensive information on objectives, methodology/process, key documentation (e.g. questionnaire, manual), FAQs, news/updates and even outcomes (e.g. key status statistics). Ghana's website is a good example of this (with high use of other social media accounts too, such as X and Facebook) and Mali and Liberia are also making an important effort. In other countries, websites are developed to a lesser extent (Benin, Cameroon, Niger, Nigeria, Sierra Leone, The Gambia). Surprisingly, two of the most advanced information systems in the region either do not have a website or logo (Senegal), or have one that is out of date and incomplete (Mauritania). This speaks to the broader politics surrounding communications efforts.

Figure 13: Example of social registry logos

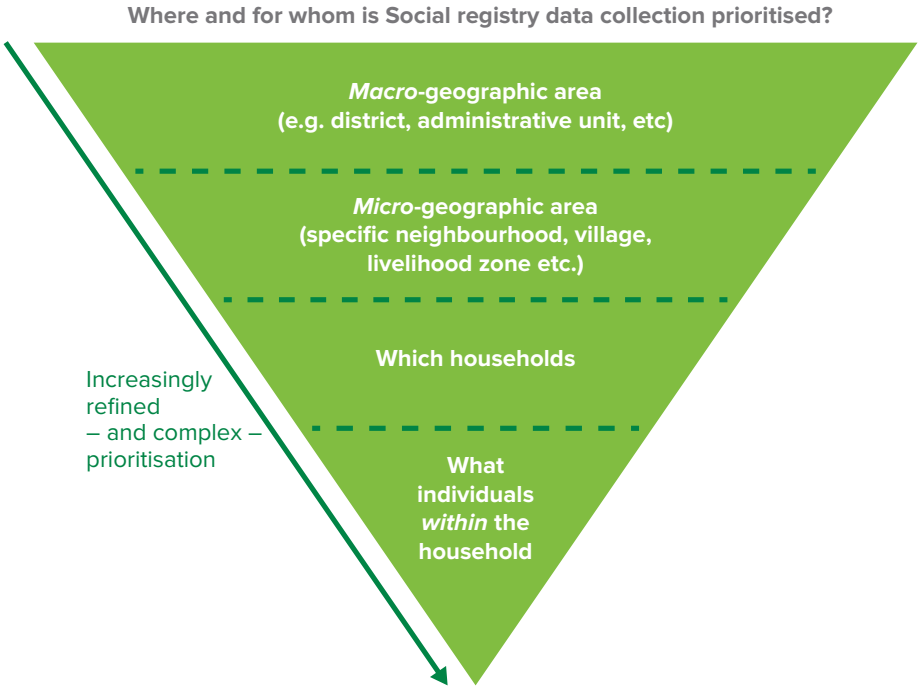
2.3. Design and implementation aspects affecting key outcomes

2.3.1. Data-collection approach and subsequent data coverage

Across all countries analysed in the region, the primary approach to data collection is a static so-called 'census sweep'[14], with data-collection teams travelling round the country to collect data at set intervals – either door to door or at agreed locations in every community. In a couple of countries (Mali, Nigeria), this is starting to be complemented by on-demand approaches.

Who is responsible for data collection varies. For example, Chad, Burkina Faso and The Gambia work alongside statistics offices whose enumerators are responsible for data collection (posing some risks to perceived statistical independence, but guaranteeing trust in data quality), while other countries work via contracted enumerators or government staff.

Figure 14: Prioritization process at geographic and household level



14 This refers to the typology of data-collection approach that resembles that used by statistical surveys, but does not mean all households' data are collected as 'a census', i.e. quotas are often applied to determine whose data are collected.

Most importantly, it is crucial to break down the process for prioritization of coverage at macrogeographic, microgeographic and household level (Figure 13), as this has important implications for potential data use (sometimes referred to as 'deployment strategy').
For example, focusing on the macrogeographic level, countries can broadly be divided into:

- those whose ambition it is to cover 100 percent of the population nationally (with a progressive schedule): Ghana, The Gambia, Liberia (and also Burkina Faso as a longer-term goal). NOTE: this should translate into blanket approaches at microgeographic and household level.

- those who have explicitly set a national coverage target (e.g. X percent of the population) and a strategic data-informed strategy to prioritize coverage so as to reach that target (using poverty maps, in some countries complemented by vulnerability data): Nigeria, Senegal, Mauritania. Note: this necessarily translates into the application of quotas, applied in different ways.

- those with relatively patchy and non-strategic geographic coverage, depending on historical reasons and programme priorities: Cameroon, Côte d'Ivoire, Niger, Chad, Mali.

At microgeographic level, possibilities for strategic prioritization are reduced (as high-quality data do not exist at this level, beyond demographics from old census data), but countries such as Nigeria, Senegal and Mauritania leverage data available alongside targeting committees to prioritize strategically. Note: no prioritization where ambition is 100 percent national coverage.

At household level, several countries leverage community-based prioritization processes to decide which households to interview ('the poorest and most vulnerable') based on the allocated quotas: Cameroon, Benin, Nigeria, Senegal, Burkina Faso (for rural areas) – as well as Mali and Niger for some of their caseloads. Mauritania is the only country experimenting with a hybrid approach via a short data-collection questionnaire for 100 percent of its population and a data-informed prioritization based on that data, to decide which households require more in-depth data-collection. Burkina Faso applies this methodology in urban areas only. Note: no prioritization where ambition is 100 percent national coverage.

For countries we have data on, this is further broken down in Table 2, showcasing a wide range of approaches and highlighting how choices at each level are often driven by how data will be used for targeting of specific, existing programmes. In many countries in the region this is focused on pre-identifying 'the poor' and setting quotas at each level based on this assumption. Clearly, this carries important inclusion risks and limits the flexibility of how registry data can be deployed for different targeting approaches beyond poverty targeting.

Table 2: Registry data-collection approach, determining strategic coverage

Country	Macrogeographic prioritization of coverage (commune)	Microgeographic prioritization of coverage (village/ neighbourhood)	Household prioritization at community level
Cameroon	Patchy. Ministere des Affaires Socailes (MINAS chooses the different communes in which to target. It is starting off with eight communes in the east of the country (not much difference in terms of poverty and vulnerability). It's a large refugee hosting area. There are many refugees from Central African Republic, but the host communities are also in a very similar socioeconomic situation	Unclear whether any prioritization	Community-based process to decide whose data will be collected (prioritizing 'poorest and most vulnerable')
Burkina Faso	Patchy and under development. A deployment plan exists for the first three years, giving priority to the poorest but yet relatively secure areas, hence disadvantaging areas affected by conflict and displacement	Target is to cover all villages (100 percent coverage) in selected areas	Rural areas: Community-based process to decide whose data will be collected (prioritizing 'poorest and most vulnerable'). Urban areas: Blanket approach (all households interviewed) for light-touch data collection (100 percent). Data-informed (poverty-focused) decision on households for in-depth interview depending on allocated village/neighbourhood quota. (Note: prior approach was community-based)
Côte d'Ivoire	Patchy. Areas where the Safety Net Programme is active	Only some villages selected, unclear how	Blanket approach (all households interviewed) where poverty was higher than 55 percent
Ghana	National scale ambition, with gradual prioritization using the poverty profile of the country, prioritizing the poorest over areas less in need	Target is to cover all villages (100 percent coverage)	Blanket approach: 'census-based' data collection conducted in areas with high poverty levels. For the rest of the country, mobile registrations centres are used, where household members can go to register their households at set moments in time
Niger	Patchy. Currently, different geographic prioritization criteria by different actors feeding data in, leading to diverse coverage across locations and no consistent strategy. Note: Future plan is to prioritize based on poverty incidence + vulnerability data	Patchy. For example, some actors (such as humanitarian/ food security) create decentralized targeting committees. Others use lotteries, etc.	Different approaches by different actors feeding data in. For example, community-based pre-identification vs blanket approach for all households in prioritized area, etc. Note: Future plan is to aim for 100 percent coverage in vulnerable and food insecure areas

Benin	National scale ambition. All 77 communes	Unclear whether any prioritization	First, community-based prioritization, then interview of those pre-identified as 'poor'
Chad	Patchy. Currently, different geographic prioritization criteria by different actors feeding data in, leading to diverse coverage across locations and no consistent strategy	Patchy. Depends on who is feeding data in. For example, PARCA only covers 25 km around refugee camps. For example, lean season prioritization based on local authorities and recent innovation to use satellite data	Blanket approach: 100 percent of households in prioritized areas registered
Liberia	National scale ambition, starting from poorest counties	Target is to cover all villages (100 percent coverage)	Blanket approach: 100 percent of households in selected communities registered
Nigeria	National scale ambition to cover every locality. To prioritize using a poverty map across states, to provide a basis for the classification, ranking and selection of participating Local Government Areas (LGAs), meaning the distribution of the covered households is heavily skewed to rural areas. Coverage is planned in three phases, starting with 30 percent poorest LGAs, then subsequently 50 percent and 20 percent poorest LGAs in a state to achieve saturation	Ranking of communities: In this consensus-based approach, the most-deprived communities are given priority The availability of basic amenities and infrastructures is used for further ranking	Community-based process to identify 'poor and vulnerable households', using agreed criteria, facilitated by a community-based targeting team. Data on all of these are collected up to the quota
Senegal	National scale ambition: national coverage across the 14 regions, 45 departments and 552 municipalities of Senegal. The target (pre-2023 planned expansion) was to cover all households below the poverty line, i.e. around 30 percent of households nationwide. Quotas are determined at communal level, alongside the Statistics Agency, based on small area estimation methods analysing poverty (concentration of households living in 'extreme poverty') and demographic data (population concentration) from the national census and most recent statistical surveys. →With new increased target to reach 55 percent coverage, shifting methodology to encompass vulnerability: Census + routine household survey data: correlates of poverty + vulnerability + demographics and areas recurrently affected by shocks	Based on overall quotas allocated, local authorities organized into a Municipality Targeting Committee (governor, prefects, mayors, regional DGPSN coordinators) establish specific quotas per community, calculated in proportion to poverty levels and population size. Other aspects may be factored in: for example, access to services, exposure to shocks	Community-based process aimed at identifying the 'poorest' households up to the identified quota. RNU data collection is only performed for identified households, at a chosen location in the community (not door to door)

Mali	Patchy. Currently, different geographic prioritization criteria by different actors feeding data in, leading to diverse coverage across locations and no consistent strategy. Data considered by different actors include: poverty and infrastructure, acute malnutrition, severity of food insecurity	Patchy. For example, some actors prioritize geographic continuity within selected communes (with lower coverage within and quotas based on demographic data); others create decentralized targeting committees that prioritize, for example, food insecure areas to avoid dilution	Different approaches by different actors feeding data in. For example, community-based pre-identification vs blanket approach for all households in prioritized area. Note: Future plan appears to aim for 100 percent coverage in areas with highest Communal Poverty Index and Risk/Resilience Index
Mauritania	Target (40 percent) set to exceed official poverty rate. Specific quotas for each municipality are determined (census + survey data) to reflect the incidence of poverty in that municipality via 'small-scale poverty estimation methods' + demographics + reinforced quotas in areas vulnerable to shocks	Definition of village/ neighbourhood-specific quotas based on: Demographic data primarily, based on overall municipal quotas. Conducted at central level with support from Statistics Office	Blanket approach (all households interviewed) for light-touch data collection (100 percent). Data-informed (poverty-focused) decision on households for in-depth interview depending on allocated village/neighbourhood quota. (Note: prior approach was community based)

Note: We use colour-coding to give an overview of key patterns across countries. Broadly, approaches that are poverty-focused are light blue, vulnerability-focused are green, demographic-focused are grey and infrastructure/service availability-focused are yellow. Other than that, dark blue is used to indicate national or 100 percent coverage ambitions at national or subnational level (including blanket approaches at community level). Purple is used to indicate patchiness/fragmentation in approaches. Brown is used to indicate community-based approaches at community level.

Once again, the level to which coverage within the registry is strategically set makes a big difference to the potential uses of the data. Box 5 speaks to Senegal's trajectory towards better encompassing a focus on vulnerability when setting its coverage targets.

Box 5: Shifting to more strategic collection of data in Senegal, encompassing a focus on vulnerability

The data-collection and expansion efforts for Senegal's Registre National Unique (RNU) gained revived attention during and in the aftermath of Covid-19. "Following the distribution of food kits implemented in 2020 as a first COVID-19 response (to all RNU households and beyond), the government expressed a clear need to broaden the reach of assistance programs to populations with new forms of vulnerability" (World Bank, 2022): When the Government distributed food aid to all members of the registry, for the first time, the RNU had become 'visible' to communities and partners. This was translated into an explicit political target to reach "1 million households" with the RNU, so as to broaden the registry's focus beyond poverty, towards vulnerability, and thus enable more inclusive programming.

The political target was further elaborated by the RNU Directorate, alongside experts from the Statistical Agency (Agence Nationale de la Statistique et de la Démographie – ANSD) and the World Bank, in order to calibrate the expansion to de-facto vulnerability levels in the country, as analysed within a 2021 Poverty Assessment.

The major change in methodology lies in the setting of the geographic quotas, reflecting a revised national target of 55 percent coverage (precisely 1,037,000 households), up from under 30 percent, and a focus on 'vulnerability' rather than poverty alone (World Bank, 2022; key informant interviews):

Extension of the RNU will be based on 'vulnerability quotas' calculated at municipality level by decomposing the unexplained variance of household consumption into a household-level (idiosyncratic) and a community-level (covariate) component.[15] The final vulnerability estimates thus combine poverty-induced vulnerability and risk-induced vulnerability.[16]

The analysis shows that in 5 of the 14 regions of the country (Thiès, Louga, Kolda, Matam, Kaffrine), the percentage of individuals vulnerable to poverty is about 1.5 times higher than the percentage of poor people. This implies that the current method of geographic targeting (of the RNU or of programmes) based solely on poverty incidence would miss many vulnerable people with high probability to fall into poverty.

The choice of departments covered by the extension will also prioritize those that are particularly and regularly affected by climate-induced shocks, chosen with the SE-CNSA, WFP and other actors working on drought response and food security.

The approach to household-level selection (community-based) remains unchanged.

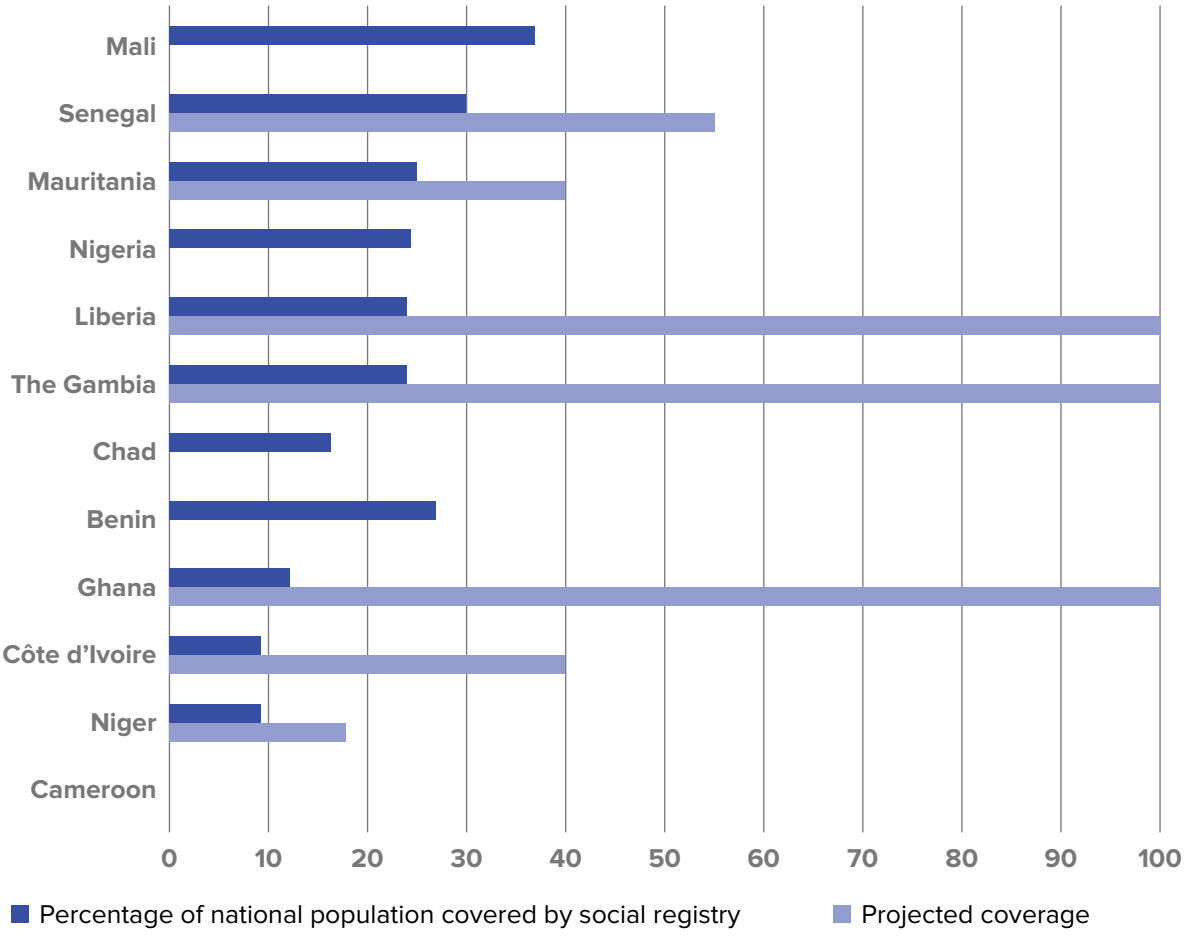
Source: Barca, Kreidler and Ouedraogo, 2023

15 The methodology followed is discussed in Skoufias et al., 2021, applied to Ethiopia.

16 The analysis is based on a poverty assessment of trends between 2011 and 2018, drawing on two nationally representative household living conditions surveys conducted in 2011 (Enquête de Suivi de la Pauvreté au Sénégal 2011) and 2018 (Enquête Harmonisée sur le Conditions de Vie des Ménages), as well as data from the Covid 2020 High-Frequency Survey (HFS) (World Bank, 2021c).

The resulting coverage based on the expansion strategies discussed in Table 2 is summarized in Figure 14, including desired coverage targets. Mali is the country in which the social registry covers the highest proportion of the national population (37 percent), followed by Senegal (30 percent), Benin (27 percent), Mauritania (25 percent), Nigeria, Liberia and The Gambia (all at 24 percent). Then, under the 20 percent of population covered, there is Chad (16.3 percent), Ghana (12 percent), Côte d'Ivoire and Niger (9 percent), and Cameroon (0.09 percent . Obviously, this way of presenting the data gives an advantage to those countries with smaller populations. In absolute numbers, Nigeria is the country in which the social registry covers by far the most households (15,374,523). Then follows Mali with 1,285,000 households covered, then Ghana (809,368), Senegal (541,192), Chad (509,737), Côte d'Ivoire (490,000), Benin (480,522), Niger (400,000), Liberia (252,000), Mauritania (225.855), The Gambia (83,000), São Tomé and Príncipe (20,000) and Cameroon (9,879). In terms of the projected coverage, Figure 15 also shows that Ghana, Liberia and The Gambia are the only countries that target 100 percent national coverage, followed by Senegal with a target at 55 percent, Mauritania and Côte d'Ivoire at 40 percent.

Figure 15: National coverage of the social registry, by country



It is also important to highlight that the national average can mask substantive regional variations: In Chad, for example, some regions have a coverage rate of over 70 percent compared to others where coverage is non-existent or in single-digit percentages.

There is, of course, also a question of who is included and who is excluded within these overarching coverage targets. It is interesting to note two regional trends in this respect:

- In the aftermath of Covid-19, a realization that existing registries were very skewed towards rural locations, and an effort to increase coverage in urban areas (e.g. Mauritania, Mali, Senegal).

- An increasing focus on integrating internally displanced populations (IDPs) and refugees in the data where possible, acknowledging permeable borders in the region. In Chad, the majority of the social registry data comes from refugee hosting and surrounding areas. In Cameroon, recently an operational decision was made to include displaced people on the registry. In Mali and Niger, registration is open for non-nationals/IDPs. In Mali, data on these is also fed in separately via the Matrice de Suivi des Déplacements. Mauritania's inclusion of refugee data is discussed in Box 1. In Burkina Faso, the debate is ongoing and very relevant as the majority of the humanitarian and lean season assistance is focusing on highly insecure areas where the Registre Social Unique sees difficulties to deploy any time soon.

2.3.2. Questionnaire length and key sections affecting data relevance

Across the region, the length of social registry questionnaires (determining what variables are captured and stored) was very high, on average, containing between 52 questions[17] (Senegal) and 248 questions (Mali and Niger[18]), with most countries having over 100 questions (e.g. 200 in The Gambia, 191 in Côte d'Ivoire, 148 in Cameroon, 138 in Nigeria, 120 in Benin). These take between 35 minutes and 2.5 hours to be completed, depending on the questionnaire and the household composition.

- All the questionnaires we had access to (11 countries) include the following sections: a) Identification of the household; b) Household characteristics; c) Housing characteristics; d) Access to water/ sanitation; e) Education; f) Sources of livelihood/work; and g) Health (and whether any disability[19]).

Some additional sections were specific to certain countries.

- In The Gambia, Ghana, Burkina Faso, Benin and Mauritania, the social registry questionnaires had a focus on social protection and access to social services.

- In Côte d'Ivoire, Senegal and Benin, the social registry questionnaires included a section on shocks and crisis management/coping strategies.

- Across the questionnaires we had access to, 7 included food insecurity questions, either as a 7-day recall (Cameroon, Niger, Chad, Senegal, Mali and Mauritania) or a 30-day recall (Côte d'Ivoire).

17 Note: For easy comparison purposes, this report compares questions in the questionnaire, including those in the identification cover page. These may lead to very different numbers of variables (and length of questionnaire duration, de facto) depending on what questions are asked. For example, food consumption modules often ask 'one' question that is then repeated many times for many food items.

18 Note these are almost identical.

19 Note this is, however, asked in a very light-touch way, not sufficient for true identification of PwDs (see Barca et al., 2021).

The process for developing the questionnaires was broadly participatory in most countries, often involving actors from other sectors too (health, sometimes humanitarian). However, this has led to a tendency to add questions because they 'may be useful' for analysis purposes rather than interrogating each variable's true usefulness.

The result is that many of the questionnaires included questions that are 'unrealistic' and less useful for administrative data that is not kept continuously up to date; for example, questions with a very short time duration/ shelf-life. This is further discussed in section 4.1.7.

Interesting and positive experiences have been emerging to shorten social registry questionnaires, especially in the aftermath of Covid-19, when the cost of data collection was seen as prohibitive to ensure a rapid and cost-effective response. For example, in Mali and Niger, 'RSU-light/simplified' versions of the questionnaire were created, drastically reducing the number of questions (to 29 in Niger). Niger is also going one step further to develop a modular questionnaire, as outlined in Box 6.

Box 6: Niger's efforts to create a modular, shorter questionnaire

Niger's Registre Social Unifié (RSU), with support from the World Bank, is developing a shortened and modular version of the harmonized, 11 sections-long questionnaire (which was piloted and deemed too long). The shortened version is planned to become the key information base for the RSU, which would be complemented by additional data collected by user programmes. Prioritization of variables that will form the core of this questionnaire has been made on the following basis:[20]

- Usefulness for the targeting of user programmes. Choices on the usefulness of specific variables were made by comparing questionnaires of those programmes that currently have a data-informed approach to targeting (i.e. Projet Filet Sociaux (PFS) using the short PMT questionnaire and ECHO's Prise en charge nutritionnelle des enfants programme, which uses a short HEA-based questionnaire). Variables that were directly of use to inform eligibility determination were prioritized.
- Variables that do not change frequently (i.e. that will not become swiftly obsolete) and that have relatively high stability over time (i.e. no drastic fluctuations depending on seasonality).

2.3.3. Data updating and currency

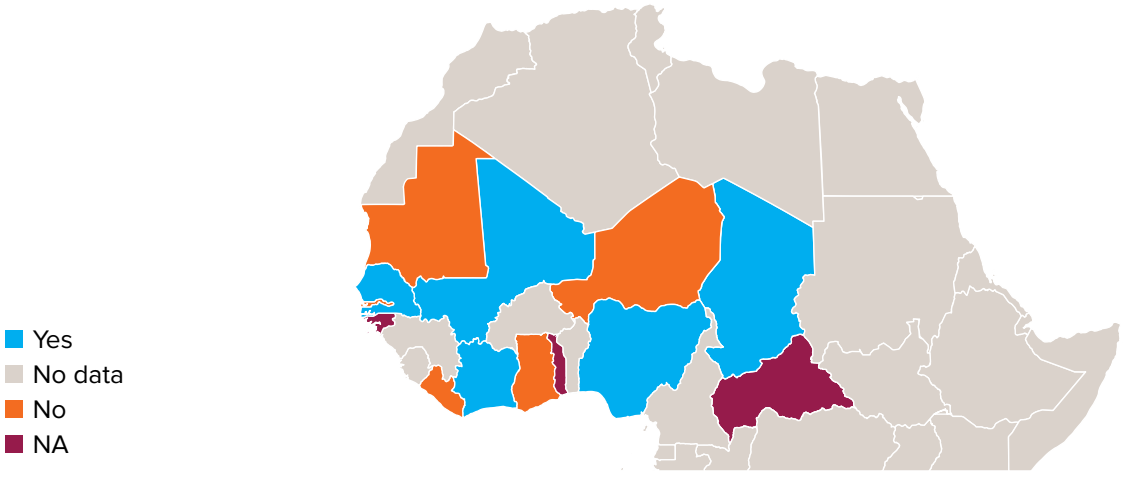
Strategies for updating data are crucial to data currency, which is in turn crucial to the ability to confidently use data to inform programme targeting. Across the region, six countries provide specific timeframes for updating data (as per the 'census survey' data-collection approach), as follows:

- every two years: in Cameroon and Nigeria
- every three years: in Côte d'Ivoire and Mali
- every four years: in Senegal and Niger

As Figure 16 shows, these countries have committed to data updating through protocols/legislation or other formal statements of intent, with the exception of Niger, where this is in process.

20 Geschwind and Luis Alberro. 2022. *Proposition d'une structure de données modulaire pour le RSU*, SASPP.

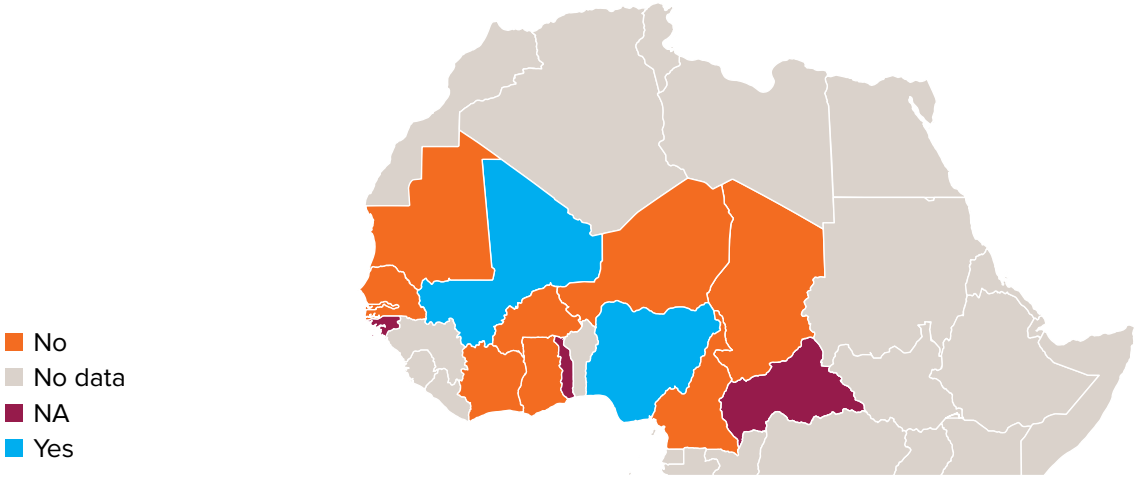
Figure 16: Protocol/commitments for data updating, by country



Given that both poverty and vulnerability – and especially vulnerability to food insecurity and malnutrition – are highly dynamic, particularly in conflict-affected contexts, it is clear that these intended cycles for updating remain problematic. This is particularly the case as global experience shows that formal commitments to updating are often not respected, with significant delays accrued due to the lack of available resources and political will.

In this context, it is surprising to find very low commitment in the region to more decentralized and on-demand approaches to data updating, building local government structures and capacity that can also play a much broader set of functions to address people's evolving needs (Figure 17). The only countries where there appears to be any shift in this direction are Nigeria and Mali (see Box 7).

Figure 17: Whether on-demand built in, by country



Box 7: Mali's piloting of on-demand registration

In Mali, following a capacity assessment of local structures conducted in 2018, there have been increasing policy discussions on shifting towards more dynamic, on-demand and decentralized approaches to registration and updating data. With the support of UNICEF and WFP, this is translating into the piloting of such an approach in four spheres. The objective is to improve accessibility to the Registre Social Unifié (RSU) (and thus the range of programmes that will hinge on its data) and also reduce the cost of registration from 5,000 CFA per household to 1,500 CFA. This is currently being operationalized via the following channels (feasibility still to be assessed):

- Contracting and training ten national non-governmental organizations (NGOs) via a 'Carte de Partenariat' to support village-level continuous registration, in coordination with health workers and other village-level stakeholders.
- Establishing registration kiosks at cercle level and sharing kits at commune level, to be led by local social development services (SLDES) and local agents. The contents of these are still being negotiated but will broadly include a server, portable computers and tablets, and internet connection.
- Exploring the potential of digital transformation (e.g. via AI-based voice recognition to fill in the questionnaires[21]).

Within data-updating strategies outlined in manuals of operations across several countries in the region (e.g. The Gambia, Liberia, Senegal, Nigeria, Burkina Faso in the future) there appears to also be a focus on user programmes feeding updated data back – but in reality this is not really happening in practice.[22] While provisions for this have been embedded into data-sharing protocols, the reality is this is not happening for a range of reasons that will need to be tackled:

- Lack of understanding of the importance of sharing data back by user programmes (both validated social registry data + list of de-facto beneficiary households/ individuals);
- Lack of a structured process and platform for sharing data back in agreed and useful formats;
- Lack of common identifiers (e.g. user programmes not retaining social registry functional identifiers, or not collecting national IDs where these are used);
- Data validated/collected by user programmes not perceived as useful. Especially, users focusing on shock response and food insecurity/nutrition often only validate name/surname and phone number, i.e. their very limited use of social registry data limits usefulness of their feedback. This was the case in Senegal;
- Data provided by user programmes is not entirely trusted – there is a perceived risk of compromising social registry data quality (a key argument used in Burkina Faso to insist on only the RSU unit itself collecting data and not asking partners to contribute/support).
- Beyond a focus on the potential role of interoperability for data updating (see section 2.1.3 on why this may be some years removed), several countries also mention a data-updating role for grievance redress mechanisms, discussed further in section 2.3.4.

21 Noting the complexity of using artificial intelligence for us in local languages beyond French.

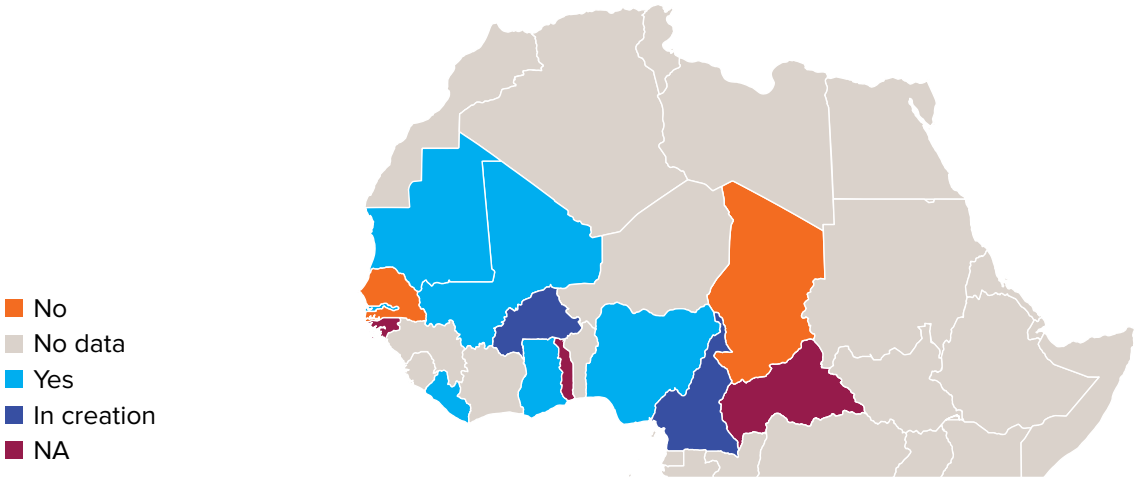
22 This is possibly with the exception of Nigeria.

2.3.4. Data accuracy/trust

More countries – with Senegal, Nigeria, Ghana and Mauritania at the forefront – are investing in quality assurance processes and platforms for their data[23], including third-party monitoring. This is a crucial shift that needs to be embedded in operational manuals and data-management standard operating procedures to the extent possible, to guarantee transparency in process and outcomes.

Worryingly, however, only six countries (Mali, Liberia, The Gambia, Nigeria, Ghana and Mauritania – in creation in Cameroon) have also developed a functional grievance/redress mechanism for the system, which is operationalized in different ways (Figure 18). As an example, Mauritania has created two toll-free call centres (one for RSU, one for Tekavoul – with plans to bring these together) and allocates 2–5 percent of funds to bringing people into the system who have been excluded. In Nigeria, a grievance redress mechanism is set up at the community level immediately after any engagement, with units at higher levels of implementation supporting.

Figure 18: Grievance/redress mechanism for the system



Use of biometrics in the region has increased (collected in five countries), but it has advantages as well as disadvantages. On one hand, biometrics can enable true one-to-one and one-to-many authentication and thus de-duplication. On the other hand, it carries increased data protection risks – especially if set up as a functional identifier for a sectoral registry rather than as a foundational identifier. In Ghana's social registry (GNHR), pictures and fingerprints are collected for head of household and two or three other household members (aged over 15). In Liberia, fingerprints are taken from the head of household and all other members (16 years and above). The LHSR is further incorporating unique identification numbers for each individual to facilitate mapping to the national identification system. Similar efforts are underway in Nigeria, Benin and Côte d'Ivoire.

23 Supervisions, spot-checks, data validation checks, etc.

Box 8: A brief reflection on the 'usefulness' of biometrics

A biometric is a representation of a characteristic of a person, such as fingerprints, voice, face, signature, retina or iris patterns – though recent developments in technology have seen more advanced (and difficult to use) biometrics begin to be employed. The use of biometrics is not inherent to the use of digital identities (it is just one approach). Nonetheless, biometrics are widely used as part of digital identity services and, in some countries, they have started to also be collected for the provision of social protection.

Importantly, biometrics can perform two functions, but these come with caveats:

- **Identification** helps to answer the question 'Who is this person?', also referred to as one-to-many or 1:N matching, or recognition[24], which can also be used for de-duplication purposes. It is obviously essential to have people's biometrics on a database before you can compare them for identification purposes, and this only works well where that source database is 100 percent comprehensive of the population of interest (e.g. Aadhaar's almost 100 percent coverage in India, and similar coverage for equivalent systems in Pakistan, Peru and Argentina). This is not yet the case in any of the countries in the Sahel/West and Central Africa region, meaning this function cannot be played in the foreseeable future, even where biometrics are collected. It also poses risks because of the necessary data centralization; not ideal, especially in conflict prone and fragile states, and where data protection is insufficiently legislated and enforced.
- **Verification** (also referred to as one-to-one or 1:1 matching, or authentication) is the process of verifying that the service user is the individual they claim to be, helping them claim 'I am person X'. For example, a person may use their facial image to verify their identity. This is, by its very nature, a much more straightforward challenge than recognition, especially for select cohorts of individuals (e.g. those identified as beneficiaries to be able to receive their payments at a paypoint).

Overall, it is essential to interrogate the necessity for biometrics, fully laying out potential risks and harms alongside benefits, before adopting them – especially in humanitarian contexts.

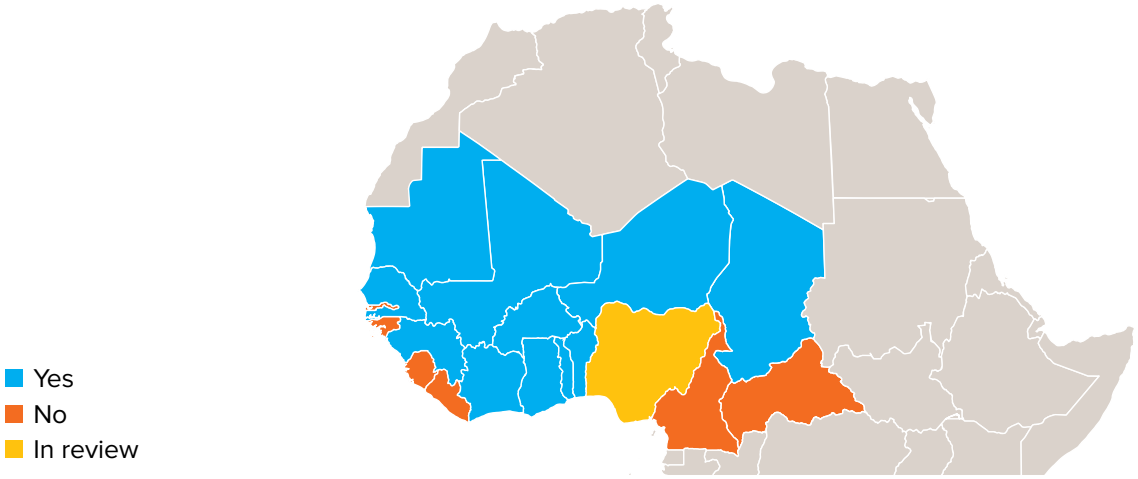
Source: Barca et al., 2018; The Engine Room et al., 2023

24 Note that this process holds true for de-duplication using non-biometric attributes, but is considered less accurate.

2.3.5. Data privacy and protection

The legal landscape for data protection in the region has improved over the years. Among the countries reviewed, 13 have data legislation in place (9). In most of these countries, authorities or commissions for the protection of personal data exist to oversee implementation and enforcement of the legislation. In most of these countries, too, decrees that institutionalize the social registry (section 2.1.4) explicitly address data protection concerns (Table 3).

Figure 19: National data protection legislation, by country



Beyond the legal framing, ensuring data protection and data security by design is also fundamental – especially in contexts where there is a risk of the government being party to conflict and/or discriminating against certain population groups. While there was no way to assess this thoroughly within this review[25], a range of current practices are cause for concern. For example, in Chad, the 'informed consent' form within the social registry questionnaire declares that data will only be used for research purposes, anonymously, which is clearly not the case for administrative data being used to inform targeting decisions. Another important issue is whether data is stored on hardware servers in-country, or in the cloud/on servers abroad, which has important political, legal, financial and technical/administrative implications. A positive trend in some countries has been the storing of data on national servers run by the national institution responsible for digital transformation (e.g. in Senegal), rather than on ad-hoc servers belonging to the social sector ministry.

25 For this, a data protection impact assessment (DPIA) would need to be carried out. See guidance within Wagner et al., 2022.

Table 3: Data protection legislation, by country

Country	Law/authority
Benin	• The protection of personal data is regulated by Act No. 2009-09 of 27 April 2009 as amended by Act No. 2017-20 of 20 April 2018 on the Digital Code in the Republic of Benin, Book V, and Act No. 2020-35 of 6 January 2021 • Personal Data Protection Authority ('APDP')
Burkina Faso	• Law N°001/2021 on the protection of personal data • Commission de l'Informatique et des Libertés – CIL • Data protection discussed in key decrees on the Registre Social Unique
Chad	• Law No. 007/PR/2015 on the Protection of Personal Data • Data protection discussed in key decrees on the Registre Social Unifié
Côte d'Ivoire	• Law No. 2013-450 of 19 June 2013 on the protection of personal data
Ghana	• Data Protection Act, 2012
Guinea	• Law No. L/2016/037/AN, dated 28 July 2016, on Cybersecurity and Personal Data Protection in the Republic of Guinea regulates personal data • Data protection authority appointed
Mali	• Law No. 2013-015 of 21 May 2013 on the Protection of Personal Data • Data protection authority ('APDP') • Data protection discussed in key decrees on the Registre Social Unifié
Mauritania	• Law 2017-020 sur la protection des données à caractère personnel • Data protection authority recently created with "Décret n° 2022-13 du 18 février 2022 relatif à la composition, l'organisation et le fonctionnement de l'Autorité de protection des données à caractère personnel"
Niger	• Law No. 2017-28 of 3 May 2017 and subsequent revisions • Haute Autorité de Protection des Données à caractère Personnel (HAPDP), created in 2017 • Data protection discussed in key decrees on the Registre Social Unifié
Nigeria	• National data protection legislation is in review, regulation of 2019 and Bill forthcoming (drafted 2022) • National Data Protection Commission (NDPC)
São Tomé and Príncipe	• Law No. 03/2016 on the protection of personal data • National Data Protection Agency ('ANPDP')
Senegal	• Law No. 2008-12 of 25 January 2008 • Commission de Protection des Données Personnelles (CDP) • Data protection discussed in key decrees on the Registre National Unique
Togo	• Law No. 2019-014 Relating to the Protection of Personal Data

Countries where data protection is not guaranteed sufficiently by law: Cameroon, Central African Republic, Guinea-Bissau, Sierra Leone, Liberia and The Gambia (Draft Data Protection and Privacy Policy Strategy, 2019)

Photo: WFP/Arlette Bashizi

3. Social registries as agnostic tools: what do the data say?

The use of social registries by different actors is dependent on two main factors: i) an understanding of how the social registry, as a tool, can serve different programmes; and ii) the ability of the social registry to respond to the targeting needs of different programmes (and, in particular, whether the registry collects the data that is in reality used by these programmes for targeting).

Social registries are sometimes associated with certain targeting approaches (e.g. chronic poverty targeting) and specific targeting 'tools' (e.g. proxy means tests (PMTs)), but they do not need to be. Social registries in Western Africa contain sufficient data to cater for the targeting needs of different programmes. The dissociation between targeting approaches/tools and social registries is particularly important in the region because social protection policies here seek to tackle different types of vulnerability: typically poverty, vulnerability to shocks and food insecurity, and social exclusion. These different types of vulnerability cannot be associated with only one type of targeting tool at the risk of losing the focus on multiple vulnerabilities.

Nonetheless, with the notable exceptions of Mauritania and Senegal, food security actors in the region do not typically use social registries to identify the beneficiaries of lean season support. This is, in part, due to differences in beneficiary selection methods across sectors, in part due to the incomplete coverage of the registries, but also, in part, to misconceptions around social registries, which are often construed as not being 'useful to food security and nutrition (FSN) targeting objectives. On one hand, it is true that food security programmes tend to use community targeting methods to identify the most vulnerable, while programmes focused on poverty typically use at least some combination of community-based targeting and scoring (typically through PMTs). On the other hand, the variables used by both approaches to targeting are broadly the same and it is not only possible but also increasingly common to use data-driven approaches for the targeting of FSN programmes (WFP Guidance, 2021).

This is a missed opportunity. Given the limited coverage of regular social safety net programmes that typically serve the poorest, many potential users of social registries are linked to FSN[26] programmes, and in the first instance lean season responses – either cash or in-kind – that typically seek to reach the most food insecure.

An analysis of the social registries' data structure in light of commonly used data-informed targeting tools (including for FSN purposes) can be useful to assess whether social registries are fit-for-purpose in this regard. Understanding the potential applications of social registry data for FSN targeting is important to encourage use, as well as to identify potential improvements

26 In this section, we specifically focus on Food Security and Nutrition programs' potential use of social registries, because of their relevance and prevalence in the region. However, it must be noted that a wider range of programs can use social registries, such as subsidized health insurance programs, education/scholarship programs, fee waiver programs, family allowances, etc. Largely, the reflections presented here apply more broadly beyond FSN.

to social registries' data structure to cater for a broader set of needs. The objective would be to ensure that social registries are truly agnostic with regards to targeting and as useful as possible (e.g. in terms of the variables they contain) to inform a range of targeting approaches and tools.

To support this, we conducted a complementary data analysis to this paper, comparing the performance of various modified targeting tools to identify food insecure households (Silva-Leander and Barca, 2024). This analysis had various uses and purposes, to exemplify the multiple ways in which data from a social registry can be used to inform targeting that poses food security and nutrition concerns as the primary outcome variable of interest, rather than consumption poverty. First, the analysis looked at the targeting accuracy of using a typical (poverty-calibrated) PMT to identify food insecure households. Second, it sought to compare a range of tailored targeting tools' performance against that same objective. Some of these were modifications to the standard PMT, shifting the outcome variable the algorithm was optimizing against (i.e. FSN); others were 'simpler' data-driven approaches, as summarized in Table 4.

The results of the analysis are not discussed here, so as not to interrupt the flow of the report. What is worth stressing is the extent to which the different models/ targeting tools tested affect the required data structure in the social registry. For this purpose, Table 4 also provides an overview of the types of targeting models/ tools analysed within Silva-Leander and Barca (2024), the number of variables each required and whether these variables are typically included in social registries.

Overall, the results from the analysis suggest that including additional information in social registries (and the PMT formula) is *not* the most important factor for improving the identification of food-insecure households, as it does not significantly improve results in relation to current PMT approaches. Questionnaires are already long enough, with impacts on costs and data quality, as explored in other sections of this report.

Another factor to consider is that the ability of social registries to cater to the needs of a broad range of programmes is also impacted by the strategic choices related to the registry roll-out. Beyond looking strictly at the data contained in the registry, it is important to consider whose data is in the registry and who is left out by design. It is useful to reflect here on the information described in Table 2 in section 2.3.1. Many countries have opted for a first step of community-based identification. On the one hand, this ensures better acceptance and cohesion, mobilises local knowledge, and limits the number of households to be surveyed. On the other hand, it associates the registry with 'targeting' and a certain definition of vulnerability, and necessarily limits the pool of potential beneficiaries for a broad range of social programmes, therefore creating risks of exclusion which can aggravate the vulnerabilities of those left out by design.

Notably, the data analysis did not explore the possibility of combining the current PMTs with other, more sophisticated or up-to-date information, such as satellite imagery or other forms of big data. It is possible that the inclusion of such information could enhance the targeting of food-insecure households without requiring additional variables. It could also highlight potential exclusions by design, which could be remediated in an ad hoc manner.

Table 4: Comparing the targeting performance of various modified targeting tools

Model ('targeting tool') name and description	Predictors / eligibility	Weights	Number of variables needed (and overlap with PMT-related variables)	Variables typically included in social registry* (Yes/No)
Current PMT	Original poverty-focused PMT indicators	Original poverty-focused PMT weights (as replicated in EHCVM[27])	41–48 variables. 100 percent overlap	Yes
PMT+	Original + Food security-related indicators	Weights based on correlation with consumption	78–107 variables. Partial overlap	Not currently, but could
FS-PMT	Original PMT indicators	New weights based on correlation with HFIAS[28] (food security)	41–62 variables. 100 percent overlap	Yes
FS-PMT+	Original + Food security-related indicators	New weights based on correlation with HFIAS (food security)	117–124 variables. Partial overlap	Not currently, but could
Short FS-PMT+	Best predictors from FS-PMT+ (shorter list)	New weights based on correlation with HFIAS (food security)	19–52 variables. Partial overlap	Not currently, but could
National vs urban/rural	Best predictors from FS-PMT+	New weights based on correlation with HFIAS (food security)	103–126 variables. Partial overlap	Not currently, but could
Time-sensitive indicators	Best predictors from FS-PMT+, + Time-sensitive indicators	New weights based on correlation with HFIAS (food security)	126–132 variables. Partial overlap	No, and not likely in the future
Categorical	Vulnerability criteria (e.g. orphan)	No weights: Yes/No	10 variables. Any overlap is coincidental	Some
Vulnerability score	Number of vulnerabilities	Equal weight (1/10th per indicator)	10 variables. Any overlap is coincidental	Some
Multidimensional	Observable signs of poverty (e.g. housing)	Equal weight (1/10th per indicator)	10 variables. Any overlap is coincidental	Yes
Combined	Categorical + Multidimensional	Equal weight (1/10th per indicator)	10 variables. Any overlap is coincidental	Some

* In Niger and Senegal.

27 Enquête Harmonisée sur le Conditions de Vie des Ménages (nationally representative survey).

28 Household Food Insecurity Access Scale (simple and user-friendly approach for measuring the impacts of development food aid programs on the access component of household food insecurity)

Photo: WFP/Amadou Baraze

4. Implications for information systems strengthening and targeting, especially to increase focus on vulnerability and FSN

This section focuses on the strategic implications of the assessment of existing systems and regional trends conducted in section 2 and the reflections shared in section 3.

CAVEAT: This section is explicitly *not* framed as a set of 'recommendations', as specific recommendations would range widely across different countries and contexts, depending on their trajectory so far, broader institutional environment, digital ecosystem, intended uses, and policy objectives. As we have seen, these vary considerably across countries in the region, affecting what is feasible and realistic in the short term. This section nevertheless hints at many important issues that will need to be tackled and discussed in each country, to support a process of informed decision making and action, focused on the things that are easiest to achieve in the short term and planning strategically towards broader shifts in the medium term ('future-proofing').

This section consists of two parts: first, a set of actions that could support the strengthening of information systems serving the social protection sector, with a particular focus on ensuring a stronger food security and nutrition (FSN) and vulnerability lens. This is followed by reflections on options to enhance data-informed targeting, once again with a primary focus on FSN and vulnerability concerns.

4.1. Strengthening information systems, including with an FSN/ vulnerability lens

This section outlines actions that could support the strengthening of information systems serving the social protection sector, with a strong focus on ensuring a stronger FSN and vulnerability lens.

4.1.1. Abiding by the Digital Development Principles

The process of digital transformation within the social protection sector should follow the Digital Development Principles (Figure 20) to make the process inclusive and entirely focused on user needs, while avoiding some of the key pitfalls of technology-focused projects. The Digital Development Principles were developed by the UN and a wide number of partner agencies to help practitioners succeed in applying digital technologies to development programmes, while avoiding key risks. A publication by the Digital Convergence Initiative (a USP 2030 endorsed virtual community working to build a global consensus around standards for social protection information systems) called *Applying the Principles for Digital Development in Social Protection* usefully describes what these principles imply for the information systems serving the social protection sector.

Figure 20: The Digital Design Principles

4.1.2. Broadening ambition in terms of functions

Whatever system strengthening is being pursued, it is important to stress that the social protection information systems can do more than just inform targeting – if they are set up to do so. Hence strengthening them should also keep an eye on how to further support these other functions.

- **First and foremost, the integrated beneficiary registry function (rarely pursued in the region) can play a role in understanding overlaps, synergies and gaps across multiple programmes operating in a country**, with different yet complementary objectives. Given the scarcity of financial resources in the region to improve coverage rates and all of the literature on the importance and heightened impacts of 'cash+' and 'bundled' interventions – and of avoiding programmatic fragmentation – it is a missed opportunity not to have an overview of who receives what, over time, including across programmes led by different sectors and actors, and plan coordinated support to households and individuals, including referrals, on that basis. As an example, this was an issue that was extensively stressed in a recent review of nexus programming in Yemen (Ghorpade and Ammar, 2021).

- **Second, the integration of other operational functions along the delivery chain can also bring about significant gains, from a coordination and value-for-money[29] perspective**. This is particularly the case for payment platforms and grievance redressal functions, which are currently being consolidated in some countries in the region (e.g. payment platform in Mauritania).

More broadly, data *use* to inform budgeting, planning and day-to-day management could be significantly improved across many countries in the region. Guidance on this can be found within Barca, Hebbar et al. (2023).

Even where 'targeting' is the main function pursued, it is similarly important to ensure the system can support eligibility determination for a wide range of programmes aiming to serve different population groups and address different idiosyncratic (e.g. lifecycle) and covariate (e.g. shock-related) risks. This means dissipating the myth that social registries 'are only for poverty-targeted programmes' and ensuring the data and systems can in fact support this.

4.1.3. Strengthening institutionalization and capacity

As discussed in section 2.1, most countries across the region have taken many steps to institutionalize social registries in policy/strategy, legislation, and organizational structures and processes in recent years. The diversity of experiences also helps surface some insights that will be relevant to future systems strengthening.

First, when embedding the vision for the information system in policy and strategy, it is important that:

- **It remains wide and focused on the full range of potential benefits** (1), and not just on facilitating 'poverty' targeting as well as cost-saving and 'efficiency'. This seems to be a tendency within some of the vision-setting documents and needs to be broadened. Ultimately, these digital platforms should serve as the information basis for planning/developing, targeting, rolling out and monitoring a range of programmes that not only address chronic poverty but also start addressing key lifecycle risks, setting a stronger foundation for future crises[30], as well as *vulnerability to* poverty, malnutrition and food insecurity. The latter are often exacerbated by conflict and displacement, which thus also needs to be taken into consideration when elaborating the vision.

- **It is 'future-proofed'**, that is, designed to serve the (universal) vision for social protection over time, across social assistance and social insurance (including social health insurance), rather than the fragmented and low-coverage set of programmes a country may have today.

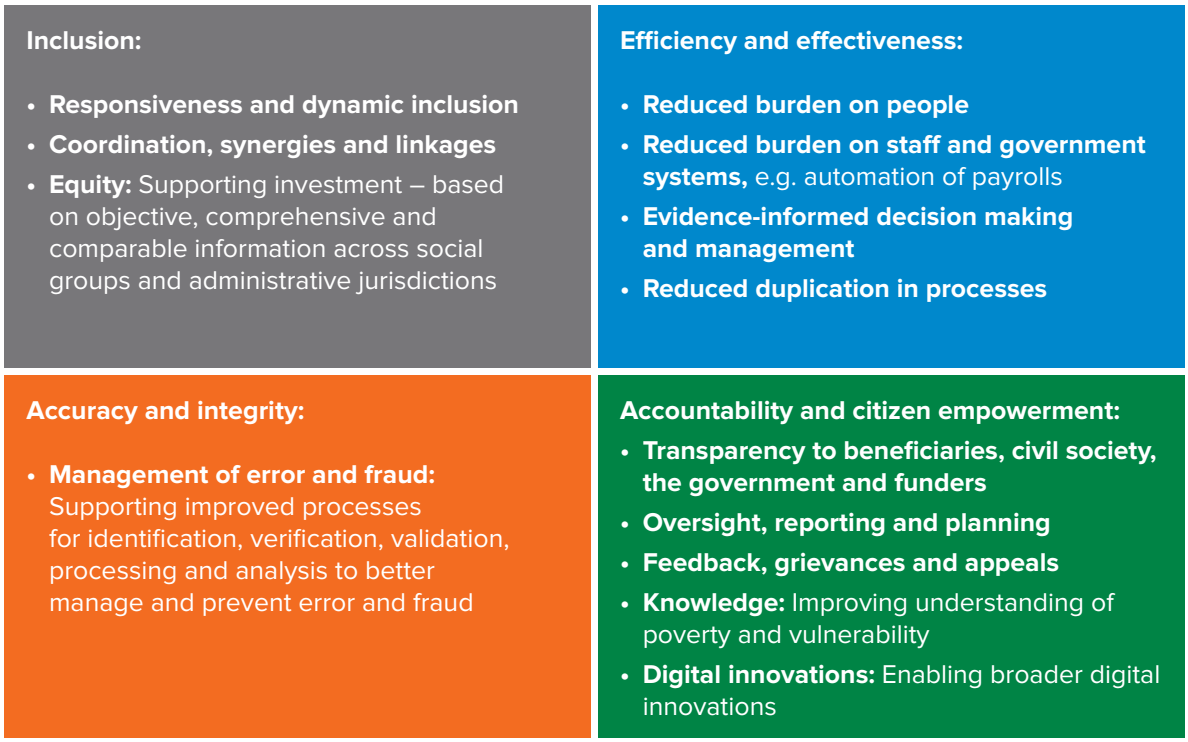
- **It is not self-centring**. The risk is for the (implicit) strategic objective to be 'creating, institutionalizing and expanding the social registry database' (as an end in itself) rather than 'better serving populations in need' (as a means to the ultimate policy end).

- **It is cross-sectoral**, reflected in policy and strategy documents across different sectors – including those focused on FSN concerns.

29 For example, reaping the benefits of economies of scope and scale.

30 Countries that had these in place have been shown to have cushioned the impacts of the COVID-19 shock more effectively, including the 'new poor'. For one example on why this was the case, see Carraro and Marzi (2021).

Figure 1: Range of potential benefits of social protection information systems



Second, in terms of legislation, "a delicate balance needs to be weighed – depending on country context – between a) excessive legislation 'binding' the development of the information system, stifling its flexible development and use, and b) insufficient legislation, compromising its medium-term sustainability" (Barca, 2023). It would be important that legislation is used to reinforce the vision set out in strategy/policy, while also firmly regulating some of the key provisions, principles and minimum parameters that ensure the overall functioning, quality and inclusiveness of the system (e.g. on data updating, inclusivity of access), while addressing emerging risks (e.g. data protection) – in line with the ambition within ILO Recommendation 202. Further details (e.g. on business processes, roles and responsibilities of different actors, etc) would then be clearly defined and documented within supporting official documentation (e.g. operational manual, management standards, data-sharing agreements) and made publicly available for accountability purposes. Of note is also the high risk when embedding an obligation to use the data for targeting purposes in legislation (as with Mali's 2022 decree and similar provisions in Senegal), as use should be encouraged via consultation, trust-building, ensuring data quality, etc, rather than legal obligation.

Third, in terms of organizational structure:

- The ambition to cut across sectors and work beyond individual programmes needs to be reflected in the institutional housing of the information system, which would ideally be sitting at a high enough level to effectively coordinate across multiple agendas and sectors.

Fourth, the staff capacity serving the information system is crucial:

- At central level, a sufficient number of staff with a range of technical skills is needed, including (but not limited to) the following: (a) capacity to bridge policy vision and coordination capacities with an understanding of the digital architecture required to serve that vision; (b) IT/programming capacities to ensure in-house development, updating and maintenance; (c) capacity for data analysis and use, including monitoring and evaluation (M&E) and iterative learning; and (d) capacity to proactively engage with current and potential users.

- At decentralized level, even though unrealistic in the short term for many countries in the region, it is essential that the medium/long-term ambition is to have a network of permanent staff working at local level as the human 'face' of the system (and as 'single window service' facilitators) – acting as touchpoints for reflection of local concerns, accountability and inclusive updating. The extent to which this is done and the ways in which this is structured (e.g. via a social worker workforce or agreements with municipal offices or local NGOs, etc) will depend on technical design choices and a country's specific context (e.g. levels/types of decentralization). But no matter what choices, some degree of local-level capacity will be critical to overall outcomes – and is still woefully insufficient across the region (with positive signals coming e.g. from Senegal).

- More broadly, negotiations and contracting/procurement with any external service providers (e.g. software developers) need to ensure capacity transfer is built in, inclusivity of systems is guaranteed, and vendor lock-in is avoided at all costs.

The coordinating structures supporting the information system similarly play a major role. Beyond a strong 'technical committee', the role of some sort of 'strategic advisory committee' cannot be overstated. This needs to be composed of a wide range of actors from across all relevant sectors and institutions (e.g. including the institution responsible for digital transformation in the country) and focus on the strategic vision rather than the day to day, that is, beyond decisions that are politically driven or that are driven by the availability of financing. This is also particularly key to ensure broad use and acceptance.

Last but not least, the external communication around the registry and information system is crucial. The more efforts are made to clearly and transparently explain the rules, protocols and procedures for being enrolled in the registry and benefit from linked programmes and services, the more clarity there is around milestones to date, the vision ahead, the breadth of partnerships involved, etc, and the more key outcomes will be achieved: for example equity and inclusiveness, accountability, as well as broad support for the system, helping to guarantee its sustainability.

4.1.4. Securing increased domestic financing, and more transparency and open discussion around costs

Medium-term sustainability will only be guaranteed when financing for the social registries and broader information systems in the region are predominantly or entirely domestically financed, via a dedicated budget line.

This requires estimating, and committing to, the total cost of ownership of the information system over the long term (Hebbar, 2022; Leite et al., 2017). This involves all direct and indirect costs, including "any upfront development and

capital expenditure (Capex) as well as any operations and maintenance expenditure or other operational expenditure (Opex) over a defined period" (Leite et al., 2017). In fact, this may include (Hebbar, 2022):

- software development and updating costs (licence, product per user charge, database, operating system software, server software, network software, maintenance fees, etc);
- hardware costs (server hardware costs, network upgrades, desktop hardware, data centre facilities, power supply/ generators/UPS, cooling, maintenance fees, etc);
- consulting costs (individual consultants or consulting firms for design and implementation, deployment and upgrade, integration, future projects, etc);
- personnel costs at central operating level (management, IT, administrators, data analysis/M&E, etc);
- costs for citizen interface and data collection/updating (social worker/ interviewer staff time, data processors, supervisors, IT staff and costs, etc);
- training costs (staff time, trainers, location costs, materials, etc); and
- communication costs (based on roll-out strategy).

Discussions on financing, for example, can be usefully framed with a focus on value-for-money (VfM) considerations, including renewed efforts to transparently quantify and compare these in relation to clearly identified and costed alternative strategies/counterfactuals (e.g. each programme collecting their own data). Table 4 provides some useful considerations in this regard. More broadly, open discussions around these different categories of costs, benchmarking across countries and across different approaches in one country would be hugely beneficial.

The most important VfM insight worth stressing is that the value of investing in social registries pays off if there is extensive use of the data to inform, develop and run a wide range of programmes, in light of the vision set in the SDG 2 goal and ILO 2012 Recommendation for the "progressive realisation" of universal social protection. This can be achieved in many different ways. For example, in Senegal, the ILO sector review (2021) suggests the potential use of the RNU as a way to reduce the overall costs and coverage of a range of newly designed rights-based universally leaning categorical programmes – via 'affluence testing' rather than 'poverty targeting' (i.e. removing those who are considerably better off, rather than trying to target a very hard-to-define set of 'poor' or 'vulnerable' households).

This is still a challenge in the region, where data use is still very scarce and coverage of supported populations very low compared with the data collection effort.

Photo: WFP/Arlette Bashizi

Table 5: Value-for-money considerations

	Potential indicators for comparisons	Social registry (integrating gateway functions and linking to national data ecosystem) – quantitative and qualitative VfM drivers and risk assessment	Each programme (development and humanitarian) collecting their own data – quantitative and qualitative VfM drivers and risk assessment
Economy – cost per input	Total cost of ownership[31]	• Full costs often not captured as full government delivery costs not always transparent. • Important to standardize and transparently measure each cost driver	• Similar categories of cost, but with significant overlaps and reinventing the wheel across: • every social assistance programme in the country (developing their own systems); • other programmes focused on similar categories of population, e.g. social health insurance, but also one-off programmes; and • humanitarian response actors (e.g. often very high year-on-year data collection costs).
Efficiency – cost per output	Cost per individual/ household registered Total costs over time Largest cost drivers over time	• Varies significantly across countries depending on data collection approach and design choices such as length of questionnaire. • Lowered cost over time as system is institutionalized, embedded in governance structures all the way to local level and linking/ interoperability with broader data ecosystem. • Savings in terms of fraud prevention, de-duplication and reduced time/cost for staff and applicants (e.g. digitized sourcing of supporting documents).	• Much less potential for reaping economies of scope and scale. • Overloading of capacity at local level and high risk of duplication of efforts. • Less coordinated institutional capacity to ease key cost dimensions in line with national policy and e-ecosystem (e.g. via arrangements and training of municipal counterparts, creation of online/app-/ USSD-based application platforms, pre-filling of key variables via civil registration/ other, etc). • NOTE: In environments without government, humanitarian capacity can be very strong and efficient. • Important to standardize and transparently measure

31 Software development and updating costs (licence, product per user charge, database, operating system software, server software, network software, maintenance fees, etc.); hardware costs (server hardware costs, network upgrades, desktop hardware, data centre facilities, power supply/generators/UPS, cooling, maintenance fees, etc); consulting costs (individual consultants or consulting firms for design and implementation, deployment and upgrade, integration, future projects, etc); personnel costs at central operating level (management, IT, administrators, data analysis/M&E, etc); costs for citizen interface and data collection/updating (social worker/interviewer staff time, data processors, supervisors, IT staff and costs, etc); training costs (staff time, trainers, location costs, materials, etc); communication costs (based on roll-out strategy).

	Potential indicators for comparisons	Social registry (integrating gateway functions and linking to national data ecosystem) – quantitative and qualitative VfM drivers and risk assessment	Each programme (development and humanitarian) collecting their own data – quantitative and qualitative VfM drivers and risk assessment
Effectiveness – cost per outcome	Contribution to cost per outcome of programme (e.g. poverty reduction, more timely delivery in advance of or subsequent to shocks, etc).	• NOTE: Attribution of system strength or weakness to wider programme outcomes difficult. • ALSO, strongly contingent on type and number of user programmes – ideally the integrated information system would become a tool for expanding coverage, adequacy and comprehensiveness of support. • Higher likelihood of interoperability, potentially enabling more proactive programmes. • Easier to sequence and layer multiple programmes, enhancing their outcomes. • Investment in long-term government capacity and systems. • Risk of centralizing exclusion: systematic exclusion from all social sector schemes	• NOTE: Attribution of different systems' strengths and weaknesses to different programmes' outcomes difficult. Possibly less accountability overall.
Equity – cost per harder-to-reach beneficiary	Costs of delivering outputs depending on who is reached	• In theory, cost should be lower, as more universal focus. However, often systems used for austerity rather than inclusiveness. • If run effectively, savings from integration can and should be reinvested in active outreach and efforts to register harder-to-reach people and particularly vulnerable categories. Unfortunately, this is most often not the case.	• Will vary depending on whether government vs non-government, etc.

Source: authors; also based on Barca (2023)

4.1.5. Strengthening the dialogue and interaction with users

Too often social registries in the region are being treated as an end in themselves rather than a means to an end. In many cases data seems to be effectively collected for the sake of collecting data, rather than to inform the eligibility determination of any particular programme, and the development of the registries is broadly removed from discussions with its users.

NOTES OF CAUTION

One major issue that was found in a range of countries in the region that had opted for a 'fragmented' data collection approach – that is, shifting most of the data collection responsibility to partner programmes, for example Chad, Mali, Niger – is that these partners were in fact acting as 'data contributors' rather than data users and thus failing to see the usefulness of the registries (while being 'forced' to collect data – at a higher cost – beyond what they would be if they were following their own programming).

A permanent – and constantly evolving – dialogue with (current and potential) users is crucial to the sustainability and impact of social registries and broader information systems. This is especially important for social registries, because they have considerable de facto convening power as a natural meeting point of actors and interests, bringing together a very diverse group of stakeholders who support poor and/or vulnerable segments of society.

Ideally this would include regular meetings and annual stocktaking exercises across key programmes and actors, both government (across sectors) and beyond. The topic of discussion would be according to needs, but may include the following areas:

- **Communications and dispelling misunderstandings** – in several of the countries analysed in depth, there appeared to be a 'communication' problem between the registry and its users, with users holding deep-seated beliefs and some misunderstandings that were not reflected in registry current practice.
- **Methodological** – for example prioritization of questionnaire variables based on actual use, fine-tuning of data collection and updating methodology, type of data analysis needed, etc.
- **Harmonization (not homogenization) of use** – development of guidelines and agreements/standard operating procedures (SoPs) on the fine-tuned details of data use for different actors, including exception handling.
- **Learning/stocktaking/feedback** – open/transparent reflection on what has been working and what hasn't and how this can be improved/addressed over time.
- **Vision setting** – supporting the strategic process of the 'strategic advisory committee'.

4.1.6. Reinforcing strategic coverage

Strategic coverage of social registries goes far beyond analysing overall coverage rates in a country and, for example, aiming for 100 percent or 'very high' coverage. As the example of Chad has shown, significant differences across different geographic locations and across different population groups can be hidden behind a country's overall coverage rate. These differences are sometimes informed by explicit strategic choices (this is increasingly the case e.g. in Senegal, Mauritania), but are too often the result of historical contingencies (e.g. Niger), particular donor funding (e.g. Chad) or hinging on secure access (as in Burkina Faso).

This is particularly the case for coverage that encompasses a focus on vulnerability and FSN-related risks. What ultimately matters is *where* data is collected and *whose* data is collected – as well as who is being left out – *and why*. The more the data collection process is informed by evidence and strategic considerations, the more likely the result will be useful to intended users – and impactful in terms of supporting people facing different and evolving needs.

In contexts of forced displacement, needs are often highest in those areas that are insecure and thus difficult to access to collect data. This is a serious concern as the safety and security of all stakeholder groups are at stake. This leads to a trade-off between ensuring that social registry data is relevant for a wide variety of programmes, including humanitarian assistance, and ensuring methodological rigor of the data collection process. Excluding highly insecure areas might be an operational necessity but simultaneously infringes on the equal right of each citizen to be potentially included in the social registry.

NOTES OF CAUTION

Of course, in an ideal world (and often the case in middle and high income countries), no 'benevolent leader' would have to take these strategic decisions on data collection for 'optimal coverage', and the social registry information system would simply be the backbone of a 'single window service' and on-demand approach where anyone could apply for assistance anywhere in the country, when in need: that is, coverage of the data on 'potential beneficiaries' would self-regulate and change continuously (collecting minimal data and cross-checking against other government databases such as a tax registry), triggering changes in coverage of (a wide variety of) programmes. However, such an approach presupposes several conditions, for example: (a) levels of poverty, vulnerability and need that are sufficiently low to be financially and technically manageable, including catering to continuously shifting coverage (rather than fixed-list approaches); (b) a strong digital ecosystem across government (covering all); (c) high capacity at local levels of implementation; (d) a social protection system that is composed of a variety of programmes across the contributory/non-contributory spectrum and catering to different lifecycle needs. This is ultimately a long-term trajectory for countries in the region.

Detractors of social registries rightly stress the limitations of these 'fixed-list' systems to the development of inclusive social protection. As much as this is true, and fundamental to address over time, any strategic decision needs to be measured against a realistic counterfactual given the current context in each country. In this case, the counterfactual is most often each programme in a given country being run as a separate 'project' (see also Table 4 on VfM considerations):

Photo: WFP/Richard Mbouet

facing the exact same challenges faced by a social registry in order to identify its target population;

reinventing the wheel in terms of strategic choices, without necessarily building on prior learning or learning by others – or offering sufficient visibility and transparency into the ultimate inclusiveness of their processes;

duplicating efforts and costs for data collection and technology platforms for managing the data (no economies of scope and scale), often year on year, while placing a high burden on people/households who are interviewed again and again and asked to participate in repetitive prioritization meetings;

not investing in broader ecosystemic changes (e.g. interoperability) and cross-government/cross-sector coordination as these are beyond the reach of any individual programme, especially if led by external actors; and

not investing in national government capacity at local level, crucial to medium-term changes.

The following reflections outline how to ensure strategic coverage with an FSN and vulnerability lens. They should be considered and discussed based on country context.

A. Ensuring a risk-informed approach to geographic coverage

How coverage targets and roll-out plans are set, at national as well as macro and microgeographic level, matters, as Table 2 showcased across countries in the region. These need to be strategically designed, predictable and transparent.

- **At national level:**
  - A country's population size will obviously affect the feasibility of very high coverage targets. Differences across ambitions in for example the Gambia and Mauritania on one side and Mali and Senegal on the other are dictated by this.
  - Overall coverage targets would ideally be set in broad relation to key national statistics, where possible encompassing a focus on vulnerability, not just poverty (as per the most recent shift in Senegal, which raised the coverage target to 55 percent, significantly above the poverty line).
  - Ambitions can also be set in relation to the coverage of current and potential future user programmes: having the data on large sections of population that is likely never going to be used to support receipt of any benefits is a waste of money and raises expectations.
- **At macrogeographic level:** there are many ways in which data and insights/learning from a wide range of actors (including from other sectors) can help define coverage priorities more strategically – focusing on past and projected vulnerability, and not just poverty. The increasing quality of data in many countries means this can be done all the way down to secondary administrative levels (e.g. 'commune'):

- From a 'poverty' perspective, innovations in small-area estimation methods are increasingly being used, as well as satellite imagery alongside machine learning.

- From a vulnerability and FSN perspective, higher coverage (and related quotas) could be guaranteed where risks are highest, ensuring prioritization is informed by:

  . data from past crises and risk/vulnerability assessments, held by humanitarian and disaster risk management (DRM) actors (high exposure over the years, e.g. consistently /Integrated Food Security Phase Classification (IPC)/Cadre Harmonise Phase 3 or above);

  . statistical data on vulnerability based on analysis of national household surveys (e.g. Senegal);

  . FSN data (high concentration of malnutrition prevalence, food insecurity and FSN risks); and

  . DRM risk maps, agrogeological and meteorological data.

- Conflict and related security considerations may also have to be factored into decision making, and provisions taken for areas of a country where for example governments may not have control/access (see further elaboration under point D. below).

- **At microgeographic level** (down to village/community/neighbourhood): data is often not sufficiently granular for prioritization of coverage to be done in a data-informed way at this level (beyond some of the innovations offered via satellite imagery e.g. trialled by WFP in Chad, which need exploring). However, efforts can be made to ensure any consensual method (e.g. via commune-level committees) includes FSN, DRM and humanitarian actors and encompasses criteria that go beyond poverty alone, for example livelihood zones determined via Household Economy Approach (HEA) processes. Some countries may also prioritize geographic continuity (i.e. all contiguous villages) within selected macrogeographic locations, to ensure horizontal equity and avoid tensions. It is important to proof this step of the process against politicization, elite-capturing or other forms of deliberate manipulation for the sake of individual stakeholder interests.

B. Ensuring the selection of households is inclusive, justified and transparent

Once macro and microgeographic areas have been prioritized, there is a further strategic choice on whether to register 100 percent of households living in that area, or a subset – and, if so, how to prioritize households up to the defined quota (coverage target).

NOTE OF CAUTION

It is worth stressing once again that we are discussing the coverage of the registry (and data on potential beneficiaries) that would subsequently be used to inform targeting of different programmes, using different eligibility criteria for the selection of actual beneficiaries.

By definition, any prioritization of certain households or groups over others in the registry/data results in a first filter of exclusion in the subsequent targeting – unless mechanisms to address this are set in place.

Different countries make different choices, depending on what is feasible, affordable, politically palatable and reasonable given the future likely use of the data. Overall:

- Where 100 percent coverage is not possible, different data collection strategies could be pursued for different groups. Some countries (e.g. Mali) are pursuing 100 percent coverage in locations with the highest levels of poverty (and ideally vulnerability and FSN risks) and lower coverage elsewhere; others (e.g. Mauritania and Burkina Faso for urban areas) are covering 100 percent of households with light-touch data, which is used to select the lower percentage of households interviewed more in depth (those facing highest needs and risks).

- Several countries in the region (e.g. Senegal, Burkina Faso for rural areas, etc) are encompassing a community-based prioritization process to decide which households should be selected for interview. This introduces risks of elite capture, etc, but these can be significantly mitigated via transparent processes (as recently introduced in Senegal following process evaluations). Another risk is the exclusion of displaced people, as committees formed by local residents might favour the selection of fellow residents over displaced people hosted within their community.

Beyond any of these considerations, the following best practices also hold true – acknowledging these may not be realistic/feasible for most countries in the region in the short term:

- **Flexible coverage/inclusion of populations in need**, via more dynamic approaches to registration and updating – including via complementary channels/mechanisms (see sections 4.1.8 and 4.1.9 below). This will be particularly crucial for population groups that are continuously changing and critical for FSN actors as they are often nutritionally at risk: pregnant/lactating women, young children, migrants and IDPs.

- **Avoid fixed-list 'quota' approaches to the extent possible** as these rarely in fact reflect the extent of need.

- **Ensure groups most systematically at risk of being excluded are able to register**, including via alternative/complementary channels/mechanisms that cater to their specific needs, for example pastoralists, street children and people with disabilities (PwDs) (e.g. in Senegal and Mauritania via the Carte Egalité de Chance (CEC) registration).

- **Strong redress systems** (more below).

Social registries in the region all encompass 'roster' data on all household members within the household, not just household head (as is the case for most registrations of humanitarian data). This opens opportunities in terms of supporting targeting that caters to individual needs in the household. It also potentially enables linkage/de-duplication across different databases all the way down to the individual level.

NOTE OF CAUTION

Leveraging national (statistics) census processes for 100 percent data collection: high hopes but NOT recommended

In discussions with social registry representatives from many countries in the region, the research team very often received the comment that national statistical censuses were kicking off in 2023–2024 and these were an opportunity to "collect data for the social registry" because the variables across the two had "very high overlaps" (e.g. Niger, Mali, Chad, Ghana).

While this can appear to make logical sense, it hinges on the lack of understanding of the differences between statistical and administrative data, and the legislation around this. In fact, this is something that has globally never been done before and is actively discouraged, for two main reasons:

- Census data on individuals and households cannot be released to anyone (not even other government entities) if not in anonymized and aggregate format and used "exclusively for statistical purposes". Sharing this data for administrative purposes would contravene the Fundamental Principles of Official Statistics signed up to by all UN member states.

- Using statistical data for administrative purposes could severely compromise the quality of statistical data (people could have an incentive to lie).

Data could, of course, flow in the opposite direction – from administrative towards statistical data sources, as this is a very different use case that does not compromise statistical independence (this is increasingly the case in high income countries). Also, no matter what, census statistical data collected over the next few years will be essential to social planning and to the data-informed design of social registries.

C. Ensuring coverage is not 'fragmented', but at the same time strategically considering different strategies for different areas or population groups

Some countries in the region (e.g. Chad, Mali, Niger) have quite highly fragmented coverage of their population (among other issues), as they have been delegating the role of data collection to partners. The important message here is that uneven coverage is not a problem *per se*; it is a problem if it is not strategically thought through and transparently communicated. For example, we discussed above differential strategies used by countries in the region for different areas (urban/rural) or different population groups (light touch for those better off, more data for those identified as most in need). This is standard practice in other countries, for example across Latin America, including different methods for hard-to-reach groups (in their case urban slums or those living in the Amazon forest).

D. Ensuring conflict-sensitivity is mainstreamed across the entire process

Any process of singling out certain individuals or households within a community – for the purpose of the social registry or for selecting actual programme beneficiaries – carries the risk of doing harm by creating new, or exacerbating existing, tensions. Access might be severely restrained to certain areas and leaving them denies residents in this area their right to have an equal chance to be included in the registry. Furthermore, this might be interpreted as taking sides within a conflict by favouring geographic locations of one

or another party to the conflict. The ability to send enumerators to certain locations, and for them to operate, is highly dominated by local politics – so the very quality of the basic enumeration might be biased regardless of subsequent prioritization – particularly when working in areas that are not fully under government control.

Displacement patterns are very dynamic in many countries and pose a significant challenge: oftentimes specific government institutions have the institutional mandates to register displaced people and timeliness is of the essence to ensure assistance is provided as quickly as possible. Some of the questions asked in the questionnaire are difficult to apply, for example those on housing conditions do not fit the temporary living conditions in host communities. People who are already included in the registry need to be able to maintain that status, even if they get displaced to other areas, and more importantly – though beyond the control of the social registry itself – the benefits they possibly receive through assistance programmes.

The access of refugees to a host country's social registry is granted in some countries – for example Mauritania and Chad allow for them to be included in a similar way to residents and to become eligible for social protection programmes. This can lead to tensions between the refugees and host communities if the latter feel that too much attention is paid to, and too much assistance is given to, the refugees.

In Chad, where the social registry is mainly populated by one programme funded from the International Development Association (IDA)/ World Bank refugee window, the coverage rate among Chadians is only 16.3 percent, whereas 52.2 percent of the refugees are included (by December 2022). In some provinces, the overall data set in the social registry is heavily skewed towards the refugee population, to the detriment of the Chadian population: in Ennedi-Est, 71.5 percent of the RSU entries consist of refugees, whereas they constitute only 27.2 percent of the total inhabitants of the province. In Wadi-Fira it is 45.3 percent (compared with 14.6 percent of total inhabitants), and in Quaddai 34.7 percent (compared with 11.7 percent of total inhabitants).

The protection and exchange of data collected from displaced populations is a particularly sensitive issue,[32] in particular where tensions and violence have ethnic or religious connotations and certain ethnic groups are overrepresented among the displaced population. Collected personal data easily becomes sensitive when – if disclosed – it may result in discrimination against or the repression of an individual. Appropriate measures of anonymization and/or pseudonymization need to be applied to mitigate the risk of reidentification of individuals. And even for sharing aggregated data, it is important "the data sets do not divulge the actual location of small, at risk groups, for example by mapping data such as country of origin, religion or specific vulnerabilities to the geographical coordinates of persons of concern" (ICRC, 2020: 34).

32 For guidance, see ICRC (2020).

4.1.7. Increasing the relevance of the data (especially regarding FSN and vulnerability-focused targeting)

Relevance of social registry data for potential users is determined by a combination of the data that is being collected via the official questionnaire plus any further interoperability – or data-sharing – with other data sources that may complement this data (which is rarely the case in the region). In other words, what variables can be drawn upon? And how relevant are these to the targeting strategies (eligibility criteria and qualifying conditions) of different potential user programmes, both current and future (aligned with a medium-term strategic vision)?

The following considerations emerge based on the analysis of the variables typically included within questionnaires in the region.

Making questionnaires shorter and more realistic

Social registry questionnaires in the region could usefully be shortened, especially as only a very small percentage of variables is in fact used by users. Questionnaires vary from approximately 52 to 248 questions, taking up to 2.5 hours to complete, at a very high cost. This insight is reinforced by the data analysis briefly discussed in section 3 (see Silva Leander and Barca, 2024). In fact, recent analysis by the World Bank explores innovations in questionnaire design and implementation that enable 'truncation' of surveys based on prior responses (see Ohlenberg et al., 2022, and the accompanying blog).

Analysis of current variables in the social registry questionnaire of each country against their 'realistic' usefulness to (current and potential) users will be essential. The country case studies found the length of questionnaires to be consistently excessive compared with de facto and potential use. It needs to be stressed that this type of government-held administrative database is very different from, for example, post-shock data collection exercises, most often conducted by humanitarian actors.

Experience across the region has shown social registry variables are 'realistic' and useful when:

- They are currently used by programmes for their targeting (or could realistically be used in the near future). This is one of the main criteria for the determination of the 'core module' of questions in Niger's revised approach.

- They have relatively high time-validity (i.e. they are not swiftly out of date). As an example, the Chad questionnaire has ten variables on food consumption "over the last 7 days" and six variables on coping strategies in the last seven days – neither of these can be trusted over time. The variable on pregnant women is also unreliable in the medium term, unless it is updated via linkage to, for example, health data.

- They have relatively high stability over time (i.e. no drastic fluctuations depending on seasonality, leading to inequities across households for which data was collected at different times). Once again, this is the case for the food insecurity and coping capacities indicators, as well as, for example, animal ownership.

- They do not add significant cost (e.g. not anthropometrics, not extremely lengthy modules), or could be integrated at low cost.

- They are not outcome indicators, for example, FSN score (these cannot be used for targeting for all the reasons discussed in the WFP Targeting and

Prioritization Operational Guidance Note – see WFP, 2021).

- They do not risk creating perverse incentives. For example, although having children who are not enrolled in school may be associated with household poverty/vulnerability, including this variable may generate an incentive to remove children from school in order to improve the chances for assistance.

Exploring modularity

A modular approach to the questionnaire could also be considered, as Niger and Mauritania are exploring. This would entail a 'core' set of questions that reflect current/routine targeting needs and additional ad hoc modules that can be mutually agreed in advance (to guarantee harmonization) and integrated by partners during their data collection, depending on their data needs. Unique identifiers would enable linking of data at household and individual level. This approach is also used in other countries (e.g. Chile via the FIBE form) to ensure post-shock data is incorporated into targeting decisions that use the social registry as a basis. This reflects the current 'complementary targeting process' (i.e. validating and complementing social registry data) performed by many actors, for example, in Senegal, with the difference that it is more institutionalized, agreed in advance, and formally feeds back into the social registry.

Modularity could also entail a slightly different pre-agreed depth of data collection for different population groups or geographic areas. For example, deeper *ex ante* vulnerability data could be collected for households in disaster-prone areas, compared with those in the rest of the country.

Ensuring standardization and avoiding fragmentation of questionnaires

Some countries in the region (e.g. Mali and Niger) have attempted to aggregate data from different questionnaires (during different data collection rounds by different actors) into one 'social registry' database. This has led to fragmented data that cannot be fully compared and used, ultimately highly problematic from a data quality and use perspective, as recent COVID-19 response experiences also stressed (Barca and Alfari, 2022a; 2022b; 2022c). Note this is very different from pre-agreed modularity, where some common questions are asked in exactly the same format.

Considering further variables that are either missing or could be strengthened (via direct data collection or data-sharing)

Depending on the country's questionnaire and streamlining process described above, there may still be important variables missing or ones that could be strengthened, especially when considering an FSN/vulnerability lens (e.g. via linkage with other data sources). Beyond the data-identified list discussed in Silva Leander and Barca (2024), this could include the following, for discussion:

- **Operationally relevant variables:**
  - **geographic information system** information for all households can be very useful in certain circumstances (impossible to collect when data is collected at a central point of collection rather than at the house, with consequences also on verification of data);
  - more than one **phone number** – up to three different ones (including e.g.

neighbour) to ensure identification and contactability; and

- **preferred mode of payment, including bank account number and/or mobile money etc) number** if any – useful for pre-registered but not pre-enrolled households, for example to support expansions of coverage via digital transfers.

- **Variables that are intrinsically swiftly out of date or difficult to collect via social registry data collection alone, yet critical to help identify widely recognized nutritionally at-risk categories** (and also e.g. calculate up-to-date dependency ratios). For example:

  - **newborns and deaths** – could potentially be systematically pulled from civil registration and vital statistics (CRVS) data;

  - **pregnant and lactating mothers** – could potentially be systematically pulled from nutritional monitoring/health data;

  - **PwDs** – could be systematically pulled from complementary registration processes such as CEC in Senegal;

  - **IDPs and migrants** – could be pulled from relevant complementary registration processes, where there are any, catering to the specific needs and concerns – including safeguarding concerns – of each group; and

  - **street children, pastoralists, etc** – as above, but may require specific efforts.

- Other variables worth considering if aiming to identify households with (especially FSN-related) vulnerabilities:

  - **past death of a child in the household** (if this can be pulled from other administrative data sources as too sensitive to ask);

  - **health risks relating to undernutrition** (e.g. diarrhoea);

  - **water and sanitation conditions** (access/type of toilet, drinking water, etc); and

  - **historical receipt of transfers** (via an integrated beneficiary registry function).

Importantly, from a cost-effectiveness perspective (where this data is not already available and matchable via other administrative data sources), there is a significant amount of village-level data (via a short village-level questionnaire) that could play a big role in complementing household data while providing fundamental indications to support, for example, nutrition-sensitive targeting. This includes distance to key services and a wide variety of other variables, which it does not make sense to collect at household level (but via complementary community-level questionnaires).

The use of 'alternative' data sources (beyond other administrative data sources discussed above) as complementary to social registry data could also be considered, with strong attention paid to potential benefits and emerging risks. For a full review of potential data sources, their uses, and the opportunities and challenges associated with this, see Aiken and Ohlenberg (2023).

4.1.8. Improving currency

One of the key dimensions of data quality is its 'currency': the degree to which data is current (up to date), and thus represent individual and households' real circumstances at the required point in time. Overall, it will be crucial to make progress on this, given the worrying trend in the region to prioritize static data collection approaches (section 2.3.3), as up-to-date administrative data is crucial for inclusiveness, adequacy and cost-effectiveness (Barca and Hebbar, 2020):

- **Inclusiveness:** Given the dynamic nature of poverty and vulnerability, any social assistance programme that bases eligibility decisions on a static snapshot will likely face serious challenges in providing support to those most in need, especially when the snapshot is seriously outdated. The same principle is true for categorical programmes, whereby the beneficiary status may be triggered by a life event, such as a child grant for a newborn.
- **Adequacy:** Up-to-date data can also ensure that benefits are truly catering to household and individual needs in terms of adequacy of provision. For example, the size of a transfer may vary depending on changing numbers of household members, changing status (e.g. illness and disability) and the types of shocks faced, among other aspects. Similarly, the type of service and linkages across programmes also need dynamic updating.
- **Cost-effectiveness:** Delivering benefits and services to the right people at the right time requires up-to-date information on beneficiaries.

It is almost impossible for any given database to continuously represent an up-to-date snapshot of a population, but many realistic efforts can be made to ensure social protection data is more up to date than what is currently the case in the region. These will of course need to vary depending on country context, but include the following, summarized in Table 6.

Table 6: Updating strategies and reflections

Possible updating strategy	Reflections
Census survey every x years	Currently predominant across the region, but highly problematic from an updating perspective given continuously changing household conditions. Unless updating targets are established by law (ideally under three years), it is unlikely these are respected for lack of funding. In fact, even where this is the case, delays are frequent.
Mobile registration teams complementing static data collection	Could be set up at national level to prioritize updating for areas where needs/conditions have changed, or are particularly acute (i.e. data use very likely). Relatively small cost considering potential benefits.
Updates via grievance mechanism	A functional grievance mechanism, especially if supported by capacity at local level, could help facilitate updates for pre-identified categories of changes to household conditions.
Updates via user feedback	User programmes need to retain the capacity of providing updates to social registries as they are the ones with the most up-to-date data. Several issues will have to be tackled in order for this to work effectively (which it currently isn't across all countries in the region). A platform (software module) for receiving and validating user-updated data and a standardized process for this will need to be developed. For example, Mauritania is currently in discussion to develop a platform for user data to feed back to their Registre Social (RS): • defining mechanisms to ensure and validate data quality and guarantee trust for user data; • ensuring users retain RS functional unique identifiers, to facilitate data matching; and • agreeing with users what variables most urgently need updating – for example, in some countries users are only using and then collecting updated information on a very restricted set of variables (name, phone number, etc) – not that useful for updating purposes.
Updates via targeting exercises of new programmes	Linked to the point above, for areas/households for which data needs to be collected from scratch – on one hand, ensuring these collect data using the same 'harmonized' data collection questionnaire could ensure the data is subsequently fed into the registry (where data protection concerns are addressed). On the other, this places the onus and cost on programmes that often have far more limited data collection needs, while also transforming potential user programmes into contributor programmes and potentially increasing fragmentation and undermining data quality and trust.

Possible updating strategy	Reflections
On-demand applications (in person)	It is crucial, over time, to shift to more on-demand and continuous approaches to registration, increasingly leveraging permanent local capacity where possible. This will require a diagnostic of diverse user needs, as well as addressing some of the political economy barriers to dynamic registration (no control over coverage as this is not a 'fixed-list' approach), but is a critical step towards inclusive protection. For example, Mali has made important efforts in this direction. Barca and Hebbar (2020) may be of help.
On-demand applications (digital)	Online or SMS/USSD-based registration options do not seem to be feasible in the short or medium term in the region, but have been used very successfully in other regions, especially where authentication capacity was possible via foundational identifiers.
Interoperability with other government datasets	Leverage updated data at the source and linking it to the social registry – as further discussed in section 4.1.9. This is especially important for programmes with categorical eligibility criteria focusing on age and household composition (e.g. dependency ratios). It will be virtually impossible for administrative data to have up-to-date information on young children, household composition and deaths within the household if high-quality and digitized CRVS data is not linked. Data on pregnant and lactating mothers could be similarly pulled from health systems, disability data from disability information systems, etc.
Differential update strategies for different variables and household types	This could take different forms but hinges on a more modular approach to the data, for example: • obligation for people registered in the social registry to inform government authorities if their situation changes in relation to key household status dimensions (birth, death, divorce, migration, etc) as is often the case in many countries; • light-touch post-shock survey that updates key variables and collects missing ones (e.g. damage), complementing core data; and • more frequent updates for certain types of households – possibly living in specific livelihood or risk zones, etc.

It is also worth stressing that, by definition, no data collected *ex ante* will truly represent a situation *ex post* (especially in the context of shocks). Other countries address this by having a 'core' of data within their social protection information system that can be swiftly validated and/or complemented via light-touch additional data collection (e.g. a short one-page form), linked back to the 'master data' via unique identifiers (Barca and Beazley, 2019). The potential for this can be explored according to context.

4.1.9. Linking to the broader data ecosystem: interoperability and data-sharing

When thinking about the social protection information system and the role it can play in preparing and responding to shocks, there is a tendency to focus on 'social registries' alone. Yet it is crucial to think across the whole data ecosystem and how social registries can strengthen data exchange (ideally moving towards interoperability) with other relevant registries that can help to significantly enhance targeting outcomes (Hebbar, 2022).

Having said this, full interoperability across government (and non-government) databases does not appear to be a short-term option in most countries in the region, though the policy agenda in several of them aspires to this. This is mainly driven by the immaturity of the overall digital ecosystem (low coverage, low digitization of key databases), lack of capacities and/or political will. Data is power, and data-sharing touches on the mandates, purpose and ownership of different actors over their programmes/processes, which makes it a challenge from a political economy perspective. The issue is, of course, compounded by the lack of a very high coverage of foundational identifiers acting as a unique identifier in most countries in the region.

While many of these aspects are beyond the direct control of the social registry actors in the short term, it will be critical in the medium to long term to engage in the discussions – often led by the agency in charge of digital transformation – on the digitization of key government information systems and the creation of a whole-of-government architecture, of which the social registries would be one building block.

In the short term, there are aspects that social registry units in the region could/should start considering, if this is not already the case:

- **identifying which key government databases/information systems it would make most strategic sense to draw upon** (and/or exchange data with bi-directionally) – and mapping the status of each, as well as a roadmap towards further integration with each (for a full list of key systems and why they may be useful, see Table 7);

- **define protocols and/or legal frameworks for data-sharing, access and use, alongside inter-institutional arrangements** for governance and management of systems and their integrated use;

- **partnering with identification and civil registration** agencies to piggyback on the social registry data collection process and beyond to facilitate access to identification and civil registration for those facing the highest barriers;

- **ensuring open APIs (application programming interface) and open standards are used where possible**;

- **developing a data dictionary that is aligned with other government systems** – for example, this may imply ensuring

uniformity of definitions of administrative structures at the subnational level; periodic government changes to administrative units further complicate the situation;

- **ensuring matching of data can be carried out at the level of the individual, not just the household** – this has huge implications, for example, for de-duplication; and

- clearly **setting out the risks deriving from this process and mitigation strategies developed**.

Materials and experiences from other countries documented and discussed by the Universal Social Protection (USP 2030) Convergence Initiative may be useful for this. As an example, adopting "open standards, open data, open source, and open innovation" is Principle 6 of the Digital Development Principles, dictating that new software code, tools, data collection, content and innovations for sector-specific solutions should not be locked away behind licensing fees, with data only used by and available to specific initiatives, but should enable a "whole of government approach" (Hebbar, 2022).

Photo: WFP/Abdoul Rafick Gaissa Chaibou

Table 7: Interoperability and data-sharing with which other databases and why?

Which system?	Why useful to share data (if well maintained, accurate and up to date)	
	From (...) to social registry	From social registry to (...)
Programmes/ interventions across the social protection sector and beyond	• The social registry can be continuously updated via programme data (which is often more up to date). • Integrated beneficiary registry function and M&E – tracking who receives what across multiple programmes (including across sectors). • Potential for integrating delivery functions (e.g. payments, grievance redress).	• Programmes can use data from the registry to select their beneficiaries. • Programmes can benefit from further data integration established at national level.
Identification system; see also this webinar	• National identification acts as unique identifier and enables data exchange/ interoperability with other government databases. • Authentication of identity.	• Data collection effort for registry could help identify and register unregistered individuals or act as incentive.
CRVS system; see also this webinar and accompanying resources	• Can include current data on newborns/children as well as deaths (the types of variables that are often out of date in social registries), beyond useful data on age. Very widely used in middle and high income countries, including for proactive registration and household composition (marriages, etc).	• As above.
Geographic information system	• Provides spatial information on hazards and various other metrics of spatial vulnerability and poverty.	• Social registry data can be used to support broader geographic information system analyses.
Disability registration; see also this webinar	• Can provide trusted data on disability status of household members to inform eligibility determination or prioritization.	• Social registry data could trigger deeper disability registration for identified individuals and complement disability data.
Case management system	• Can be used to identify and flag households with specific protec-tion-related vulnerabilities and risks and support referrals.	• Social registry data can complement case management data and provide broader household context.

Which system?	Why useful to share data (if well maintained, accurate and up to date)	
	From (...) to social registry	From social registry to (...)
Health system data; see also this document	• Can provide trusted data on chronic illness status of household members to inform eligibility determination or prioritization, as well as other health-related needs. • Potentially also a source of continuously updated data on pregnant and lactating women as well as newborns.	• Programmes can use data from the registry to select their beneficiaries (e.g. subsidized health insurance). • Better integration, coordination and planning across social sectors.
Tax data and social insurance data	• Ensures comprehensive overview across social protection pillars. • Can be used to inform 'targeting out' of richer/affluent segments of the population as well as those already covered by social insurance, while also supporting prevention of fraud. If very high coverage, could also be used for means testing. May also provide classification of employment categories.	• Tax authority could benefit from better understanding of poverty and social protection receipt.
Informal worker registration	• Can be used to identify select categories of unprotected workers (e.g. no access to social insurance).	• Across these categories, can support tailoring of programmes to individuals' and households' broader socioeconomic needs.
Land cadastre and farmer registries; see also this paper	• Can be used for data on land/home ownership and use, type of crop production, strategic insights on productive inclusion potential, etc. • Farmer registries can be a registration gateway to provide subsidized social insurance to informal agricultural workers.	
Refugee/ IDP/migrant registration	• Can support inclusion of these populations into social protection.	

Source: Barca (2023, based on Barca, 2018

4.1.10. Ensuring data protection

Beyond being a human right, privacy and data protection issues are central to social protection information systems, as these collect and/or process enormous amounts of personal information, often on a country's most vulnerable and marginalized population groups. "Inadequate privacy and personal data protection in social protection programmes can have numerous negative impacts" (Hebbar, 2022; Wagner et al., 2022):

- It can harm individuals due to stigma, discrimination, perceived partiality in a context of conflict, abuse, surveillance and exploitation. Vulnerable populations often do not have any alternative but to share their data in order to receive support and are often less able to protect their rights than other segments of the population.

- It can undermine public support for programmes by diminishing public trust (as in cases of mass information disclosure).

- It can compromise the effective functioning of social protection programmes, including their effective coordination and data-sharing with other government and non-governmental partners (e.g. humanitarian actors upholding humanitarian principles).

With data protection assurances varying widely across countries in the region (section 2.3.5), especially in terms of de facto enforcing and adapting to specific social protection concerns, data protection can be enhanced by:

- **Following best practice:** A new SPIAC-B endorsed guide (Wagner et al., 2022), discusses these in depth. This guidance should be leveraged to inform countries' trajectories.

- **Taking informed consent seriously** at the point of data collection, including stressing the fact data is likely to be used for a range of programmes both current and future. This was rare in the region, though data was in fact being used this way.

- **Conducting a privacy impact assessment**, identifying and addressing/mitigating emerging risks.

- **Understanding legal restrictions around the sharing of extremely sensitive data**, for example bank account information, tax/national identification, ethnicity, biometrics, etc.

- **Understanding the particular protection concerns emerging in contexts of conflict and instability**, including via experience-sharing with humanitarian counterparts – and explicitly addressing these.

- **Understanding the data protection implications of requesting humanitarian actors to share their data**. These are often not allowed to share data with national governments because of their legal status and obligations to respect humanitarian principles – unless extremely strong data protection assurances are in place (ICRC, 2020). Alternative approaches, such as zero knowledge proofs and hashed personal data, could also be explored.

4.2. Enhancing data-informed targeting with an FSN/ vulnerability lens

This section goes beyond the data and set-up of the social registry itself, towards analysing how FSN (and other) actors could use the data – from the social registry and from other data sources – to inform their targeting strategies, as requested for this assignment. It doesn't go into any prescriptions on *how* targeting should be done – as this is beyond the scope of this piece – but it provides food for thought, with a particular focus on data-informed targeting approaches (those that would draw data from the social protection information system).

Why is this important?

While routine social protection focuses on poverty alleviation, FSN programmes aim to address food insecurity, undernutrition and related vulnerability. The two are closely related, but not the same. On one side, the literature stresses the two are strongly connected, as poverty and marginalization compound malnutrition, influencing people's ability to access and consume nutritious foods and access nutrition-related services (e.g. as summarized in TASC and SPACE, 2021b; see also Siddiqui et al., 2020; FAO, 2022).

On the other side, the studies explicitly exploring de facto overlaps between the two in the micro-data show that overlaps exist – but not to the extent expected. This has important implications for programmes aiming to target malnutrition and food insecurity, which cannot rely on the same methods and indicators as those targeting poverty.[33]

As an example, Brown et al. (2019) draw on data across sub-Saharan Africa and find that about 75 percent of underweight women and undernourished children are not found in the poorest 20 percent of households, and half are not found in the poorest 40 percent. FAO (2022) similarly compare data across ten countries in sub-Saharan Africa and Latin America, finding that – while monetary poverty is strongly correlated with food insecurity – the overlaps vary widely across countries, within country geographies and depending on group characteristics (e.g. agricultural livelihoods).

4.2.1. Dimensions of 'good enough' targeting

Before going any further, it is important to clearly frame what is intended by 'good enough' targeting when analysing the potential usefulness of social registries and broader social protection information systems to enhance the targeting of interventions that aim to address vulnerability (i.e. not just poverty), and especially vulnerability to food insecurity and malnutrition.[34] Furthermore, it needs to be acknowledged that no form of targeting is perfect in any way, and that each targeting choice presents multiple trade-offs against different relevant dimensions. Targeting is also "far from just a technical exercise: it is a deeply contested and political exercise" (Sabates-Wheeler and Szyp, 2022) and should be judged by those parameters.

Very often (including within the analysis discussed in Silva Leander and Barca, 2024) a methodological choice is made to start from a focus on 'targeting accuracy': that is, comparing different targeting approaches in relation to the objective of best identifying

33 It should be noted that an increasing strand of literature and practice (especially driven by the World Bank) has started to define and measure 'vulnerability' as 'vulnerability to poverty' (Hill and Porter, 2017; Gallardo, 2018; Skoufias et al. 2019a; 2019b; 2021; Carraro and Marzi, 2021), with different methodological and practical implications.

34 This does not just refer to 'emergency' or seasonal responses, but also routine programmes.

those who were the most vulnerable to food insecurity, as represented in the data available within social registries. By definition, such a comparison 'prizes' those data-driven and algorithmic methods that are designed to maximize the desired outcome variables (given the available data, which also needs to be judged for quality and currency).

However, 'targeting accuracy' needs to be unpacked, in terms of the level of error versus the degree of error emerging from different approaches. The 'level' tells you the percentage of inclusion/exclusion error,[35] and errors are likely to be greater the smaller (lower coverage) the programme, particularly for proxy means test (PMT) type methods.[36] The 'degree' of the error is also important: where are those errors? For inclusion errors, if errors are from just above the cut-off point, that is much better than if the wrongly included are from the richest. For exclusion errors, even null degrees of difference create life-changing discontinuities for people. This is where benefit incidence analysis is useful as an accompanying tool, to show the distribution of those who are included across different methods (Sharpe et al., 2021).

Second, 'targeting accuracy' needs to be complemented by other dimensions, to conduct a comprehensive evaluation of what may be 'good enough' in any given context and for different purposes (Brown et al., 2019). Such a comprehensive evaluation framework is presented in 2 below, with relevant explanations for each dimension.

Any given targeting approach, including all the data-informed methods summarized in Table 3, will fare differently across these dimensions, which matter to intended outcomes as much as – and often more than – accuracy alone. Proxy means tests and their variations may perform very well 'statistically' but are also widely documented in the literature as being problematic against many other dimensions in Figure 21.

35 So, for example, if a programme is targeting the poorest quintile but only half of those included are actually in the poorest 20 percent and the other half are above the poorest quintile, errors of inclusion/exclusion are 50 percent.

36 This is because targeting effectively involves trying to rank people by consumption. The smaller the programme in terms of coverage, the more each error in ranking matters because the target is so small.

Figure 21: Relevant dimensions/criteria for assessing targeting approaches

Emerging trade-offs clearly addressed and mitigated

'Accuracy'
inclusion and exclusion 'errors' likely to emerge for the population of interest (depending on how this is defined against outcomes of interest e.g. poor vs 'vulnerable' as measured in different ways – e.g. FSN vulnerable), with stronger weight for ensuring minimization of exclusion errors

Acceptability (political economy and 'legitimacy') I.e. acceptable:

- For potential beneficiaries and communities (local level)? Sensitivity to cultural norms of communities in relation to the sharing and distribution of assistance – acknowledging the frequent practice of informal redistribution where targeting is not understood or accepted and the (direct, indirect, opportunity) costs to households of participating.
- For the general public (e.g. including middle classes, etc)? Not undermining social cohesion, generating social tensions or conflict
- For national policy-makers? So they can increasingly take over 'emergency' preparedness and response, including domestic funding for it over time.
- For humanitarian and development donors? So resources can be mobilized to support the transition in the medium term.
- For humanitarian actors? Sufficiently covering humanitarian needs and not compromizing humanitarian outcomes, so parallel responses are not triggered.

Feasibility (Practicality)
What targeting method is feasible and practical – at scale, and in the medium to long term – from the point of view of:

- not overburdening SP administrative capacity?
- institutional path dependency and the strength of existing administrative and data systems? Including financial, technical and administrative capacity to design, implement and adapt the method.

Appropriateness

- Vis-à-vis overall needs and vulnerabilities and how they are distributed across population, over time: beyond poverty, looking at multidimensional and intersectional vulnerabilities
- Vis-à-vis the objectives of the intervention: what impacts are intended? What method is likely to maximize those impacts?
- Vis-à-vis the type of risk or shock, and stage: For example, for longer-term protracted crises and chronic FSN needs, more precision may be needed, while for short-term response a blanket approach may be more appropriate (e.g. allowing for 'inclusion errors'); for conflict 'do no harm', etc.
- Vis-à-vis the trade-off with adequacy: in situations of fixed budget, methods driving higher coverage may compromise on transfer value (critical to nutrition outcomes)
- Vis-à-vis ethical, human rights and inclusion/equity considerations

Coordination/cohesion
Cohesive (well layered and sequenced) with all other social protection/disaster risk management/humanitarian/nutrition programmes

Timeliness and adaptability
What approach (or sequence of approaches over time) will guarantee timely support (e.g. before negative coping strategies kick in)? Will the approach be easily adaptable to changing needs?

Transparency and accountability
What approach will ensure the highest transparency and accountability? E.g.

- Vis-à-vis engagement of communities/stakeholder groups in defining, refining or validating targeting mechanisms and criteria
- Vis-à-vis transparency, ease of understanding criteria/method and verifiability – so targeting decisions can be checked and challenged
- Vis-à-vis enabling effective feedback/complaints/grievances and other accountability mechanisms

Affordability and value for money
What is affordable? Do the benefits of the proposed approach to targeting (and an increased focus on 'targeting accuracy') outweigh the costs (community engagement, data collection, data analysis etc)?

Sustainability
Will the choices made be sustainable in the medium to long term, while not undermining sustainability of routine programmes? Will methods, criteria or case loads be incorporated into routine systems?

CRITERIA TO ASSESS 'TARGETING' approaches (focus on risks/vulnerability and FSN needs)

Source: developed drawing on work by Cherrier (2019) and extensively adapted by authors via collective brainstorming during two sessions of the informal hangout on social protection in crises contexts

As an example, targeting that is not transparently understood can fuel social tensions and do harm, instead of playing a positive role in building a better social contract. In a region where many governments are facing legitimacy challenges and insecurity is also fuelled by community tensions, it is important that targeting is designed with that in mind: for example, at least dependable, transparent, rights-based and using criteria that are understood and accepted by society (Little and Barca, 2021), or even much more categorical. This is of course ever more complex in situations of active conflict, especially where government may be party to that conflict and insufficient coverage rates contribute to social tensions.

Targeting design choices needs to therefore be systematically evaluated against all of these dimensions, to weigh emerging trade-offs against a country's context (administrative capacity, political settlement, etc), and also pre-empt and address emerging risks where these are certain to arise. More broadly, the "costs of improving targeting increase sharply as efforts are made to achieve ever greater targeting accuracy" (Sabates-Wheeler and Szyp, 2022), raising questions on the usefulness of spending so much time and money on this.

This is explored in Table 8, based on a review of existing literature, to showcase how each dimension needs to be carefully considered when evaluating one method against another. In Table 8 we prioritize methods with FSN focus and differentiate between a standard PMT and one that has been designed to identify FSN-insecure households. Geographic targeting is discussed separately below.

Photo: WFP/Cecilia Aspe

Table 8: Comparing targeting methods against relevant dimensions

	Modified PMTs (FSN focus)	PMT (poverty focus)
To what extent data-informed and whether/ how leveraging social registry data	Based on data (between 14 and 50 variables) from two key datasets: social registry plus recent nationally representative household sample survey with strong FSN variables.	As PMT+ (but poverty not FSN focus, that is, proxy for consumption poverty).
What variables 'usually' used	Similar to PMT (poverty) but can be enhanced with additional variables. Weights of variables altered to maximize FSN performance.	De facto, most often: asset ownership, housing conditions, household size, schooling, disability, etc (with weights assigned).
Accuracy	By construction, can be designed to be most 'accurate' to predict FSN vulnerability. Strongly dependent on quality and currency of two datasets it draws its algorithm on (and specific variables used to model FSN insecurity) – posing big caveats for many, fluid, crisis settings. By definition only 'predictive' power and arbitrary cut-off point (those just above line not really better off). Based on national 'average', not reflecting local vulnerabilities, livelihoods, etc. Accuracy increases with higher coverage. Risks of people 'playing the system'.	By construction, most accurate to predict poverty – but performs worse for FSN (by definition). Also same issues as PMT+.
Acceptability (including political economy and legitimacy), transparency and accountability	To people: very often not understood/accepted, viewed as non-transparent – especially if not over-rideable. Can fuel social and political tensions. To government: appreciated as can give extra control over budget (fixed list) and sense of 'objective' targeting.	
Feasibility (practicality given capacities)	Requires high technical, financial and administrative capacities, including regular (and high-quality) data collection (of both survey and administrative data) plus ability to remodel parameters. Risks overburdening capacity in certain contexts, without partner technical support.	

	Scorecard/multidimensional (FSN focus)	Simple categorical	Community-based
	Can easily be based on social registry data.	Can be based on social registry data if sufficient focus on ensuring key variables are up to date – likely requires complementary data sources (e.g. under-5, pregnant/ lactating, etc).	By definition does not leverage social registry data. Locally available data/ knowledge. Characteristics perceived to be associated with poverty and vulnerability/ FSN insecurity.
	Depends on context/relevant variables.	Varies, and can be tailored to nutritionally at-risk groups (and those for whom nutritional impacts are higher), for example dependency ratio.	De facto, most often: orphans, widowed, disabled, chronically ill, high dependency ratios, pregnant/lactating mothers, households headed by women, etc.
	Depending on how this is designed, can perform relatively well (though less well than PMT-based methods).	Leads to higher 'exclusion errors' against both poverty and FSN objectives.	Mixed performance against both poverty and FSN objectives.
	To people: relatively clear and understood, less risk of social jealousy/tensions. To government: can be tweaked to give control over budget, some sense of facilitating 'targeting' of poorest/most in need.	To people: entitlement (clear, understood), promotes inclusion, dignity (no shame), less risk of social jealousy/ tensions. To government: no full control over budget, no clear 'targeting' of poorest/most in need.	To people: for the most part accepted by people/ communities if run transparently, but subject to elite capture, political manipulation and exclusion of marginalized groups. To government: control over budget via quotas but less control over local politics.
	Requires relatively low technical, financial and administrative capacities.	Requires relatively low technical, financial and administrative capacities, but works best where, for example, civil registry, disability registration, health data are functional.	Requires transparent and high-quality process and staff to run these as and when needed.

	Modified PMTs (FSN focus)	PMT (poverty focus)
Appropriateness	Problematic in relation to human rights and equity considerations. Needs defining according to purposes and other trade-offs, as per Figure 21.	
Affordability and value for money	High cost of implementation. Can lower cost by keeping coverage low (against budget ceiling) – but compromising on broader intended outcomes.	
Coordination/ cohesion plus sustainability	If never complemented by a broader set of programmes addressing lifecycle vulnerabilities, it is insufficient, on its own, to set the foundation of a social protection floor.	

Source: adapted on the basis of TRANSFORM (2018); Brown et al. (2019); Barca and Beazley (2019); Sabates-Wheeler and Szyp (2022); Altindağ et al. (2021); and Grosh et al. (2022)

	Scorecard/multidimensional (FSN focus)	Simple categorical	Community-based
	Needs defining according to purposes and other trade-offs, as per Figure 21.	Needs defining according to purposes and other trade-offs, as per Figure 21.	Needs defining according to purposes and other trade-offs, as per Figure 21.
	As per PMT+.	Lower cost of implementation. Coverage not subject to fixed list (whoever is eligible is entitled), meaning less control over budget ceiling.	By definition, community-based targeting repeated every time targeting is performed (no data retained) so costs depend on how targeting structures are institutionalized. Can lower cost by keeping coverage low (against budget ceiling) – but compromising on broader intended outcomes.
	Depends on how this is set up.	Foundation for lifecycle programming.	Not sustainable in medium/long-term perspective, not adopted by any middle or high income country.

4.2.2. Data-informed geographic targeting

Geographic targeting remains a crucial first layer in targeting vulnerability and food insecurity – whether for ad hoc emergency response programmes, recurrent lean season response or routine programmes. In some contexts of widespread need, it may even make sense for it to be the only layer – given it can be quick and cost-effective (e.g. blanket targeting of households in identified areas) (McBride et al., 2021; Della Guardia et al., 2022).

From a data perspective, geographic targeting itself does not draw on social registry data, but it can be more easily rolled out (e.g. immediate triggering of support to households in the selected area) if the areas that are geographically targeted have high coverage (and the right type of data) in the registry – especially if some form of pre-enrolment has been conducted as per, for example, the Hunger Safety Net Programme in Kenya. Section 4.1.6 extensively discusses why it is important to think through the geographic coverage of social registries strategically – with an eye to vulnerability and FSN concerns. Where that has been the case, the likely overlaps between hotspots of vulnerability (as identified by Cadre Harmonisé/IPC and other methods) and existing data will be higher, amplifying the potential range of social registry data use to inform targeting of households/individuals.

To inform geographic targeting, beyond tried and tested humanitarian processes (Cadre Harmonisé/IPC), satellite imagery and small area estimation methods increasingly offer great potential for improved and timely microgeographic targeting of vulnerability. Satellite-based maps "can be produced at resolutions of a square kilometre or less, creating opportunities for nuanced and fine-grained geographic targeting at a scale difficult to achieve with standard mapping techniques" (Aiken and Ohlenburg, 2023). Improvements in machine learning also mean that satellite images and remote sensing can be used to precisely infer a wide variety of vulnerabilities, stresses and shocks (McBride et al., 2021): flood exposure, crop failure, housing and infrastructure damage[37] and food insecurity,[38] to name a few. The daily frequency with which new satellite data is collected means they can offer an up-to-date overview of an evolving crisis situation – acting as early warning and trigger (McBride et al., 2021). Nevertheless, significant technical/practical challenges[39] remain that will need to be ironed out before such approaches can be fully institutionalized.

4.2.3. Data-informed household/individual-level targeting

Different data needs of different household/individual-level targeting approaches

The range of methods than can be used for household and individual-level targeting in data-constrained countries (i.e. means testing etc not possible) have different data needs, and can almost be classified along a scale of complexity. This is visualized in a

37 For example, see Gupta and Shah (2020).

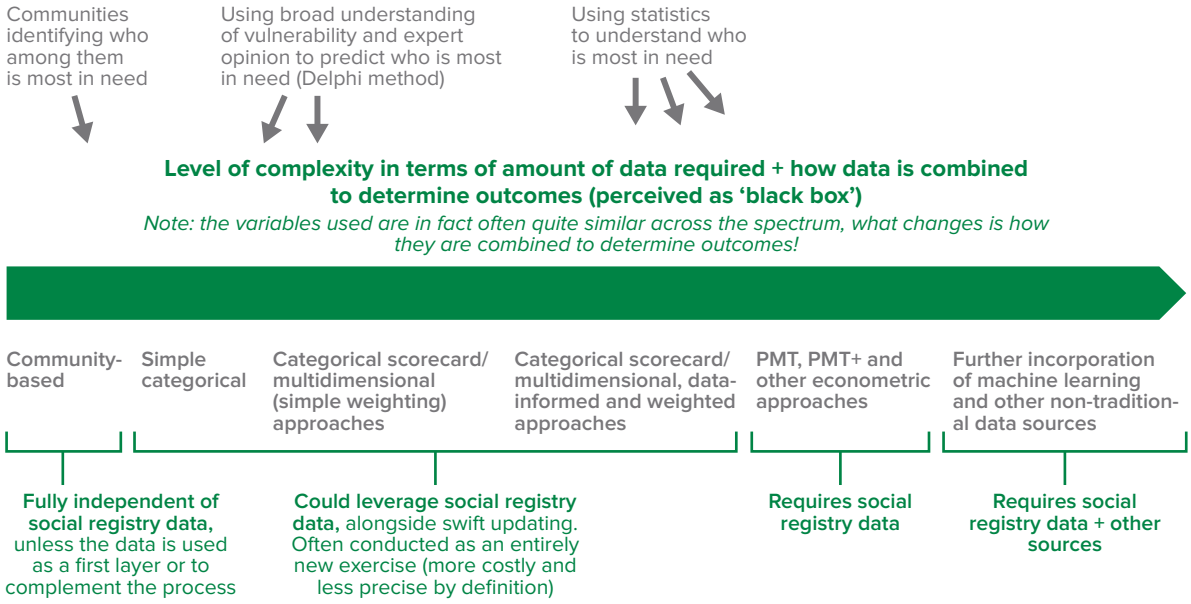
38 Noting "machine learning and big data-informed mapping methods have not performed as well in predicting indicators of malnutrition as they have in predicting asset wealth" (McBride et al., 2021).

39 Capacity: the neural networks that are most commonly used to draw inferences from satellite imagery have significant barriers to entry in terms of both human capacity and computational capacity. Data access and cost: while publicly available satellite imagery can meet some social protection needs, it is not as high resolution or as frequently updated as private imagery, which may be prohibitively expensive for some programmes unless partnerships are established between private satellite data holders, governments, researchers, multilaterals and humanitarian organizations for humanitarian tasks or other endeavours (e.g. farmer registries). As the data input demands grow, so does the burden and expense of updating the model/map. Source: Aiken and Ohlenburg (2023).

simplified manner in Figure 22, starting from those methods that do not require any form of data collection *per se* (community-based targeting[40]) and moving towards those that have much higher data requirements, including increasing complexity in the way in which data is processed to determine targeting outcomes (e.g. incorporation of non-traditional data sources and machine learning approaches).

Many of the types of variables used by these different methods to identify eligible households/individuals often overlap, and many of these have the potential to draw on the type of data contained within a social registry (or the broader information system it links to). Whether via community-based methods, scorecard methods or PMT methods, users are likely to find prioritization of households headed by women, that include people with disabilities, that have low levels of education, etc. What changes is the increasing number of variables and how these are combined to determine outcomes, which is increasingly more data-driven (e.g. adding of weights/ coefficients) and thus less transparent (as shown by moving to the right of Figure 22).

Figure 22: Spectrum of data needs for different targeting approaches



Further details on some of the less commonly known econometric/algorithmic/ statistical modelling approaches and how these have been adapted in other countries to encompass a greater focus on vulnerability and FSN concerns is discussed in Silva Leander and Barca (2024).

40 Not tackled in this paper but also not requiring social registry data are: (a) lottery approaches; (b) self-targeting approaches typically used by public works via low wage rates (problematic from many perspectives); and (c) implicitly targeted approaches (e.g. for school feeding, anyone attending the targeted school).

The social registry as a data source for identifying eligible households/ individuals – registration versus targeting

Given social registries' usefulness across a range of approaches, it is important to stress once again that social registries are – and should be – agnostic as to how the data they contain is used to inform targeting. Their strategic objective is to provide data on potential beneficiaries across a range of user programmes – each with their own targeting philosophies, eligibility criteria and qualifying conditions (Leite et al., 2017; Barca, 2018; Chirchir and Barca, 2020). This includes programmes addressing lifecycle risks, through categorical targeting, or multidimensionally addressing other needs – not just poverty-targeted programmes. It also includes programmes led by non-government actors.

In short, harmonizing the approach to registration (i.e. data collection) does not imply a need to harmonize (or worse, homogenize) targeting design: the same dataset can support different targeting approaches, led by different actors, including via complementary data collection where needed. Ultimately, social registries should be seen as the data backbone of single window service/one-stop-shop approaches to registration, as theorized by ILO, and they should be built to play that function.

NOTE OF CAUTION
design choices for the registry have a very strong impact on targeting outcomes, limiting their supposed 'agnosticism'

The statements above have important implications on the design choices of the registry itself, as discussed in other sections. In fact, existing targeting choices can influence data structure (e.g. data collected only on the 'poor'), which in turn limits how agnostic social registries truly are. Ultimately, if social registries are to act as the 'gateway' for targeting of all social programmes (and beyond), and especially where this is being made obligatory by law, being excluded from the registry is equal to being excluded from the targeting, unless complementary data collection is enabled. The design choices of the registry itself (e.g. its coverage, including of conflict-affected areas, openness to dynamic inclusion, the kind of variables they collect, etc) have a very strong influence on targeting outcomes, as the second group is a subset of the first.

As section 2 has shown, this has been made very clear in a few countries (e.g. Senegal, Mauritania), but less so in others in the region. Moreover, even where this distinction is clear, programmes sometimes 'defeat the purpose' of the social registry as a useful data source, as they:

'piggyback' their targeting on the beneficiary list of flagship programmes rather than on the social registry itself – meaning they also 'piggyback' on the targeting approach adopted by that programme (most often PMT); and

take the registry itself as a pre-digested and 'targeted' list of people who should be eligible for assistance, rather than strategically using data points in the registry to inform their eligibility (e.g. some humanitarian programmes in Senegal).

It is clear there is ample space for more strategic approaches to leveraging data from the social registry to inform FSN-focused targeting.

An important first step would be for potential user programmes in each country to discuss the respective relevance and usefulness of the data points that social registries already include – and how this could better inform their targeting. This would also inform their views and inputs

on a possible revision of the questionnaire going forwards.

Questions that could be asked include:

How could individual-level data from the roster section be better used to capture categorical vulnerabilities (e.g. disability, IDP/refugee status, age, widow/orphan status, health status, illiteracy, etc)? How could this be used for more individual (rather than just household-level) targeting?

How could household-level data (housing characteristics, access to services, etc) be better used to capture vulnerabilities to specific shocks and risks – for example, poor water and sanitation informing water, sanitation and hygiene programming and targeting; poor housing material and location in river basin informing post-flood targeting, etc?

How could other data points inform strategic programming on other fronts – for example, by type of livelihood (such as agricultural workers)?

What important variables are by definition missing or out of date in the social registry, given its current set-up – for example, a lack of interoperability with health data and civil registration data means that information on young children (first 1,000 days) and pregnant/lactating women is out of date almost by definition?

To start the conversation, an interesting and simple exercise with current and potential users could be to share a full Excel list of variables and have each user/programme interact with that, for example by marking: (a) which variables they use for their targeting (very few); (b) which variables they could further incorporate in their targeting; (c) which variables they currently use for other purposes beyond targeting (e.g. planning); and (d) which variables they could further incorporate, for example, into planning. In some countries (e.g. Mauritania) the conversation with users has already usefully gone beyond this point, towards defining joint protocols for how different user programmes will use the data to inform their targeting.

Further considerations on the use of data from social registries to inform targeting of households/individuals in response to shocks (beyond 'routine' programming)

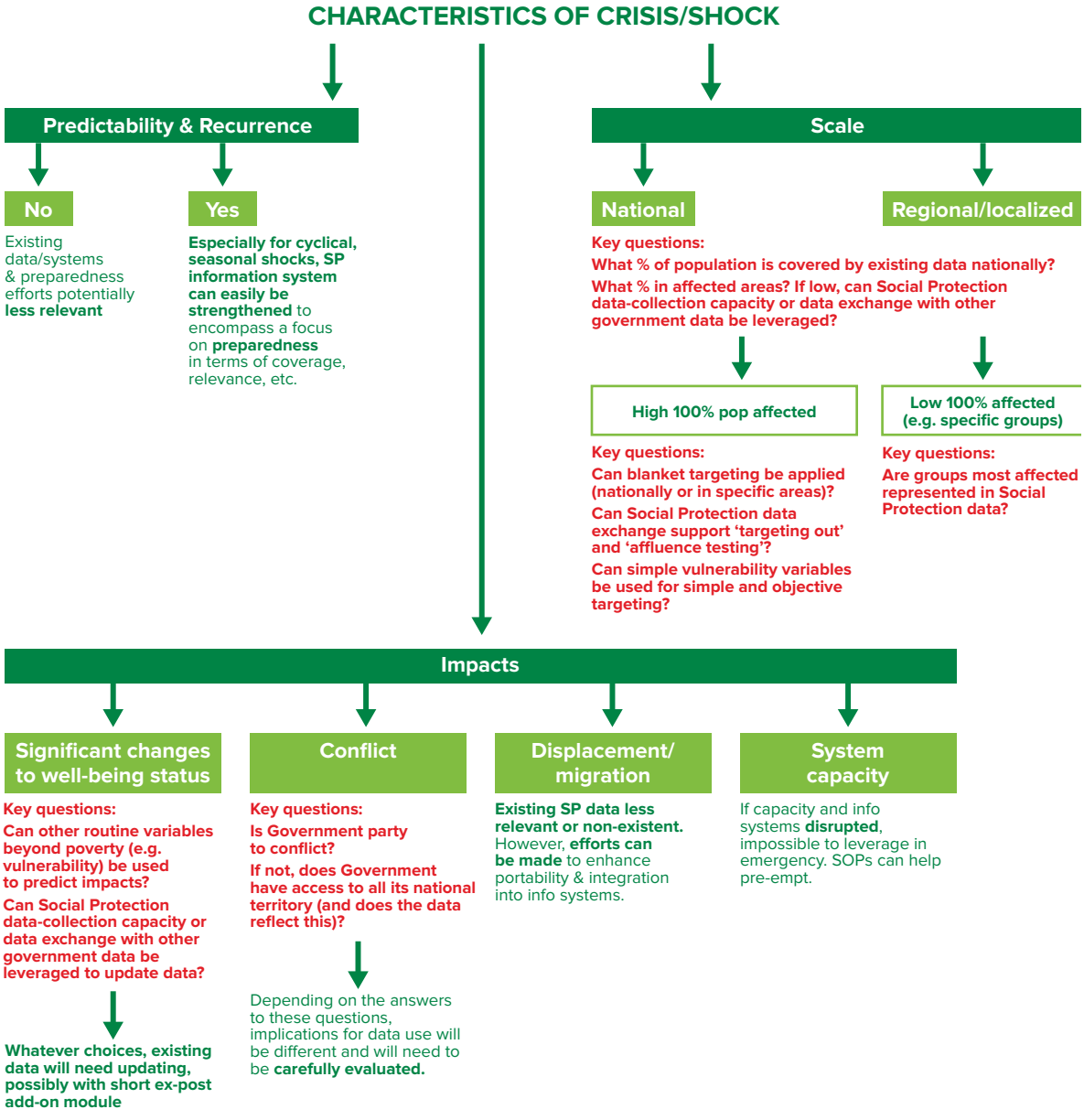
In the context of swiftly changing and 'fluid' crisis contexts, what is likely to be more important than highly accurate targeting designs is the capacity to flexibly adapt targeting design, building on the data, systems and capacities available (Sabates-Wheeler and Szyp, 2022).

The 'universality of delivery systems' (Gentilini, 2022) – and the strengths of the underlying systems beyond the data itself, including to bring in new caseloads – becomes more important than any given targeting design at any point in time, as this can be adapted to changing contexts. This played out very strongly during the COVID-19 responses globally, when many of the swiftest and highest-coverage responses globally hinged on strong information systems and staff capacities (built thanks to the running of routine systems), but not on existing targeting approaches and even existing data (often used as a first 'layer'/stage in the response) (Bastagli and Lowe, 2021; Barca and Lacerda, 2022; Gentilini, 2022).

While the focus of this review is not on emergencies *per se*, it is increasingly intended – and in some countries already the case – that data from these is used by government and non-government emergency actors in the region to inform their targeting in the context of responses to specific shocks. This is especially the case where use of the data is made obligatory (see section 2.1.4). It is thus worth briefly

laying out some of the critical considerations that need to be asked depending on the nature and impacts of the shock – beyond the more standard questions on data currency, accuracy, coverage, etc. This is done schematically in 4.

Figure 23: Considerations informing data use choices in the context of 'shocks'/'emergencies'



Source: authors, extended and adapted from Ramkissoon (2019)

Photo: WFP/John Monibah

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