

DTM SUDAN

# RETURN INDEX

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**BETA**



# TABLE OF CONTENTS

INTRODUCTION _____	3
IDENTIFYING AREAS OF RETURN _____	3
INDICATOR FRAMEWORK APPLIED IN THE RETURN INDEX BETA ____	4
CALCULATING A SCORING INDEX _____	5
INDEX FINDINGS AND FUNCTIONALITY _____	5
Key topline findings _____	5
Index breakdown per state _____	5
Geographical clustering _____	6
FURTHER DEVELOPMENT _____	7
ANNEX 1: DETAILED DESCRIPTION OF INDICATORS _____	8
ANNEX 2: HOTSPOTS FACTSHEETS _____	12

## INTRODUCTION

While the humanitarian community estimates that over one million internally displaced persons (IDPs) have permanently returned to their places of origin in Sudan since 2003, little is known about the conditions in which these returnees are living. This makes it difficult to understand why IDPs return to some areas and not others or, put another way, what makes some locations more conducive to voluntary return than others. Such information is critical to helping support the prospects for durable solutions among the estimated 3.7 million remaining IDPs in the country, to say nothing of ensuring the sustainability of return and reintegration of those who have already gone back to their places of origin. This is particularly important now given the most recent upheavals displaced and returning communities are facing.

To address this gap, IOM DTM and Social Inquiry sought to design the first ever (beta version) Return Index for Sudan. This methodology was developed initially for the post-conflict Iraq context, and has expanded to the Lake Chad Basin, Somalia, South Sudan, and Syria, among others. For background, the Return Index is a tool that provides a means of measuring the severity of living conditions in locations of returns. It combines first, a collection of context-informed minimum or critical living conditions that are necessary to make a location adequate enough to sustain returning populations; and second, quantitative analysis to generate and apply an index score to each location based on the state of these indicators. Importantly,

from this data the Index evaluates how the differences in physical and social conditions between locations correlates with return rates. It can be used to infer what conditions are most critical for facilitating returns, how to address obstacles, where to geographically target interventions and advocacy, how to strategize for resources and operations, and to explore changes in conditions over time.

The applicability of the Index rests in its capacity to combine data on these indicators for single locations into a common numerical score that can be used to identify those locations or geographical clusters that concentrate higher instability that either hinders returns or subjects people to protracted poor conditions on return. This current iteration of the Sudan Return Index is a beta version. It is the first attempt to design and implement it in-country and test its applicability to the Sudanese context, utilizing data from 1,001 locations across 11 states. From the initial analysis conducted, eight hotspots of instability are identified, mostly clustered in Darfur and Kordofan areas.

The following sections of this report present how this beta index was constructed, preliminary findings and index functionality, and next steps for improving the tool to a final version for application and use by international, national, and local stakeholders in addressing humanitarian, development, and peacebuilding needs that crosscut supporting communities as they seek to resolve displacement.

## IDENTIFYING AREAS OF RETURN

Sudan's Return Index Beta is constructed with the location-level data generated in IOM DTM's Integrated Locations Assessment (ILA), conducted in January 2022. The ILA consists of a profiling of locations that host IDPs and/or returnees, with information collected through key informants in each location. From the ~1,700 locations included in the ILA, the Index only uses data from locations from which families were displaced by conflict at some point since 2003; it thus excludes locations with only hosting IDPs or where no original population was displaced due to conflict. This includes 1,001 locations of return. In addition to estimating the current number of permanent returnee families for each location, the assessment included a specific indicator aimed at identifying the proportion of displaced families that have already returned and the proportion of those still pending to return.

Results for this indicator are shown in Table 1. One key aspect to highlight from these results is that there are different degrees of return. In approximately half of the locations, most or all of the previously displaced families have already returned. The other half reported very low rate of returns, if any have occurred at all, with most families originally from there still displaced elsewhere. To note, 18% of the locations feature no return at all of the original displaced population.

These locations of return are spread across 11 states in Sudan, with North Darfur accumulating the largest proportion of locations (43% of total locations). Table 2 shows this disaggregation by state, including the number of locations assessed in each, the number of displaced families returned to their places of origin, and the estimated number of families originally from the state that are still displaced.

Table 1. Reported rates of return in the locations assessed

How many people who were displaced since 2003 have return to this location?	#of locations	Percentage
All have returned	68	7%
Most have returned	461	46%
Around half have returned	128	13%
Less than half have returned	161	16%
Nobody has returned yet	183	18%
<b>Total</b>	<b>1,001</b>	<b>100%</b>

Table 2 Disaggregation of locations of return covered in each state

STATE	Number of locations of return	Returnee individuals	Estimated IDP from palces of origin
North Darfur	435	288,383	706,123
South Kordofan	159	129,960	284,208
West Kordofan	88	21,263	124,452
South Darfur	78	217,608	997,278
West Darfur	72	60,823	442,207
Blue Nile	54	79,560	151,156
Central Darfur	51	200,988	772,278
East Darfur	26	172,352	306,373
North Kordofan	22	-	9,321
Gedaref	9	300	5,685
Kassala	7	1,330	1,800
Red Sea	-	-	20,040
<b>Total</b>	<b>1,001</b>	<b>1,287,112</b>	<b>3,820,921</b>

<sup>1</sup> IOM DTM, Sudan Mobility Tracking Round 4.

<sup>2</sup> The ILA methodology collects information on locations from key informants—often in the form of focus group discussions. Key informants consist of representatives from the Humanitarian Aid Commission (HAC), humanitarian aid workers, as well as religious and other prominent community leaders. Data collection location-level indicators through key informants has the advantage of allowing coverage of a large number of locations in a short duration of time, but its main limitation is relying on one representative transmitting the views of a potentially large and diverse population.

# INDICATOR FRAMEWORK APPLIED IN THE RETURN INDEX BETA

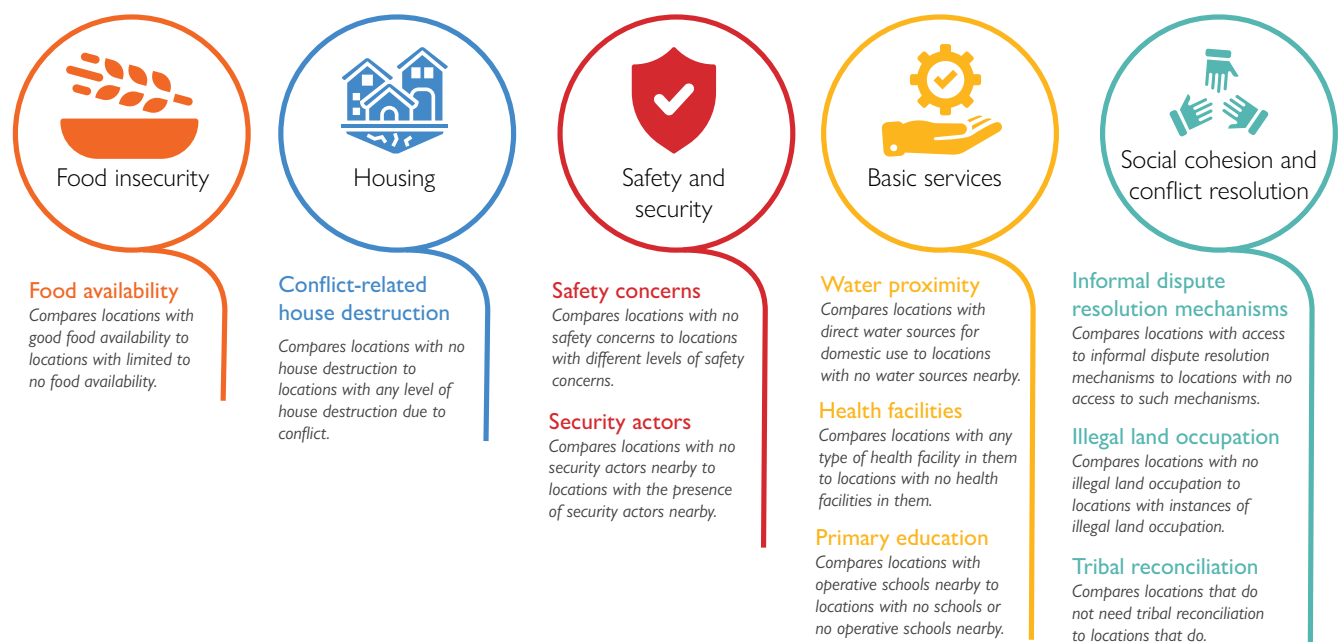
As noted above, some locations have more returns than others, and many locations here that do report returns still have a considerable number of families displaced from them. The Return Index Beta aims to explain why some areas seem more conducive to returns than others and to identify the material and social conditions that contribute to this. To do that, ten key indicators are selected from the ILA indicator framework, which is itself a tool adapted for Sudan that spans the Humanitarian-Development-Peace Nexus (HDPN). This is in recognition of the fact that the Sudan context requires an integrated response across these sectors to not only meet immediate- and longer-term needs but anticipate future risks and vulnerabilities to help prevent them.

The Sudan-specific HDPN indicators are formulated from a triangulation of sources including recent comprehensive assessments of the country<sup>3</sup> and other ILA or Return Index frameworks from

contexts of similarly protracted displacement and conflict.<sup>4</sup> The aim in this is to determine what exists already for Sudan and what is missing in relation to the HDPN that should be adapted or created for this specific context. All selected indicators are then adjusted for use at the location-level for key informant responses.

The subgroup of indicators selected for the Return Index Beta cover and evaluate the basic material and social living conditions in the locations assessed that are likely to affect the long-term, sustainable reintegration of IDPs back into their areas of origin. These cover housing infrastructure (one indicator), basic services (three), food security (one), safety and security (two), and social cohesion / conflict-resolution (three), respectively (Figure1). A more detailed description of their formulation, prevalence, and application in the Return Index Beta is provided in Annex 1.

Figure1. Summary of tested indicators

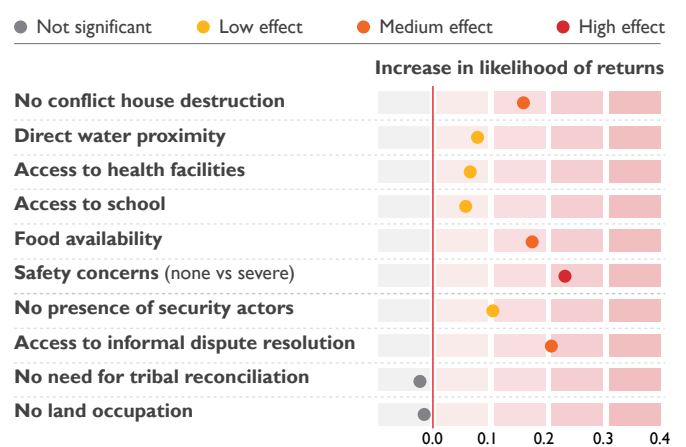


Following the indicators selection, a multivariate regression analysis is run to determine how strongly correlated these indicators are with the presence of returnees. The model used in this analysis is grounded in the assumption that locations with better living conditions as represented by these ten indicators have a higher rate of returns than those that do not. In other words, IDPs are more likely to return to locations that offer better possibilities to sustainably reintegrate than to those with poorer conditions.

Results for this model are described in Figure 2. They confirm that most of the indicators tested have indeed a positive effect on the location in contributing to a higher rate of returns and that some indicators have a stronger effect than others on returns and, as such, they can be classified in three tiers based on the size of this effect.

The exception to this come from two peacebuilding-related indicators on illegal land occupation and tribal reconciliation that seem to have no correlation one way or another with the likelihood of returns (colored in grey). This is especially unexpected in relation to illegal land occupation given that it is a priority concern and source of tension and violence across Sudan. This non-effect is likely attributable to the sensitivity of the topic when responding to it and highlights the need for a better constructed and more context-sensitive proxy indicator in this regard.

Figure 2. Results of modelling the impact of living conditions on the location's rate of return



The statistical model uses a linear probability model to estimate the correlation between full returns in a location (dependant variable) and its living conditions measured in ten different indicators (explanatory variables). The model also included a control variable for location type (urban/rural). Coefficient value indicates the added probability that a location with that condition has full returns compared to a location without that condition (e.g. access to school compared to no access to school). Line represents 90% confidence interval for the coefficient.

<sup>3</sup> IOM, Sudan Multi-Cluster Needs Assessment (2021); WFP, Comprehensive Food Security and Vulnerability Assessment (2021); and PBF, DSWG, UNHCR, JIPS, Durable Solutions and Baseline Analysis (2020).  
<sup>4</sup> See, for example, IOM ILA or Return Index frameworks for Iraq, Somalia, Lake Chad Basin, and South Sudan.

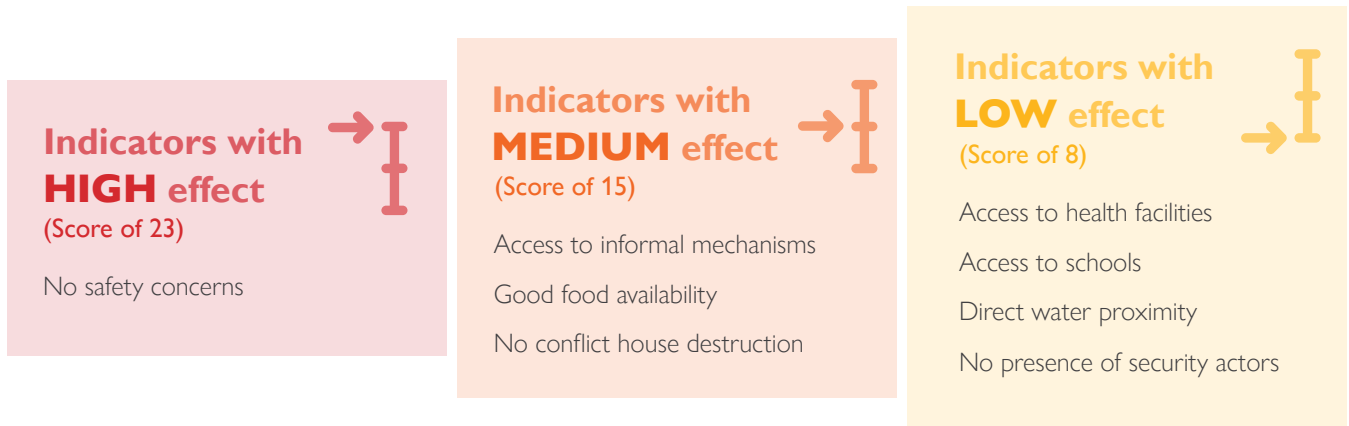
## CALCULATING A SCORING INDEX

Each indicator receives a score depending on its tier, so that the indicators more strongly correlated with population returns contribute more to the index than those with less correlation. These individual indicator scores are listed in Figure 3. To note, only the indicators that were found to have a statistically significant correlation with rate of returns are included.

Individual locations thus receive a total score based on the conditions

they reported for each indicator. Scores per indicator tier are structured categorised so that the total score a location could receive ranges from 100 (where all the basic living conditions assessed exist) to 0 (where none of these conditions exist). This enables the Return Index Beta to rank locations in terms of living conditions, from the most stable, where full returns are highly likely, to the most unstable and severe, where returns are very unlikely to take place.

Figure 3. Final indicator framework with associated scores for each indicator (total = 100)



## INDEX FINDINGS AND FUNCTIONALITY

### KEY TOPLINE FINDINGS

The average score for the 1,001 locations assessed is 58/100. This value is largely uninterpretable beyond indicating that living conditions in return areas are far from ideal in general. However, it can be used as a cut-off point to evaluate which areas fall below the average and thus are less conducive for returns, and on the contrary, which ones are above the average and feature better living conditions. This average value differs by state as shown in Table 3.

West and Central Darfur report the most severe living conditions in areas of return, while North and East Darfur as a whole feature the highest and thus have more positive average scores. For the other seven states, they all cluster close to each other in terms of score, with little variation among them, indicating similar living conditions on average.

Table 3. Average index score for each state

State	#of locations	Average state score (over 100)
North Darfur	435	64
East Darfur	26	62
North Kordofan	22	59
Kassala	7	57
Gedaref	9	56
South Darfur	78	56
Blue Nile	54	55
South Kordofan	159	55
West Kordofan	88	55
Central Darfur	51	47
West Darfur	72	41

### INDEX BREAKDOWN PER STATE

While the Return Index Beta integrates multiple indicators into one numerical index to make it easier to interpret, rank, and prioritize geographical areas, it is still necessary to understand what is behind the score to properly tailor interventions and advocacy to the actual issues present on the ground. As such, breaking down the index per state into sub-topics makes it possible to identify the most important deficiencies in each state that, based on the framework developed here, hinder returns.

This breakdown is shown below in Table 4 for each state. It classifies the indicators into either an adequate situation (the condition measured is present in a majority of locations), an average situation, or a poor situation (condition present in only a minority of locations) with indicators organized in descending order of impact on returns.

This table gives an overview of why states like West Darfur, for example, feature at the bottom of the average state index. A majority of the return locations in this state experience severe issues with safety

concerns, food availability, water availability, security actors, and lower availability of informal remedies — at least more intensely than the rest of the states. These are the priority issues that, if acted upon, would increase West Darfur's score over time and make it more conducive and sustainable for returns. Safety concerns followed by food security and informal remedies are particularly pressing factors given that the Return Index Beta model shows that they have a higher impact on the locations' rate of returns. Similar trends apply for the rest of the states.

In addition, the table shows those issues that are widespread across the majority of states. Good availability of food is absent for the vast majority of locations and only North Darfur ranks as average in this category. Similarly for water availability, residents in most locations assessed across Sudan can only access water sources that are far away from their dwellings. Beyond these two, other indicators feature relatively poorly, including safety concerns, presence of security actors, and access to healthcare.

Table 4. Breakdown of each index indicator based on prevalence across locations

STATE	HIGH EFFECT INDICATOR	MEDIUM EFFECT INDICATOR			LOW EFFECT INDICATOR			
	No safety concerns	Informal dispute resolution	Good food availability	No house destruction	Access to health facilities	Access to school	Direct water proximity	No presence of security actors
North Darfur	Adequate	Adequate	Average	Adequate	Average	Adequate	Poor	Average
East Darfur	Adequate	Adequate	Poor	Adequate	Average	Average	Poor	Average
North Kordofan	Average	Adequate	Poor	Adequate	Poor	Adequate	Poor	Average
Kassala	Average	Average	Poor	Adequate	Adequate	Adequate	Poor	Average
Gedaref	Average	Adequate	Poor	Adequate	Average	Average	Poor	Poor
South Darfur	Average	Adequate	Poor	Adequate	Average	Average	Poor	Poor
Blue Nile	Average	Adequate	Poor	Average	Adequate	Adequate	Poor	Poor
South Kordofan	Average	Adequate	Poor	Adequate	Average	Adequate	Average	Poor
West Kordofan	Average	Average	Poor	Adequate	Average	Average	Poor	Average
Central Darfur	Average	Adequate	Poor	Average	Average	Average	Poor	Adequate
West Darfur	Poor	Average	Poor	Adequate	Average	Average	Poor	Poor

### GEOGRAPHICAL CLUSTERING

State-level averages however are indicative at best and may not provide enough information to reach a full conclusion on priority areas as they can hide clusters of severity and instability, especially in states with a large number of locations. This is seen in the case of North Darfur in Figure 4. The majority of locations in the state seem to feature a relatively positive score, but North Darfur also includes a sizable number of the locations with the worst scores in the index overall. Similarly, there are pockets of stability among generalized poor living conditions in areas of return in Central and West Darfur as well.

This granular data is best utilized and contextualized when geographically mapped to its lowest level - which is by location. A color gradient is used to represent each location's score. Figure 5 thus maps the 1,001 locations assessed in the Return Index Beta, with the larger red dots indicating locations with severe and unstable living conditions. This helps to give a sense of how widespread or contained these severe locations are. This is important because while one isolated location with a low score may not necessarily raise concern, a group of neighboring locations with low scores can represent a geographical hotspot or cluster of instability affecting a larger population. These clusters are worth monitoring with respect to how they evolve over time, what specific dynamics drive their severity, and whether these issues are being addressed by relevant stakeholders.

Based on the map, it is possible to start identifying preliminary

hotspots of instability. Most of West Darfur shows relatively unstable living conditions, with few exceptions. Similarly, the point where the borders of North, Central, and South Darfur intersect also contain groups of locations with very high severity (El Fasher, Kebkabiya, Jabal Marrah, etc.). South Kordofan shows clusters of instability around key urban centers such as Dilling and Kadugli as well. As such, based on these findings, the list of the top hotspots of instability in areas of return for Sudan includes the following localities, ranked in descending order:

- Kebkabiya (North Darfur)
- Jebel Moon (West Darfur)
- Habila (West Darfur)
- Central & North Jabal Marrah (South Darfur)
- Geneina (West Darfur)
- Kadugli (South Kordofan)
- Dilling (South Kordofan)
- El Fasher (North Darfur)

More detail on the hotspots identified in the analysis using Return Index Beta is found in Annex 2, describing particular geographical zones and their priority drivers of instability and severity.

Figure 4. Ranking of return locations per state based on index score

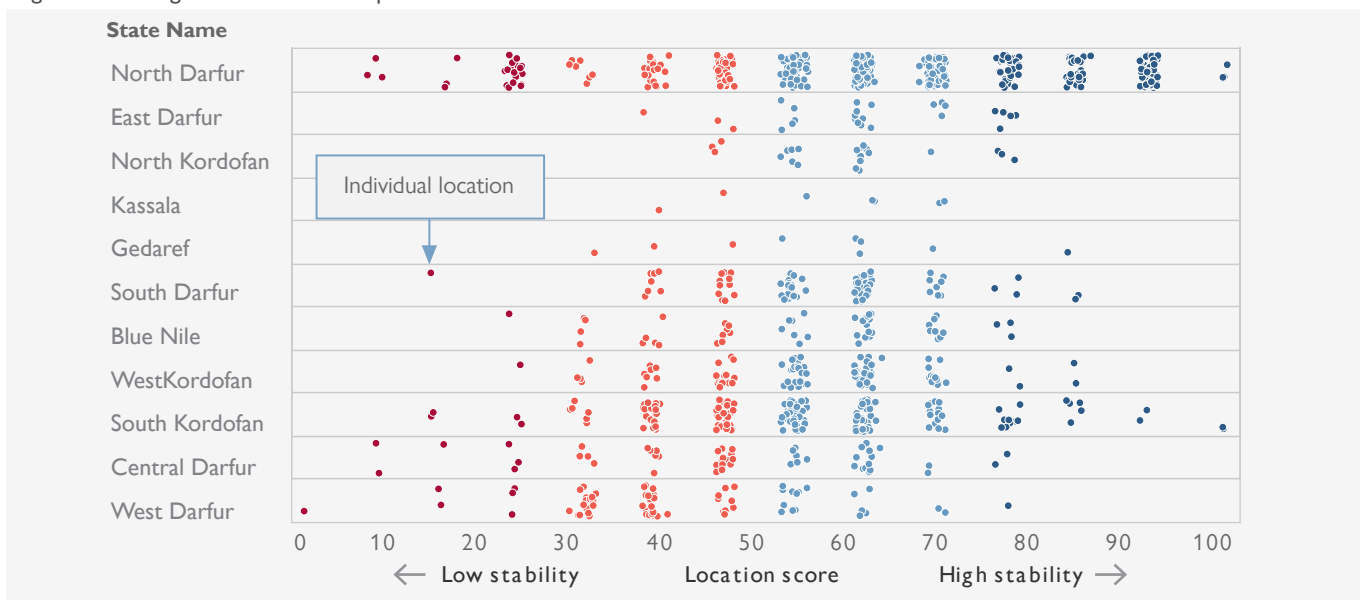
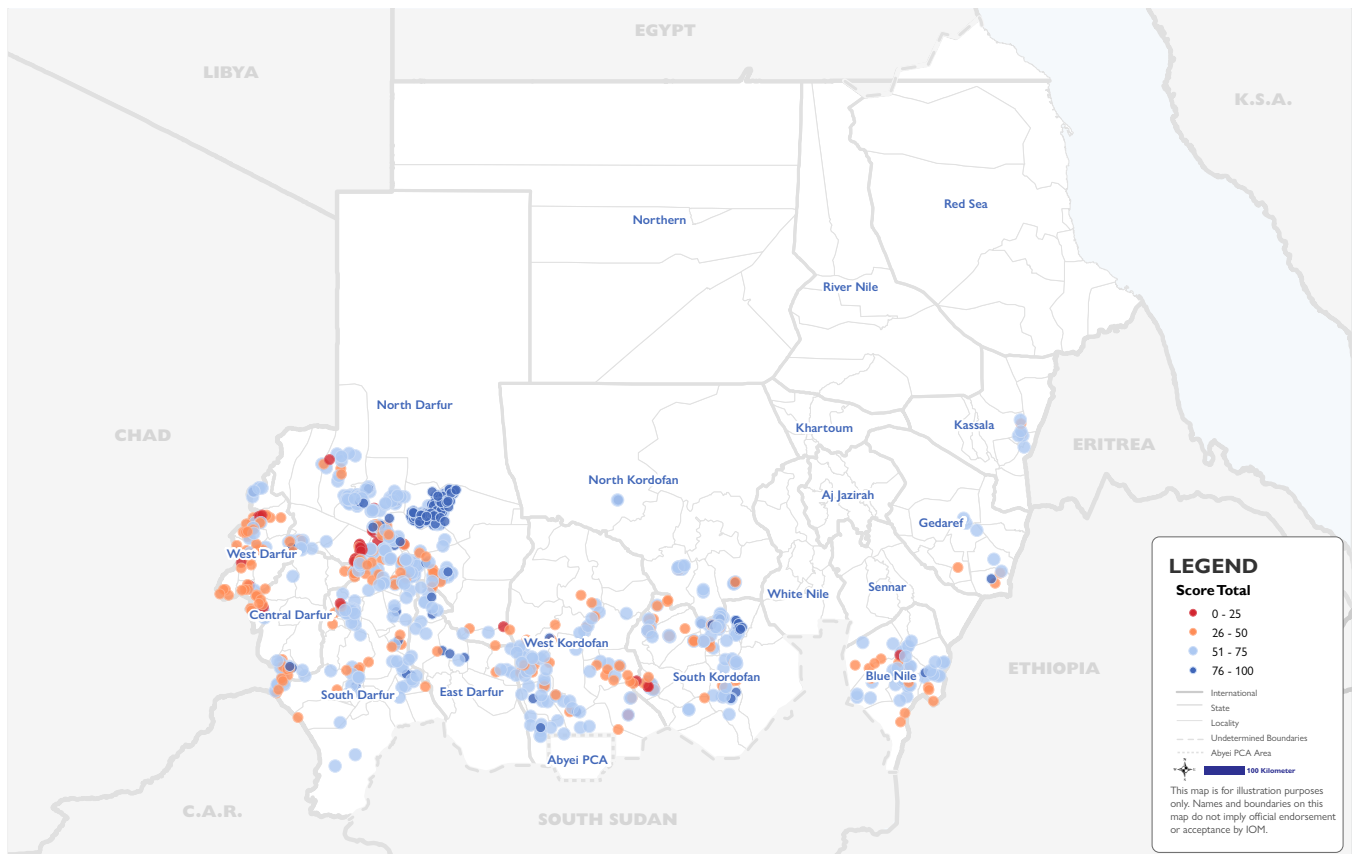


Figure 5. Map of all locations assessed ranked by index score



## FURTHER DEVELOPMENT

The methods, findings, and functionality presented here provide a proof of concept for the Return Index Beta framework for Sudan. By and large, indicators related to humanitarian, development, and peacebuilding needs are shown to play a critical role in returns, with safety concerns and access to informal dispute resolution featuring relatively prominently in whether a location is conducive for return or not. These findings are reflective of drivers of conflict, violence, and forced movement in the country.

Furthermore, the ability to understand state-level trends and disaggregate findings to the location-level as well as in identifying geographical clusters of instability and the specific drivers of this instability in each location are particularly useful in prioritizing more tailored and impactful interventions and advocacy. This also lays the basis for being able to monitor changes over time, as conditions shift and populations potentially return or are forced to displace again.

At the same time, there is critical room for further development and refinement to finalize Return Index methodology for future iterations and to enable it to be used more widely among stakeholders in Sudan. This includes the following:



### UNDERSTANDING THE CONTEXT

Refining the indicators framework in collaboration with field teams and subject matter experts to ensure analytical relevance. While the indicators currently in use are contextually appropriate and functional, there needs to be better incorporation of improved indicators on land disputes and occupation, security configuration, and livelihoods, particularly.



### EXPANDING COVERAGE

Expanding the coverage of locations for data collection to allow for better disaggregation and deeper analysis at different geographical levels, which will allow for deeper thematic and topical engagement.



### ENHANCING ANALYSIS

Designing a more sophisticated mapping of hotspots of instability that extends beyond the locality clusters presented here into more context-informed clustering of severe locations based on shared indicator dynamics and geographical density rather than locality borders alone.



### SYSTEMATIZING DATA COLLECTION

Developing a systematic and periodic process for regularly collecting and analyzing this data, after refining indicators and improving sampling, to keep findings up-to-date and track changes in conditions (and related population movements) as the context and stages of conflict transform.



### GREATER DISSEMINATION

Further disseminating the Return Index, especially to high-level stakeholders and authorities (where appropriate), in an easy-to-use manner to assist in their prioritization of HDPN efforts. The tool may also be of use in further refining a durable solutions strategy, particularly with regard to a better understanding of conditions in places of origin and the challenges for remaining displaced families.

## ANNEX 1: DETAILED DESCRIPTION OF INDICATORS

This annex contains detailed descriptions of the indicators used in the Return Index Beta, including information on their formulation, prevalence, and application in the model.

### SAFETY CONCERNS

#### What it measures?

This composite indicator reports whether residents in a location are concerned about the following issues taking place: tribal violence, crime, violence between armed actors, forced recruitment, and/or sexual and gender-based violence (SGBV). This is used to group locations in three categories from worst to best: locations with severe safety concerns (if all issues are reported), with moderate safety concerns (if only some issues are reported), and with no safety concerns.

#### Prevalence across locations

About 15% of locations fall in the severe concerns category, 57% had moderate safety concerns, and 28% reported no concerns at all.

#### Key takeaways for the index

The existence of safety concerns among residents is the most important factor affecting returns, based on model results. Locations with no concerns at all are more likely to have full returns than locations with safety concerns. Also as expected, the higher the number of safety concerns in a location, the worse their outcomes with regard to rate of returns.

Relying on key informants to provide this data may be an imperfect way to assess safety and security concerns in particular; given that they are themselves a member of the community, may hold specific biases, and may potentially be party to any conflict. Nonetheless, the correlation between safety concerns and level of returns is the strongest in the model, indicating that the responses obtained here are, in general, logical and make sense in context.

### INFORMAL DISPUTE RESOLUTION MECHANISMS

#### What it measures?

Key informants were queried about remedies available for disputes in the community, including land disputes. This indicator compares locations that operate under informal or customary mechanisms to resolve disputes and those which do not report such mechanisms (either because there are no reported formal or informal mechanisms to resolve disputes or because they rely only on formal mechanisms).

#### Prevalence across locations

At 62%, most locations report access to informal/customary mechanisms and remedies, while 17% report access to both formal and informal mechanisms of dispute resolution. Only 13% of locations report only formal mechanisms in place and the remaining 8% had no mechanisms at all available.

#### Key takeaways for the index

Locations where there is an informal/customary system to resolve disputes in place tend to have a higher rate of returns and thus are more conducive to returns. Formal mechanisms by themselves did not actually have a positive pull effect on returns, inferring low confidence in formal processes or a negative role formal actors play in conflict resolution. Similarly, locations in which residents cannot avail themselves of any dispute mechanism also tend to have lower returns. This aligns with other conflict and context analyses of Sudan and is also a phenomenon observed in other contexts in which the Return Index is implemented.

### FOOD AVAILABILITY

#### What it measures?

This indicator compares locations with reportedly good availability of basic items and food in the local markets versus locations in which food access is reportedly limited. Limitations affecting food access include limited supply, insecurity, and/or high prices/unaffordability.

#### Prevalence across locations

Less than 20% of locations report that basic items and food are widely available and easily accessed by residents. All other locations experience challenges in accessing food: residents in 44% of locations were affected by significant price hikes, 19% of locations had limited or infrequent supply, 12% suffered from security concerns that limited market access, and 6% reported no access to food at all.

#### Key takeaways for the index

Locations that suffer from any of the issues impacting food availability had a moderately lower rate of returns. Most locations are thus negatively impacted by this, given the very small prevalence of locations without restrictions in availability of food and basic items.



## CONFLICT-RELATED HOUSE DESTRUCTION

### What it measures?

This indicator compares locations that do not have residential destruction due to conflict (either because they were not affected by destruction or houses have been reconstructed) versus locations with the presence of destroyed houses/dwellings. This indicator only measures destruction caused by violent conflict, as opposed to natural hazards like erosion or flooding.

### Prevalence across locations

Almost 64% of locations report no house destruction. This is disaggregated into 21% of locations that never experienced destruction and 43% where all affected houses have been reconstructed. Following this, 21% of locations report a few houses currently still destroyed and the remaining 15% of locations feature half or more of houses destroyed by conflict.

### Key takeaways for the index

The absence of house destruction at all is found to be a significant contributing factor to returns, compared to locations that feature house destruction at any level. The model results for this indicator are in line with the understanding that the ability to return to a functional shelter is a primary need for households and is further reinforced by similar findings in other conflict-affected Return Index contexts.

## SECURITY ACTORS

### What it measures?

This indicator measures the presence or absence of security configurations. It compares locations with security actors in-location, or nearby, and locations with no security actors present in the vicinity at all. These actors are not specified in the indicator formulation and can consist of police, formal/informal security forces, or other armed groups. Very granular detail pertaining to types of security actors beyond these classifications were not asked due to the sensitivity of the topic and potential risk it may pose to key informants in answering and enumerators in asking.

### Prevalence across locations

In about 40% of locations, key informants report that there are security actors in or nearby the location, compared to 60% of locations where no security actors are reportedly present.

### Key takeaways for the index

The statistical model indicates that locations have a lower rate of returns when there are security actors within them or in close vicinity. This suggests that IDPs are less likely to return to such locations. In other words, IDPs seem more confident to return to their places of origin when these are free of security actors.

While this result seems counter-intuitive, possible explanations for this could include the lack of specific definitions for security forces in the indicator formulation, which may include actors that the community perceives as a threat for them. There may also be cases of multiple security actors present in the same area, generating tensions and competition between them and thus generating instability there. Finally, there could also be a correlation between the presence of security actors due to underlying insecurity and ongoing violence in the area, causing movement restrictions and concerns for safety. In other words, the absence of security forces could well be indicative of the absence of insecurity for returnees. Better indicator formation in subsequent rounds is likely needed to better capture such nuance.

## PRIMARY EDUCATION

### What it measures?

This indicator compares locations that have a nearby operative school that residents can access versus locations with no access to schools or with no fully operative schools nearby. As this indicator measures basic access to education, it is limited to primary schools that operate on a regular, full-time schedule.

### Prevalence across locations

About 48% of locations report that there is a fully operative primary school within the location accessible to residents, followed by 35% of locations where residents can access schools in the vicinity. Only 17% of locations report no access at all to education.

### Key takeaways for the index

Locations where residents can access primary education either in-place or nearby are more likely to have full returns than locations with no access to education. This positive impact, however, is mild at best and lower than the rest of indicators.

## HEALTHCARE FACILITIES

### What it measures?

This indicator identifies locations that have access to any type of healthcare facility in the location, either hospital, primary health unit, family care unit, or mobile clinic. As opposed to the previous indicator on education, this measures whether the facilities exist inside the location itself (not nearby).

### Prevalence across locations

There are 45% of locations that do not feature any health facility within them, compared to 55% that report at least one type of facility. The most frequent situation is the presence of a primary health unit (44% of locations), followed by hospitals (15%). The prevalence of family care units and mobile clinics is very limited.

### Key takeaways for the index

Locations with a health facility in them are more likely to have full returns than locations with no facility. It must be noted, however, that locations with no health facility in them does not necessarily translate into residents not having access to healthcare as people may be able to access facilities nearby. Thus, a more flexible indicator formulation may yield more impactful results.

## WATER PROXIMITY

### What it measures?

As an indicator related to usage of water for domestic needs, it measures the distance that households travel to access a water source. Locations are grouped as those where residents can access water directly in the location or those where they need to travel a distance to the water source.

### Prevalence across locations

In about 75% of locations, residents lack a water source nearby for home use. Only 25% of locations have a direct water source so residents do not have to travel long distances for it.

### Key takeaways for the index

Presence of a direct water source in or near the location is found to be a significant positive factor contributing to returns, compared to locations that require residents to travel some distance to the water source. To note, information on actual water availability as a different proxy indicator and potentially more linked to return dynamics is not available.

## ILLEGAL LAND OCCUPATION

### What it measures?

This indicator compares locations where key informants indicate that land is being occupied by others without permission from landowners with locations free of land occupation issues.

### Prevalence across locations

There are only 29% of locations with instances of land occupation, according to what key informants reported. For the other 71% of locations, no land is reportedly occupied illegally.

### Key takeaways for the index

This indicator was not found to be correlated with the rate of returns in the location. This implies that it does not seem to play a role at all in preventing or facilitating returns to these locations. Returns seem as likely to take place in locations where land is being occupied illegally as in locations with no land occupation.

This seems particularly counter-intuitive, especially as this issue has been reported as a cornerstone of tensions and violence that need resolution from a peacebuilding standpoint. The reasons for the lack of statistical significance could be found in limitations in the data collection: key informants reporting on this highly sensitive indicator may have unreliable information, feel unable to speak freely, or lack incentives to report on this condition accurately. The relatively low proportion of locations with reported land occupation is indicative of this. Because of the importance of this issue, there remains a need for a better constructed, more context-sensitive proxy indicator for this condition for future iterations of the index.

## TRIBAL RECONCILIATION

### What it measures?

Key informants were queried about whether a local reconciliation process was currently needed between tribes in the surrounding area in order to prevent violence from taking place. Reconciliation was defined as a process aimed to address the issues that are causing grievances between tribal groups in a mutually beneficial way.

### Prevalence across locations

Only 27% of the locations indicate that tribal reconciliation is needed for this purpose. In half of these, such a process is already taking place while, for the other half, no initiative had taken place in spite of being needed. In the remaining 73% of locations, key informants report that reconciliation is not needed.

### Key takeaways for the index

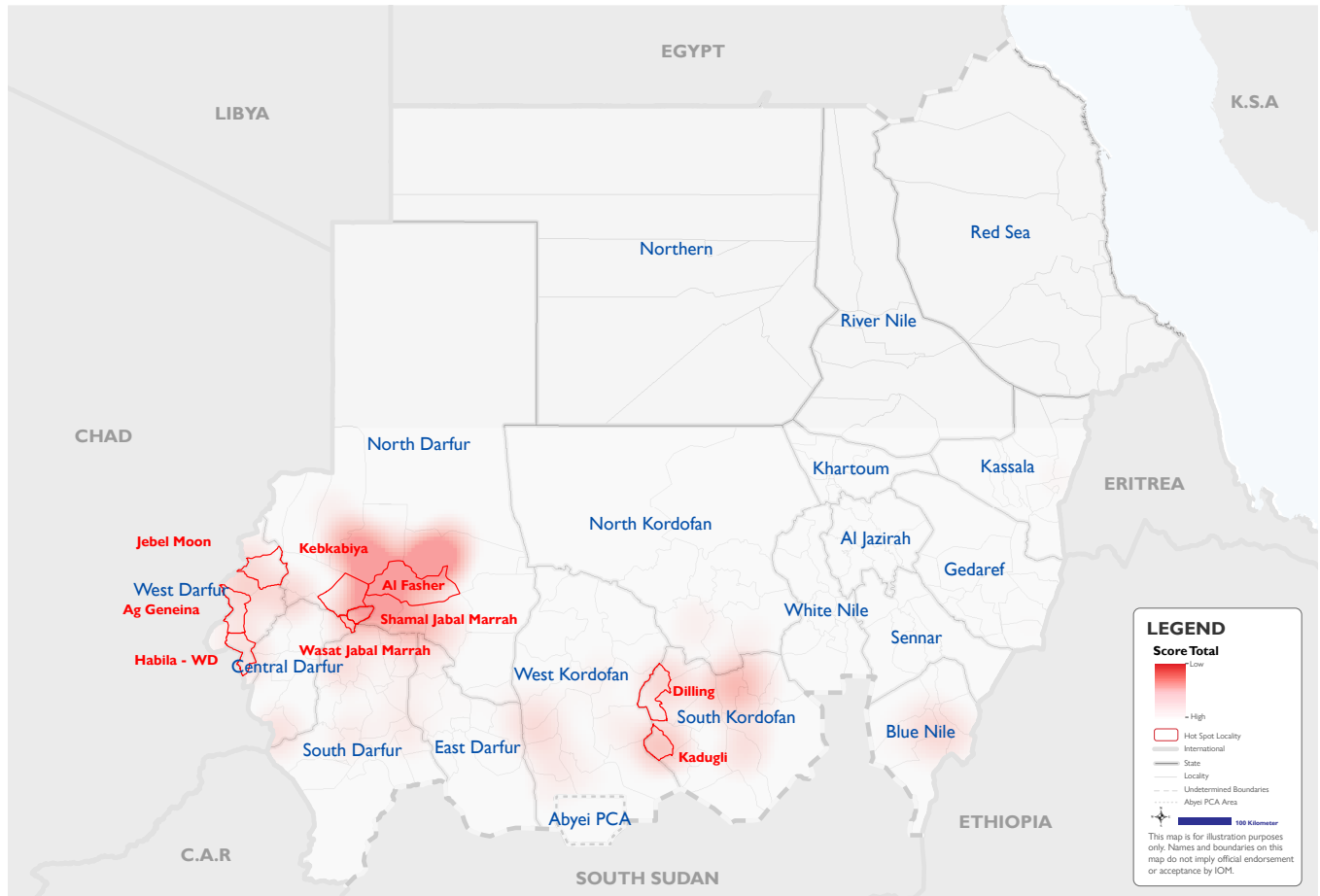
This indicator was also not found to be correlated with the rate of returns in the location. The need (or not) of tribal reconciliation does not seem to impact the rate of returns in a location. This runs contrary to the idea that, given the prevalence of conflict and insecurity across Sudan, reconciliation processes would be vital to stabilizing an area and providing conditions for the safe return of displaced persons. At the same time, access to informal dispute mechanisms is a critical factor for returns and may be similar enough to tribal reconciliation as an indicator as to cancel out the effect of this overall. Once again, a more nuanced indicator in relation to this may be needed.

## ANNEX 2: HOTSPOTS FACTSHEETS

One of the main applications of the Return Index in general is the identification of geographical clusters or hotspots of instability. These hotspots consist of several locations close to each other with a concentration of very poor and unstable living conditions, creating a whole social ecosystem in which returns are extremely limited or run the risk of triggering secondary displacement.

Figure 6 is a density map that more clearly highlights these hotspots of instability. Concentrations of locations with low scores are visible in red and they correspond to the eight hotspots identified within the report. A factsheet for each hotspot is provided in this annex, mapping the locations by score and describing the priority factors that drive those scores down.

Figure 6. Density map of index scores for all locations assessed



## CLUSTER 1 KEBKABIYA, NORTH DARFUR

The locations assessed in Kebkabiya are clustered together in the eastern part of the locality, close to Sortony IDP camp and a former UNAMID base.<sup>5</sup> They all present some of the lowest scores in the assessment, indicative of significantly poor living conditions.

All locations report severe safety concerns linked to risks of violence and crime — following the withdrawal of the UNAMID mission in April 2021, tensions flared between government forces and other armed groups. Food availability is also reportedly very limited. Many of residents' dwellings remain destroyed by conflict and they reportedly have virtually no access to basic services.

On the positive side, informal remedies help resolve disputes between residents within these locations and there are no security forces or groups reported nearby at the time of data collection.



Locations of return

**15**



Returnee individuals

**7,500**

### BREAKDOWN OF SCORE

Indicators with **HIGH** effect



No safety concerns

Indicators with **MEDIUM** effect



Informal dispute resolution



Food availability



No house destruction

Indicators with **LOW** effect



Access to health facilities



Access to school



Direct water proximity

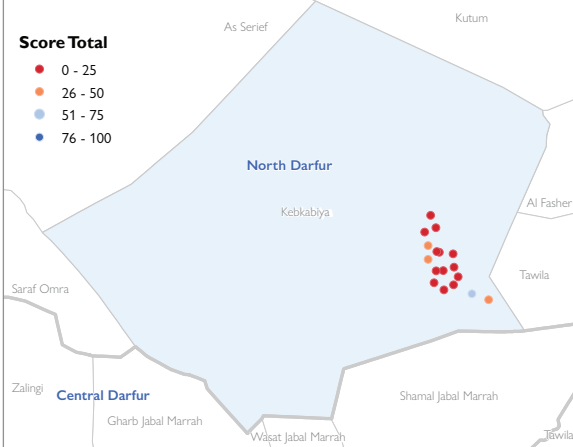


No presence of security actors

### SEVERITY OF LIVING CONDITIONS IN RETURN

#### Score Total

- 0 - 25
- 26 - 50
- 51 - 75
- 76 - 100

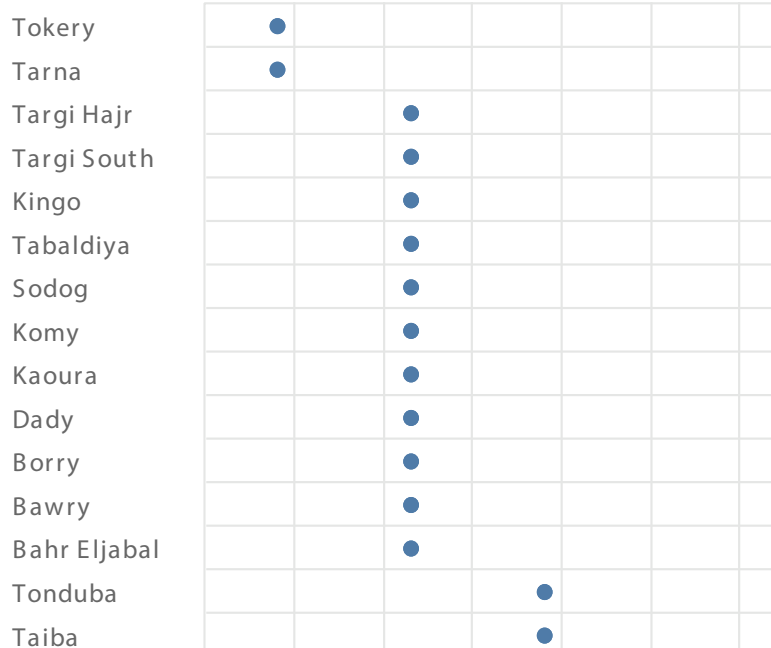


### RETURN INDEX BETA SCORE AND NUMBER OF LOCATIONS

Score	Number of Locations
75-100	0
50-75	0
26-50	2
0-25	13

## CLUSTER 1 KEBKABIYA, NORTH DARFUR

0 10 20 30 40 50 60



<sup>5</sup> For more information see, [IOM DTM, Sudan Situation Assessment: Report: Sortony Camp, Kebkabiya, North Darfur \(2021\)](#).

<sup>6</sup> For more information see, [IOM DTM Sudan Emergency Event Tracking Jebel Moon, West Darfur, Update 005 \(2022\)](#).

## CLUSTER 2 JEBEL MOON, WEST DARFUR

The locations assessed in Jebel Moon are relatively close to the border with Chad and around the locality's capital, Saleia.<sup>6</sup>

The majority of locations present living conditions significantly below the average, especially due to safety concerns, limited food availability, and the absence of informal dispute resolution mechanisms. Most of the insecurity is driven by the risk of tribal conflicts and crime, which indirectly links with a reported breakdown of customary remedies. This is reflective of the fact that Jebel Moon remains a site of continuous conflicts between nomads and farmers over issues of land accessibility and ownership.

Services are relatively limited, especially related to access to education and water sources in isolated locations.



Locations of return

**13**



Returnee individuals

**18,630**

### BREAKDOWN OF SCORE

Indicators with **HIGH** effect

**Average** No safety concerns

Indicators with **MEDIUM** effect

**Poor** Informal dispute resolution

**Poor** Food availability

**Adequate** No house destruction

Indicators with **LOW** effect

**Average** Access to health facilities

**Poor** Access to school

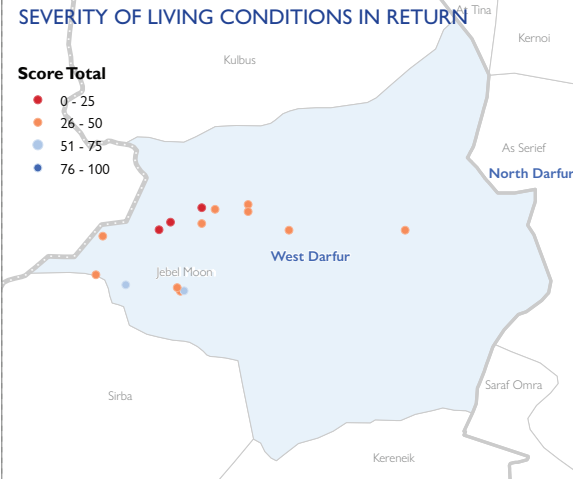
**Poor** Direct water proximity

**Poor** No presence of security actors

### SEVERITY OF LIVING CONDITIONS IN RETURN

**Score Total**

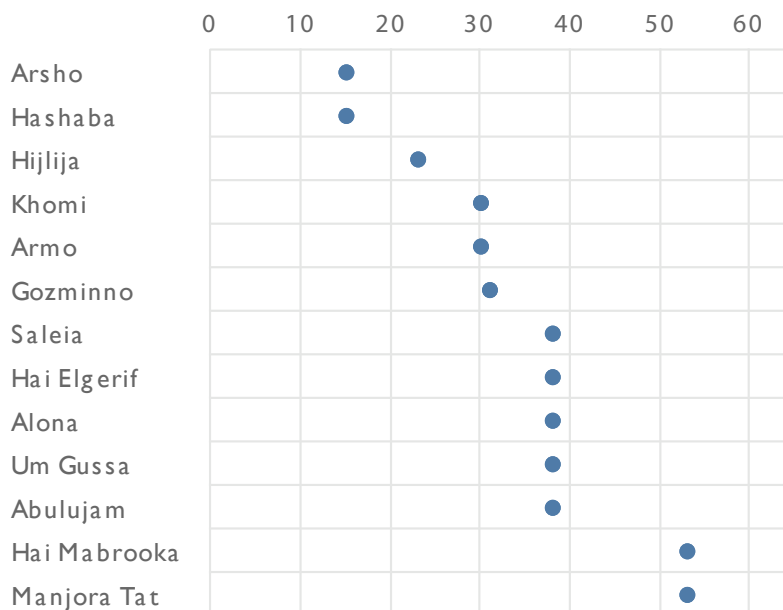
- 0 - 25
- 26 - 50
- 51 - 75
- 76 - 100



### RETURN INDEX BETA SCORE AND NUMBER OF LOCATIONS

Score	Number of Locations
75-100	0
50-75	2
26-50	8
0-25	3

### CLUSTER 2 JEBEL MOON, WEST DARFUR



## CLUSTER 3 HABILA, WEST DARFUR

Locations of return are spread across the locality, and includes its administrative capital, Habila Town. The vast majority of locations show very unstable conditions for returns, with some exceptions with a relatively positive score.

Residents appear very concerned about the risk of violence from all manner of sources. No informal dispute resolution is reportedly in place. Issues with food access are widespread affecting all locations, either due to security issues limiting supply, lack of affordability, or markets not operating. Another factor driving scores low is the general lack of direct access to water sources.

Houses however are reportedly not affected by conflict and healthcare and education are available for most residents.



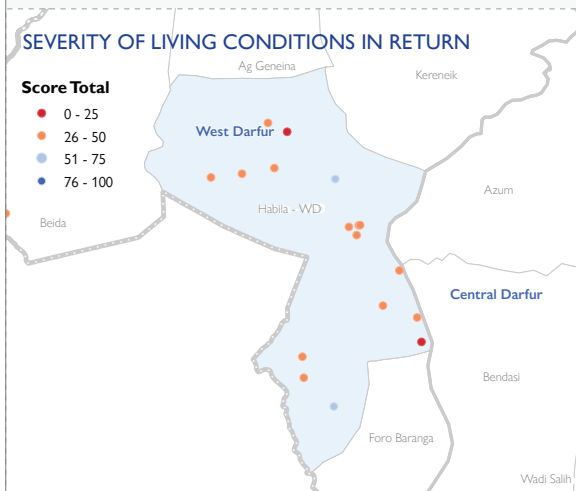
Locations of return  
**17**



Returnee individuals  
**15,955**

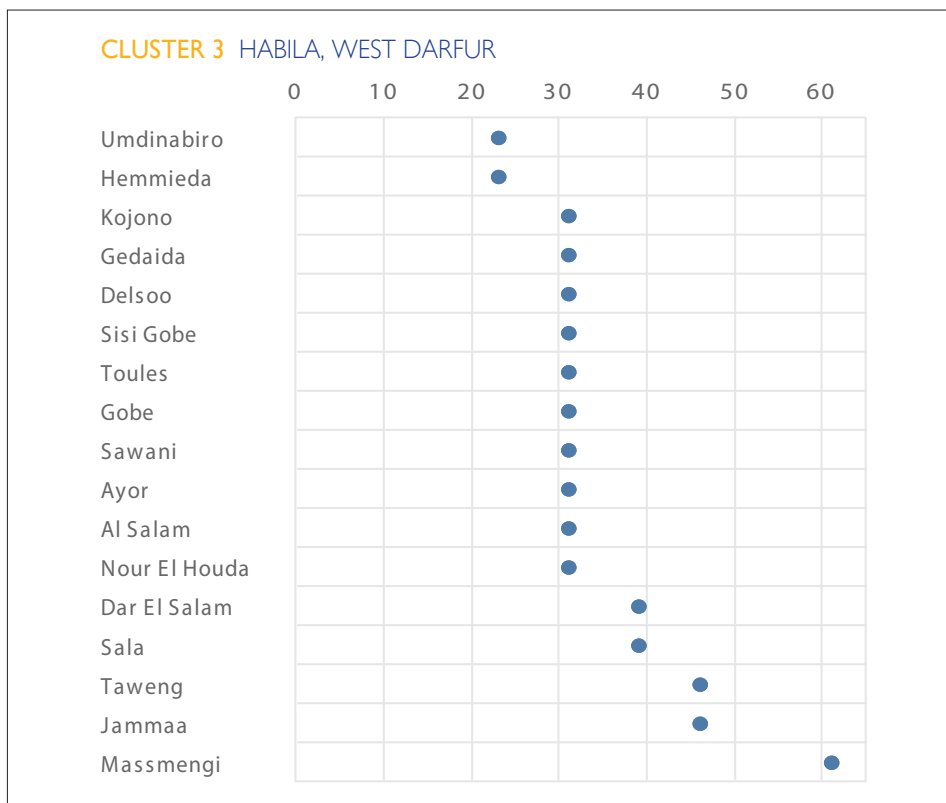
### BREAKDOWN OF SCORE

- Indicators with HIGH effect**
  - Poor** No safety concerns
- Indicators with MEDIUM effect**
  - Poor** Informal dispute resolution
  - Poor** Food availability
  - Adequate** No house destruction
- Indicators with LOW effect**
  - Average** Access to health facilities
  - Adequate** Access to school
  - Poor** Direct water proximity
  - Average** No presence of security actors



### RETURN INDEX BETA SCORE AND NUMBER OF LOCATIONS

Score	Number of Locations
75-100	0
50-75	1
26-50	14
0-25	2



## CLUSTER 4 WASAT AND SHAMAL JABAL MARRAH, CENTRAL DARFUR

This hotspot encompasses two localities, Wasat and Shamal Jabal Marrah, as they share similar dynamics. They both have some of the largest returnee populations. Most locations with the highest severity are clustered in the north of Jabal Marrah, close to Kebkabiya.

Contrary to the rest of the hotspots, here safety and security is not a driver of instability. Rather, the main drivers of it are house destruction and food insecurity. Most locations in Shamal Jabal Marrah remain largely affected by house destruction due to past conflict involving government forces and the Sudan Liberation Army. In addition, food availability in local markets is reportedly limited.

Service provision is average at best, with residents in around half of locations unable to access them overall.



Locations of return  
**25**

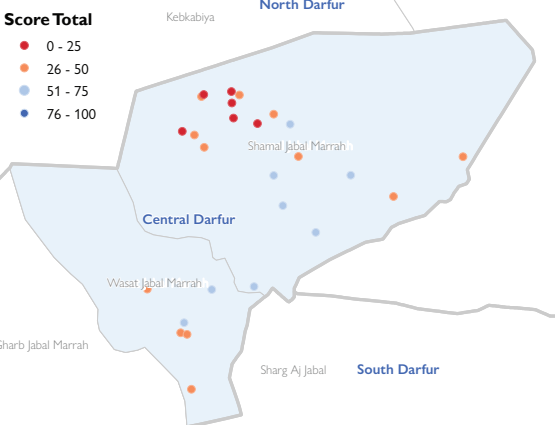


Returnee individuals  
**145,074**

### BREAKDOWN OF SCORE

- Indicators with HIGH effect**
- Adequate** No safety concerns
- Indicators with MEDIUM effect**
- Average** Informal dispute resolution
- Poor** Food availability
- Poor** No house destruction
- Indicators with LOW effect**
- Average** Access to health facilities
- Average** Access to school
- Poor** Direct water proximity
- Adequate** No presence of security actors

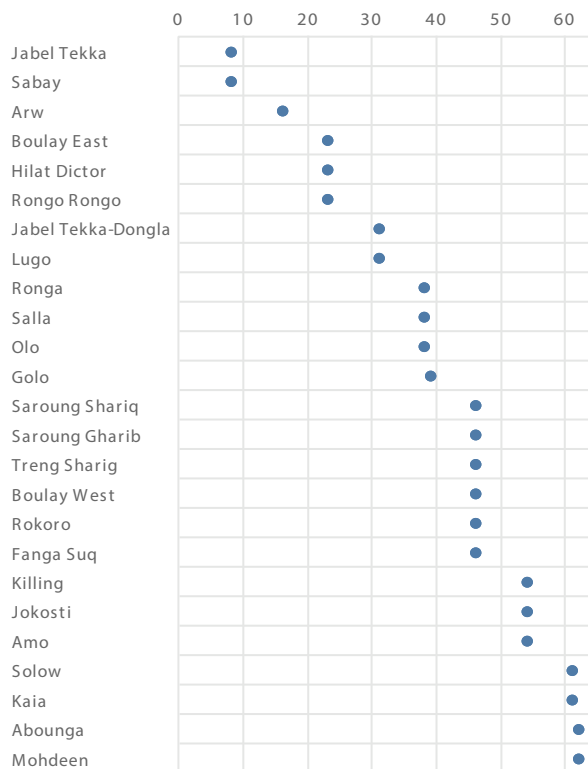
### SEVERITY OF LIVING CONDITIONS IN RETURN



### RETURN INDEX BETA SCORE AND NUMBER OF LOCATIONS

Score	Number of Locations
75-100	0
50-75	7
26-50	12
0-25	6

### CLUSTER 4 WASAT AND SHAMAL JABAL MARRAH, CENTRAL DARFUR





## CLUSTER 5 GENEINA, WEST DARFUR

Most locations of return assessed in Ag Geneina locality are located around West Darfur's administrative capital.<sup>7</sup>

Main issues in the locality driving poor living conditions and lack of returns are related to safety and security. The vast majority of locations reported concerns over high risks of violence from tribal conflicts which tend to recur and flare up typically during harvest seasons or armed clashes as well as from crime. All locations also have limited food availability, mostly linked to high prices or the security situation challenging supply. The locality is heavily impacted by the presence of security forces and armed groups nearby.

Given that this is a more urban environment, issues in accessing services are less acute than in other localities.

Locations of return **15**  
 Returnee individuals **23,995**

### BREAKDOWN OF SCORE

Indicators with **HIGH** effect

**Poor** No safety concerns

Indicators with **MEDIUM** effect

**Adequate** Informal dispute resolution

**Poor** Food availability

**Average** No house destruction

Indicators with **LOW** effect

**Average** Access to health facilities

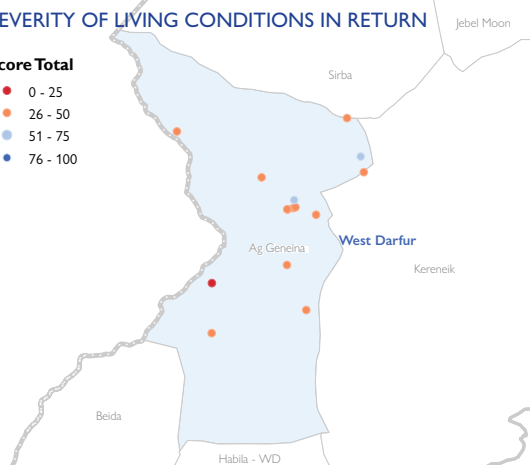
**Average** Access to school

**Average** Direct water proximity

**Poor** No presence of security actors

### SEVERITY OF LIVING CONDITIONS IN RETURN

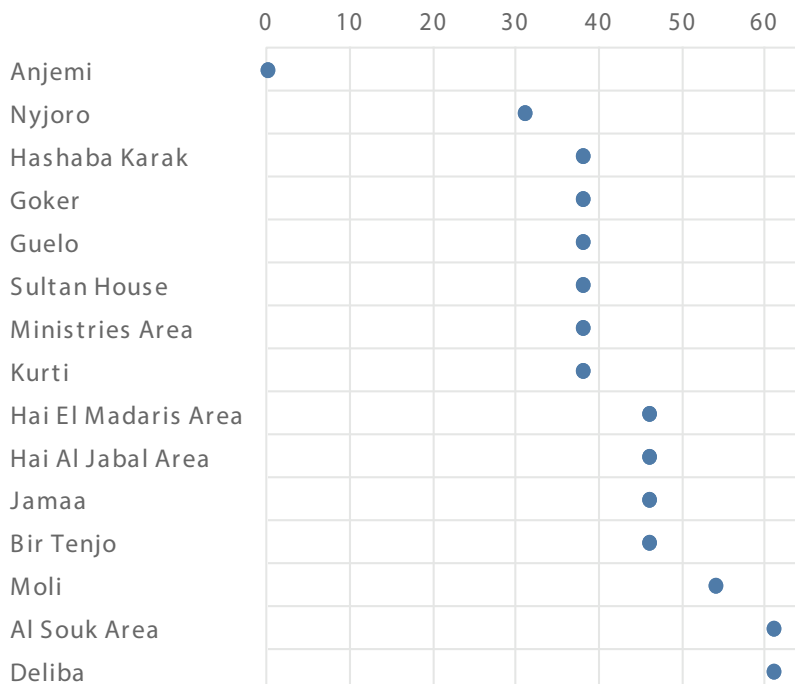
**Score Total**  
 ● 0 - 25  
 ● 26 - 50  
 ● 51 - 75  
 ● 76 - 100



### RETURN INDEX BETA SCORE AND NUMBER OF LOCATIONS

Score	Number of Locations
75-100	0
50-75	3
26-50	11
0-25	1

### CLUSTER 5 GENEINA, WEST DARFUR



<sup>7</sup> For more information see, IOM DTM, Ag Geneina EET Series Summary (Update 1 – Update 20) (2022).

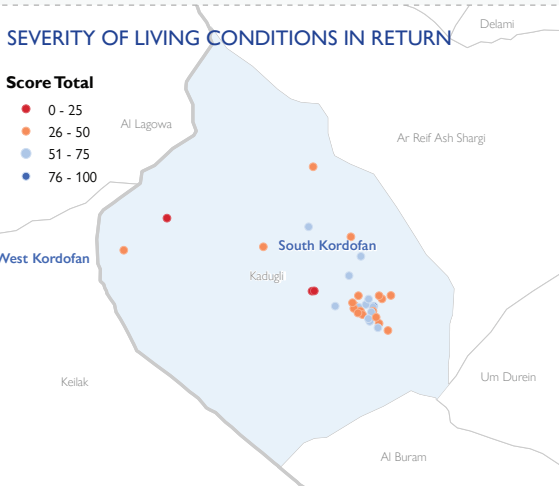
## CLUSTER 6 KADUGLI, SOUTH KORDOFAN

Over the last few years, Kadugli has been the site of repeated inter-communal conflict between Arab and Nuba tribesmen. Most locations of return assessed here are clustered within the urban area of the administrative capital. There is a mix of locations with very poor living conditions as well as others with relatively good conditions. In rural areas, most locations feature a low index score.

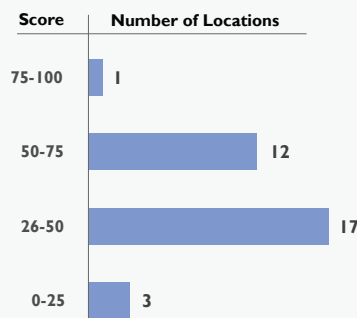
The main causes of poor living conditions are mostly linked to material wellbeing. Locations reported issues with food availability mainly due to high prices and lack of affordability. Health provision is also limited to only some areas in the center.

 Locations of return  
**33**

 Returnee individuals  
**3,871**



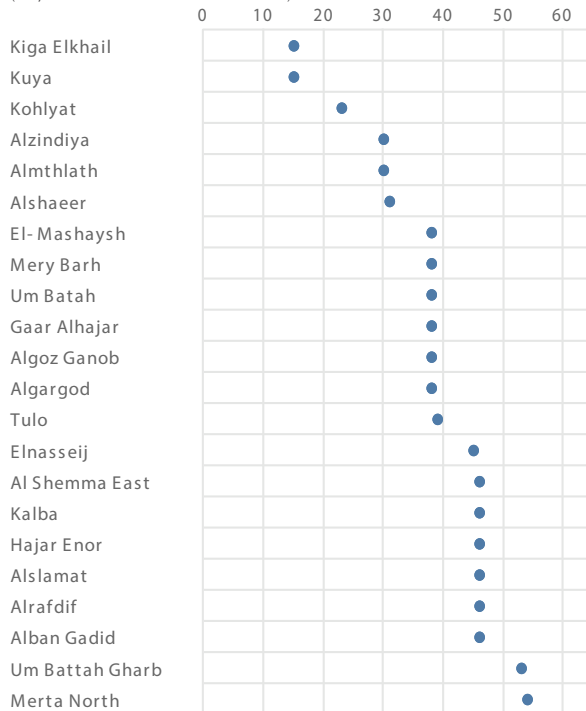
### RETURN INDEX BETA SCORE AND NUMBER OF LOCATIONS



### BREAKDOWN OF SCORE

- Indicators with HIGH effect**
  - Adequate** No safety concerns
- Indicators with MEDIUM effect**
  - Poor** Informal dispute resolution
  - Poor** Food availability
  - Adequate** No house destruction
- Indicators with LOW effect**
  - Average** Access to health facilities
  - Adequate** Access to school
  - Poor** Direct water proximity
  - Poor** No presence of security actors

### CLUSTER 6 KADUGLI, SOUTH KORDOFAN (Only the 22 locations with the lowest scores)



## CLUSTER 7 DILLING, SOUTH KORDOFAN

Dilling's urban area and surroundings concentrate the large majority of locations assessed in this locality. Overall, there are no locations with extremely low index scores, but most locations tend to have intermediate-low living conditions.

As in other contexts, safety concerns and food insecurity (linked to high prices) are the primary causes explaining these scores. Other indicators such as housing and services are mostly positive.

Locations of return **21**

Returnee individuals **2,375**

### BREAKDOWN OF SCORE

Indicators with **HIGH** effect

**Poor** No safety concerns

Indicators with **MEDIUM** effect

**Adequate** Informal dispute resolution

**Poor** Food availability

**Adequate** No house destruction

Indicators with **LOW** effect

**Adequate** Access to health facilities

**Adequate** Access to school

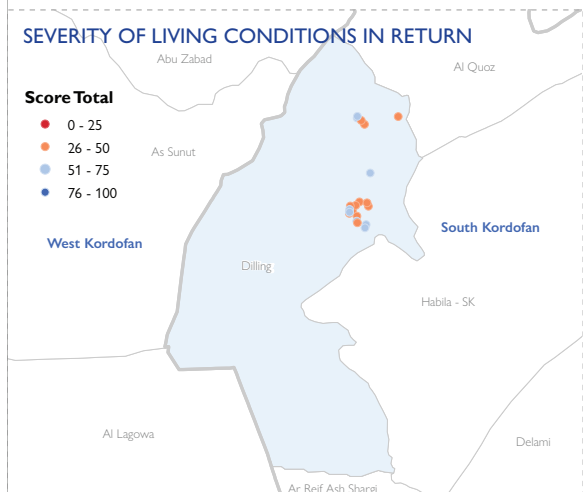
**Poor** Direct water proximity

**Poor** No presence of security actors

### SEVERITY OF LIVING CONDITIONS IN RETURN

#### Score Total

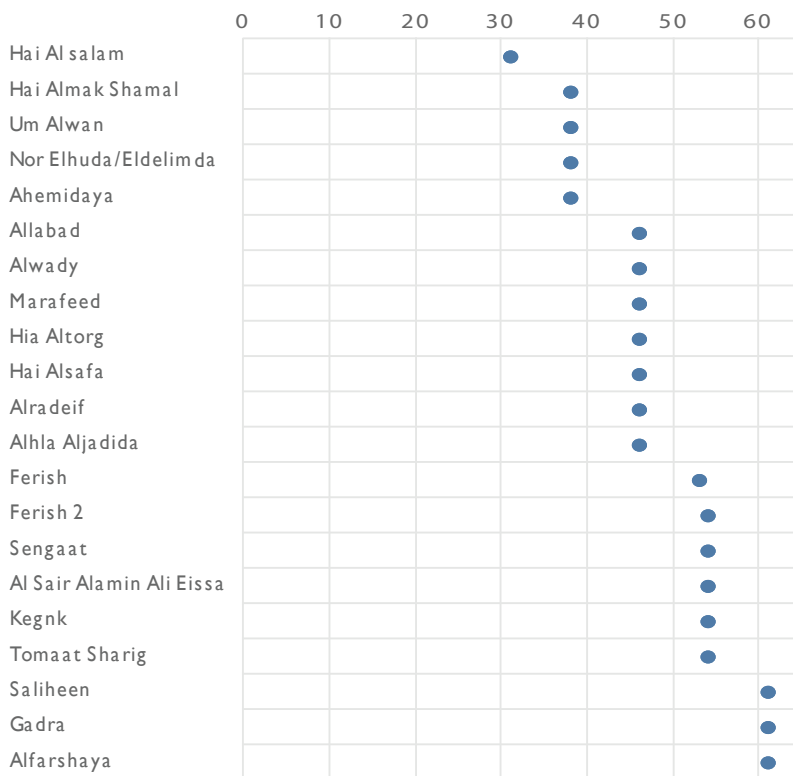
- 0 - 25
- 26 - 50
- 51 - 75
- 76 - 100



### RETURN INDEX BETA SCORE AND NUMBER OF LOCATIONS

Score	Number of Locations
75-100	0
50-75	9
26-50	12
0-25	0

## CLUSTER 7 DILLING, SOUTH KORDOFAN



## CLUSTER 8 EL FASHER, NORTH DARFUR

El Fasher is the locality with the largest number of locations of return assessed. The majority are clustered on the western side of the locality, near Kutum. There is a high diversity of locations in terms of score – many have some of the lowest index scores overall and others report relatively positive living conditions.

Those in the worst state are located relatively far away from El Fasher’s administrative capital, affected by spiraling conflicts between farmers and nomads, especially during the rainy season. For these locations, the drivers of instability are several, mostly linked to safety concerns due to the risk of renewed clashes, food insecurity (linked to security-related issues hindering supply), and housing destruction due to conflict. Poor water access and limited access to education facilities also hinder living conditions and thus returns here as well.

Locations of return **71**

Returnee individuals **49,019**

### BREAKDOWN OF SCORE

Indicators with **HIGH** effect

**Average** No safety concerns

Indicators with **MEDIUM** effect

**Adequate** Informal dispute resolution

**Poor** Food availability

**Average** No house destruction

Indicators with **LOW** effect

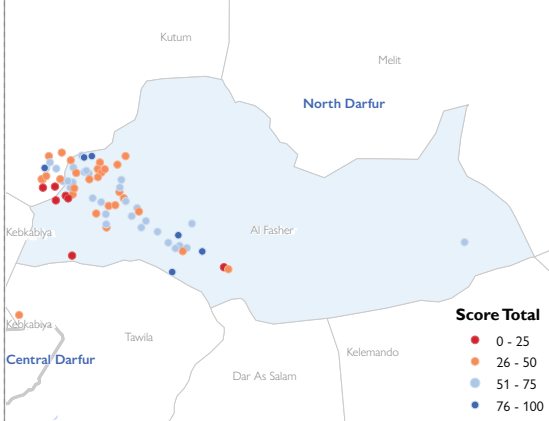
**Adequate** Access to health facilities

**Average** Access to school

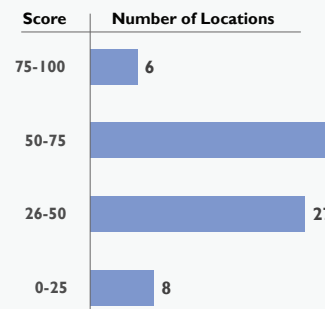
**Adequate** Direct water proximity

**Adequate** No presence of security actors

### SEVERITY OF LIVING CONDITIONS IN RETURN

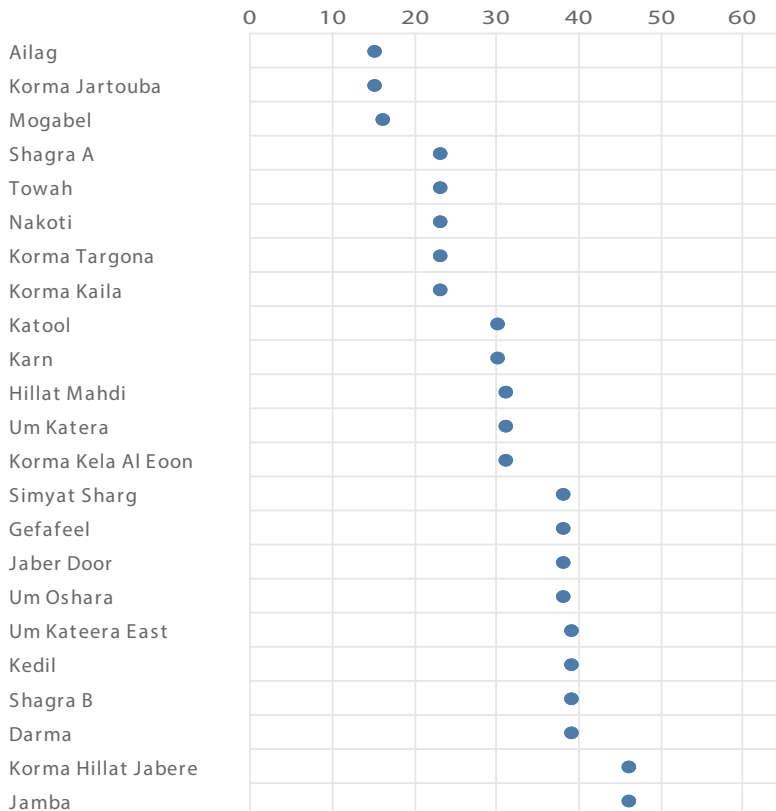


### RETURN INDEX BETA SCORE AND NUMBER OF LOCATIONS



## CLUSTER 8 AL FASHER, NORTH DARFUR

(Only the 22 locations with the lowest scores)



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