



Population Movement Baseline (PMB) Report

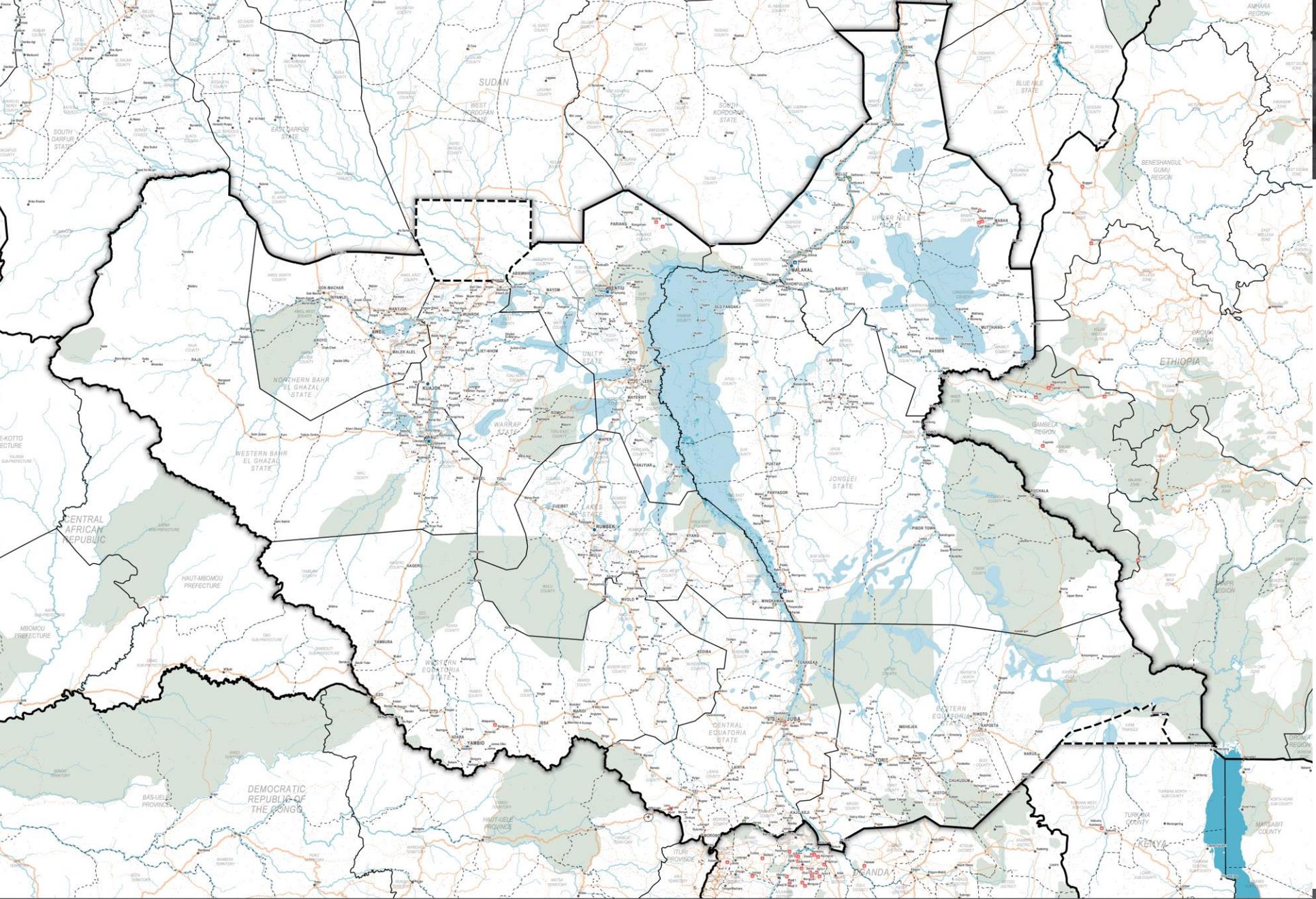
Key Findings

South Sudan, December 2020

A person wearing a dark vest with 'REACH' and 'AN EXPANDED OF IMPACTS APPROACH. UNITED FOR URBAN.' printed on the back, standing in a field of cars. The word 'CONTENTS' is overlaid in large white letters on the left side of the image.

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A person wearing a grey vest with the word 'REACH' and 'INTERNATIONAL REACH' printed on the back, standing in a displacement camp with many people and tents in the background.

OBJECTIVE

To increase understanding of population movement routes upon the onset of shocks in South Sudan in order to enable better humanitarian response planning along routes and in locations expected to receive internally displaced persons (IDPs).

- To comprehensively map historical population movement routes to contextualise current routes and support the prioritisation for a needs-based humanitarian response.
- To improve understanding of how different drivers of population movement lead to variation in displacement patterns and migration routes.
- To improve understanding of the challenges along displacement routes and the needs of the displaced populations that arise during movement.
- To provide a more nuanced narrative on the decision-making surrounding population movement in South Sudan in order to support response planning for populations on the move.

Methodology

- Mixed-methodology approach
 - Secondary data review (SDR): **March-December 2019**
 - Qualitative data collection of focus group discussions (FGDs): **June-October 2019**
 - Quantitative analysis of database, qualitative analysis of FGDs — **October 2019-January 2020**

Secondary Data Review

- Operation Lifeline Sudan (OLS) data
- UN/NGO reports
- REACH displacement mapping briefs
- Secondary data generating entries in the **PMB Database**

Qualitative Data Collection

- Participatory Population Movement Mapping FGDs
 - ✓ Western Lakes State
 - ✓ Southern Unity State
 - ✓ Upper Nile State
 - ✓ Greater Akobo

Analysis

- Quantitative analysis of PMB database: frequency of routes
- Qualitative analysis of FGDs: decision-making factors, challenges, returns
- Mixed approach: differences by driver, changes over time

Population Movement Baseline Database

Examples of Sources:

- OCHA weekly/monthly Humanitarian Bulletins and Snapshots
- OLS weekly/monthly reports (1996-2002)
- Human Rights Watch and Amnesty International Reports
- World Food Programme Sudan Bulletin (1990-2000s)
- REACH Rapid Assessments and Displacement Briefs
- Internal Displacement Monitoring Centre Reports

Year	Driver	Type_Move	Settlement_D	County_D	State_D	Region_D	Country_D	AdminLevel_D	Settlement_A	County_A	State_A	Region_A	Country_A	AdminLevel_A	
1	2002	Insecurity	Displacement	WichtheepMayom	Mayom	Unity	GUN	SouthSudan	Settlement	MayomMayom	Mayom	Unity	GUN	SouthSudan	Settlement
2	2002	Insecurity	Displacement		Rubkona	Unity	GUN	SouthSudan	County		Rubkona	Unity	GUN	SouthSudan	County
3	2002	Insecurity	Displacement		#N/A	#N/A	GUN	SouthSudan	Region		#N/A	#N/A	GBEG	SouthSudan	Region
4	2002	Insecurity	Displacement		#N/A	Unity	GUN	SouthSudan	State		#N/A	Unity	GUN	SouthSudan	State
5	2002	Insecurity	Displacement		#N/A	Unity	GUN	SouthSudan	State		#N/A	NorthernBah	GBEG	SouthSudan	State
6	2003	Insecurity	Displacement		Pariang	Unity	GUN	SouthSudan	County		Pariang	Unity	GUN	SouthSudan	County
7	1994	Insecurity	Displacement		LuakpinyNasir	UpperNile	GUN	SouthSudan	County		Maiwut	UpperNile	GUN	SouthSudan	County
8	1994	Insecurity	Displacement		LuakpinyNasir	UpperNile	GUN	SouthSudan	County		#N/A	#N/A	#N/A	Ethiopia	County
9	2004	Insecurity	Displacement		Fashoda	UpperNile	GUN	SouthSudan	County		#N/A	UpperNile	GUN	SouthSudan	State
10	2004	Insecurity	Displacement		Manyo	UpperNile	GUN	SouthSudan	County		#N/A	UpperNile	GUN	SouthSudan	State
11	2002	Insecurity	Displacement		Koch	Unity	GUN	SouthSudan	County	TonjTonjSouth	TonjSouth	Warrap	GBEG	SouthSudan	Settlement
12	2002	Insecurity	Displacement		Pariang	Unity	GUN	SouthSudan	County	TonjTonjSouth	TonjSouth	Warrap	GBEG	SouthSudan	Settlement
13	2001	Insecurity	Displacement	RajaRaja	Raja	WesternBah	GBEG	SouthSudan	Settlement		#N/A	South Darfur	Darfur	Sudan	State
14	2001	Insecurity	Displacement	RajaRaja	Raja	WesternBah	GBEG	SouthSudan	Settlement		Raja	WesternBah	GBEG	SouthSudan	County
15	2001	Insecurity	Displacement	RajaRaja	Raja	WesternBah	GBEG	SouthSudan	Settlement		Wau	WesternBah	GBEG	SouthSudan	County
16	2001	Insecurity	Displacement	RajaRaja	Raja	WesternBah	GBEG	SouthSudan	Settlement		JurRiver	WesternBah	GBEG	SouthSudan	County
17	2001	Insecurity	Displacement	RajaRaja	Raja	WesternBah	GBEG	SouthSudan	Settlement		#N/A	WesternEqui	GEq	SouthSudan	State
18	2001	Insecurity	Displacement	RajaRaja	Raja	WesternBah	GBEG	SouthSudan	Settlement		#N/A	#N/A	#N/A	CentralAfricanR	Country
19	2002	Insecurity	Displacement	KuajokGogrialWest	GogrialWest	Warrap	GBEG	SouthSudan	Settlement		AwelSouth	NorthernBah	GBEG	SouthSudan	County
20	2002	Insecurity	Displacement	GogrialGogrialWest	GogrialWest	Warrap	GBEG	SouthSudan	Settlement		AwelSouth	NorthernBah	GBEG	SouthSudan	County
21	2003	Insecurity	Displacement	RajaRaja	Raja	WesternBah	GBEG	SouthSudan	Settlement	TamburaTambura	Tambura	WesternEqui	GEq	SouthSudan	Settlement
22	2001	Insecurity	Displacement	RajaRaja	Raja	WesternBah	GBEG	SouthSudan	Settlement	TamburaTambura	Tambura	WesternEqui	GEq	SouthSudan	Settlement
23	1988	Insecurity	Displacement		#N/A	WesternBah	GBEG	SouthSudan	State		#N/A	South Darfur	Darfur	Sudan	County
24	1988	Insecurity	Displacement		#N/A	NorthernBah	GBEG	SouthSudan	State		#N/A	South Darfur	Darfur	Sudan	County
25	1992	Insecurity	Displacement		#N/A	WesternBah	GBEG	SouthSudan	State		#N/A	South Darfur	Darfur	Sudan	County
26	1992	Insecurity	Displacement		#N/A	NorthernBah	GBEG	SouthSudan	State		#N/A	South Darfur	Darfur	Sudan	County
27	2001	Insecurity	Displacement		#N/A	WesternBah	GBEG	SouthSudan	State		#N/A	South Darfur	Darfur	Sudan	County
28	2001	Insecurity	Displacement		#N/A	NorthernBah	GBEG	SouthSudan	State		#N/A	South Darfur	Darfur	Sudan	County
29	1993	Insecurity	Displacement	YeiYei	Yei	CentralEqua	GEq	SouthSudan	County		#N/A	#N/A	#N/A	DRC	Country
30	1993	Insecurity	Displacement	YeiYei	Yei	CentralEqua	GEq	SouthSudan	County		#N/A	#N/A	#N/A	Uganda	Country
31	1997	Insecurity	Displacement	YeiYei	Yei	CentralEqua	GEq	SouthSudan	County		#N/A	#N/A	#N/A	DRC	Country
32	1997	Insecurity	Displacement	YeiYei	Yei	CentralEqua	GEq	SouthSudan	County		#N/A	#N/A	#N/A	Uganda	Country
33	1991	Insecurity	Displacement	BorBorSouth	BorSouth	Jonglei	GUN	SouthSudan	Settlement		MundriWest	WesternEqui	GEq	SouthSudan	County
34	1991	Insecurity	Displacement	BorBorSouth	BorSouth	Jonglei	GUN	SouthSudan	Settlement		MundriEast	WesternEqui	GEq	SouthSudan	County
35	1992	Insecurity	Displacement	BorBorSouth	BorSouth	Jonglei	GUN	SouthSudan	Settlement	AguraanYirolWest	YirolWest	Lakes	GBEG	SouthSudan	Settlement
36	1992	Insecurity	Displacement	KongorTwicEast	TwicEast	Jonglei	GUN	SouthSudan	Settlement	AguraanYirolWest	YirolWest	Lakes	GBEG	SouthSudan	Settlement
37	1992	Insecurity	Displacement	Duk_FadiatDuk	Duk	Jonglei	GUN	SouthSudan	Settlement	AyodAyod	Ayod	Jonglei	GUN	SouthSudan	Settlement
38	1992	Insecurity	Displacement	Duk_FadiatDuk	Duk	Jonglei	GUN	SouthSudan	Settlement	KimDuk	Duk	Jonglei	GUN	SouthSudan	Settlement
39	1992	Insecurity	Displacement	KimDuk	Duk	Jonglei	GUN	SouthSudan	Settlement	AyodAyod	Ayod	Jonglei	GUN	SouthSudan	Settlement
40	2002	Insecurity	Displacement	MankienMayom	Mayom	Unity	GUN	SouthSudan	Settlement	MayomMayom	Mayom	Unity	GUN	SouthSudan	Settlement
41	1992	Insecurity	Displacement	YirolYirolWest	YirolWest	Lakes	GBEG	SouthSudan	Settlement	Aluak_Luak_OneYirolWest	YirolWest	Lakes	GBEG	SouthSudan	Settlement
42	1992	Insecurity	Displacement	YirolYirolWest	YirolWest	Lakes	GBEG	SouthSudan	Settlement	KongorTwicEast	TwicEast	Jonglei	GUN	SouthSudan	Settlement
43	1992	Insecurity	Displacement	YirolYirolWest	YirolWest	Lakes	GBEG	SouthSudan	Settlement	BorBorSouth	BorSouth	Jonglei	GUN	SouthSudan	Settlement

Limitations

- Limited by events captured in secondary data publicly available, especially where qualitative data collection did not take place: **not representative of all displacement movements 1983-2019**
- Quantitative analysis captured **frequency** of use of each route, **not** size of population moving
- Some geographic areas may be over-represented if more secondary data existed for that area
- **Findings are therefore only indicative** of key themes and routes, especially qualitative findings

Population Movement Baseline Database in Numbers

Findings drawn from quantitative analysis of PMB database

934 displacement movements,
751 county-level displacement
movements

Percent of total movements by driver:



92% Insecurity
3% Food insecurity
3% Climate Shocks
2% Disease Outbreak

Percent of total movements by movement type:



86% Internal
14% Cross-border

Percent of county-level movements by movement type:



61% Inter-county
39% Intra-county

Population Movement Baseline Database in Numbers

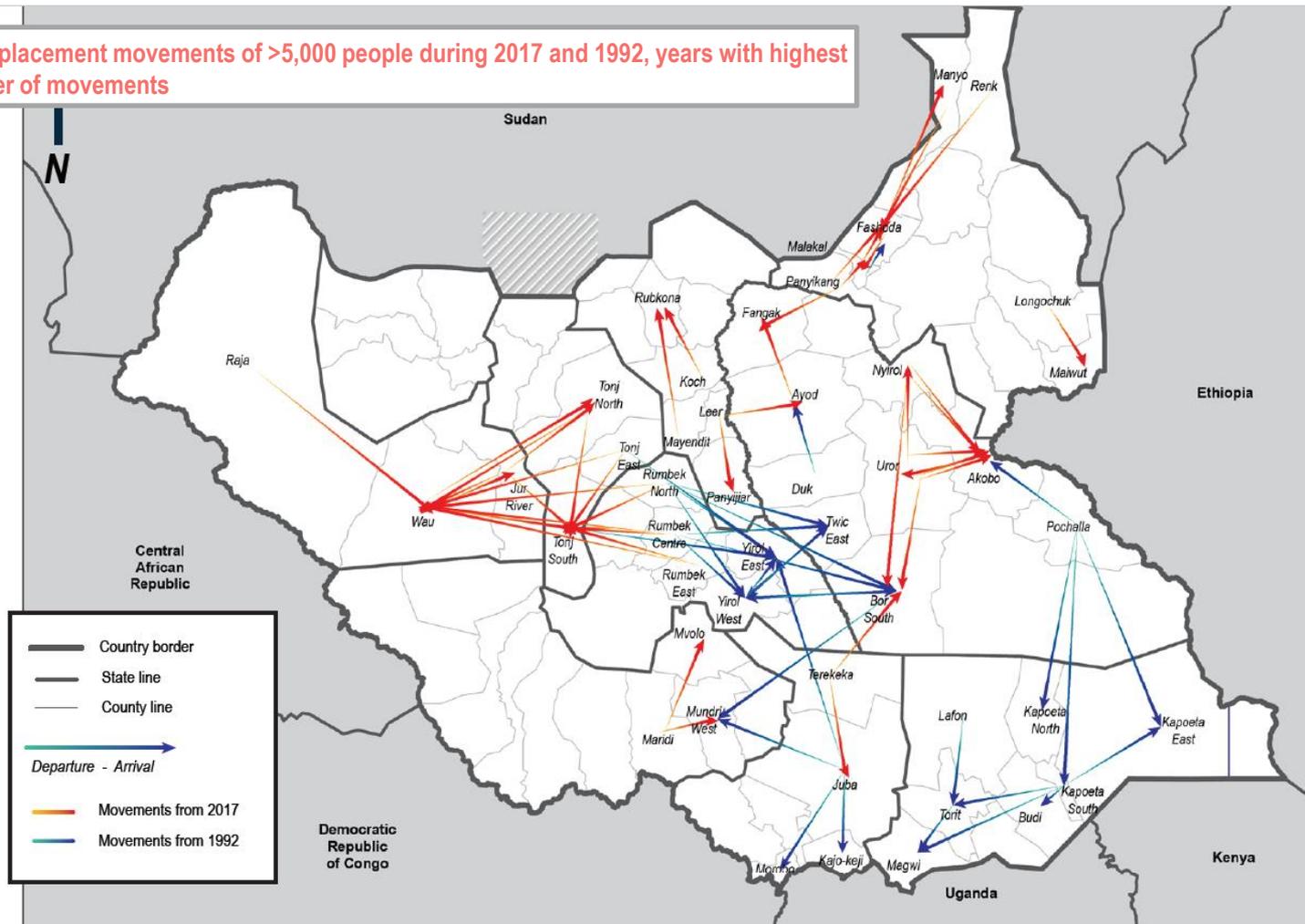
Findings drawn from quantitative analysis of PMB database

Top 5 years with most recorded movements in PMB database:

- 2017 – 141 (15%)** Among highest concentrations of offensives in contemporary conflict, displacement in Equatorias, Western Bahr el Ghazal, Jonglei, southeast Unity, Malakal
- 1992 – 60 (6%)** Conflicts in Rumbek, Yirol, Juba, and Kapoeta towns driving displacement, relocation of former refugees due to offensive in Pochalla
- 2002 – 53 (6%)** Offensives and large-scale forced displacement/depopulation out of oil-rich regions of northern and central Unity state into Warrap; conflicts in Gogrial town, mass movements out of Raja following offensive
- 2018 – 49 (5%)** Conflict and food insecurity in Greater Baggari, central Unity, conflict in Western Equatoria, sub-national conflict in Lakes
- 1999 – 49 (5%)** Onset of offensives and large-scale displacement out of oil fields in Unity; insecurity in Sobat River area driving displacement into Malakal

Population Movement Baseline Database in Numbers

Inter-county displacement movements of >5,000 people during 2017 and 1992, years with highest recorded number of movements



Drivers of Population Movement in South Sudan



Conflict/Insecurity (including perceived insecurity)



Disease outbreaks



Resource stress/Food insecurity (i.e. distress migration)



Climatic shocks (e.g. flooding)

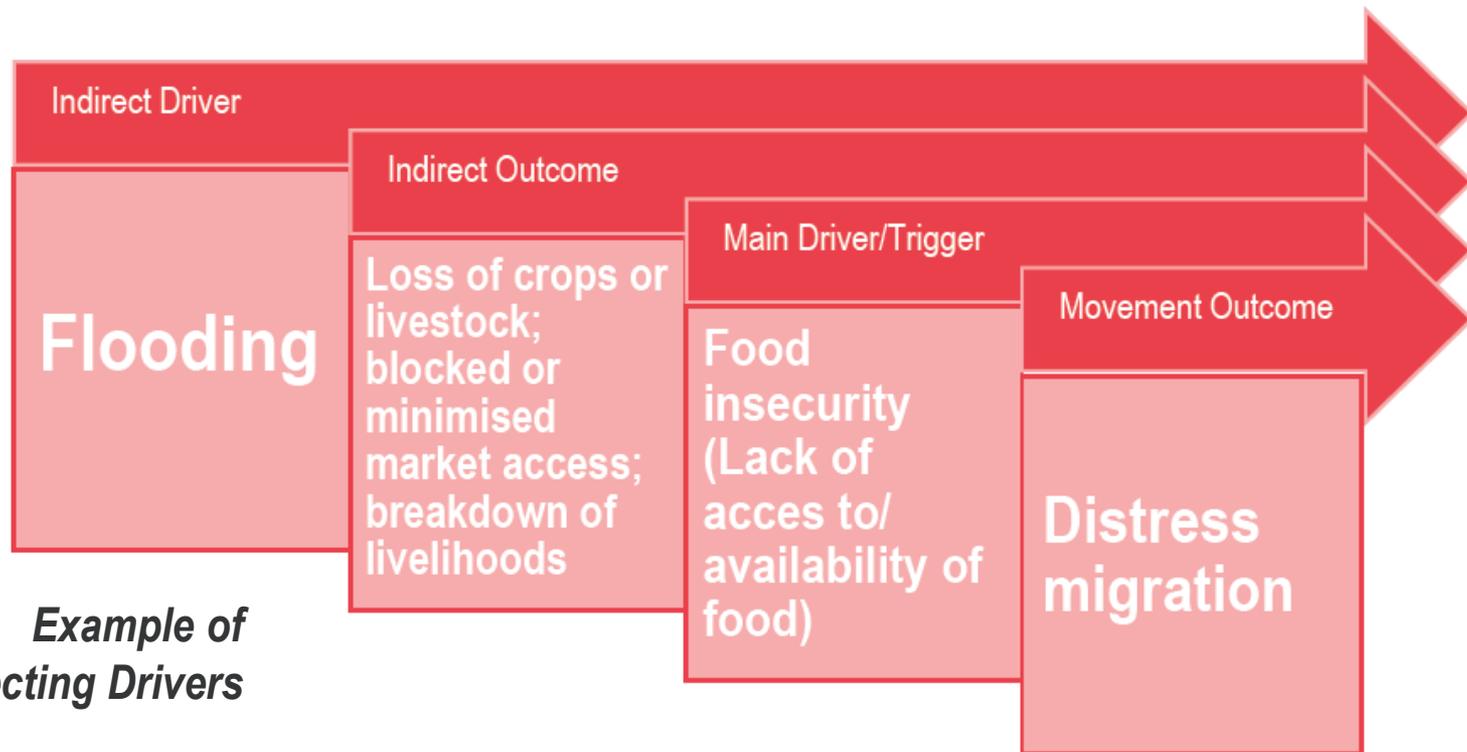


Livelihoods (e.g. cattle migration, fishing camps)

Intersecting Drivers of Population Movement

Findings drawn from qualitative analysis of FGDs

Movements often resulted from multiple inter-linked or sequential drivers, although analysis in this report categorized each movement by a single “main” driver, i.e. trigger that finally prompted household members to move



Micro-displacement, major displacement, and mobility restrictions

Findings drawn from qualitative analysis of FGDs

Micro-displacement

- Short-term, shorter-distance, recurrent displacements often following sudden-onset crises and/or **less severe shocks**
- Employed by households within a **wide range of vulnerability**
- Movement towards urban areas or bush areas in search of temporary protection followed by return
- Often first resort, preferred where possible

Major Displacement

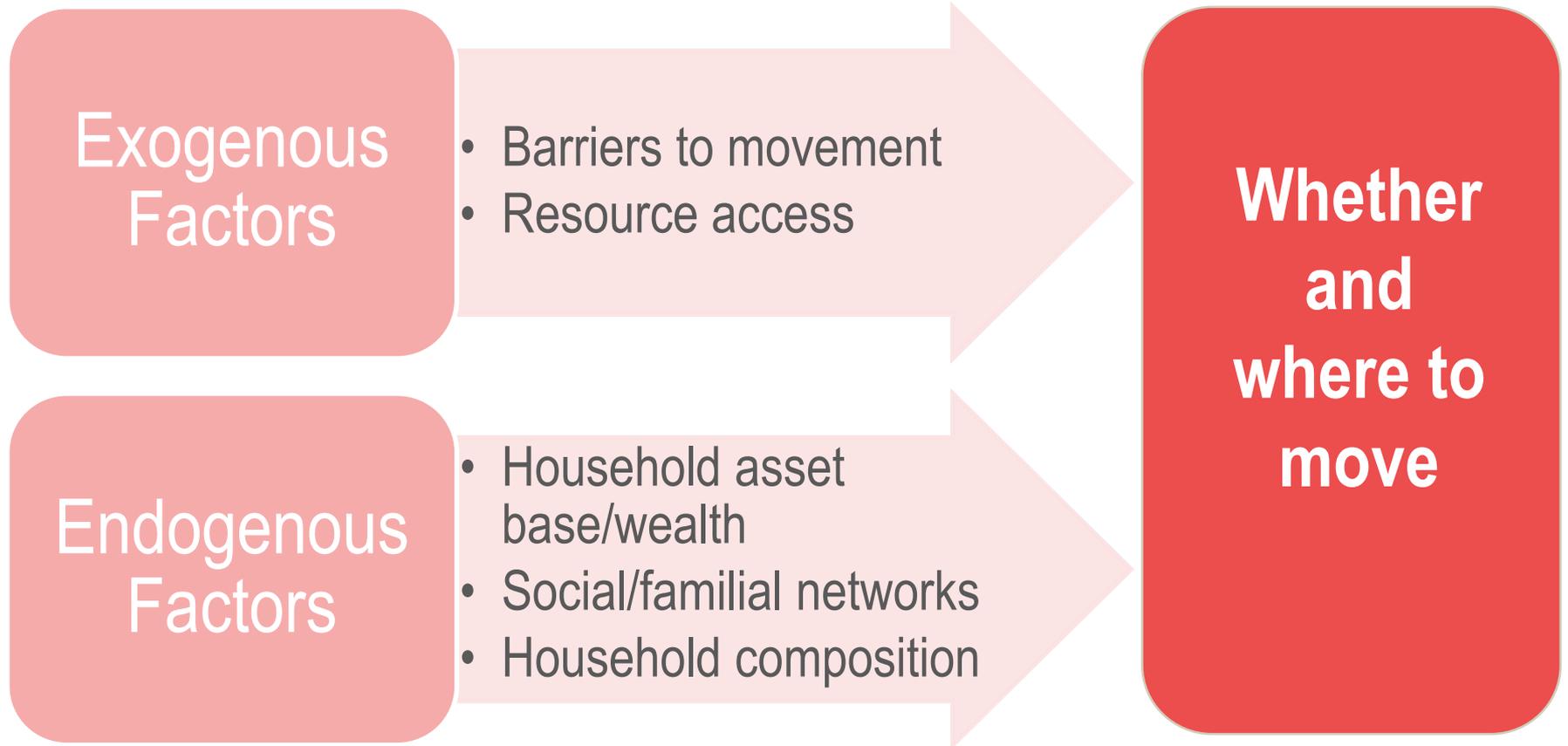
- Longer-distance, longer-term movement, often spending several months to years in each location
- Common response to more **severe/widespread/prolonged shocks**, but usually employed by less vulnerable households with ability and means to travel farther
- Micro-displacement can lead to secondary major displacement if initial shock intensifies or additional shock occurs
- Can include adaptive displacement: recurrent displacement out of high-threat area into low-threat area that becomes permanent relocation

Mobility Restriction/Involuntary Immobility

- Especially in South Sudan, mobility is a **resource** and lack of movement \neq lack of shock or lack of needs
- Inability to move is often a sign of the **most vulnerable households** as well as **more severe shocks** or combination of shocks
- Associated with more widespread shocks (insecurity, food insecurity, flooding) blocking most surrounding routes OR negating availability of resources in most surrounding areas

Decision-making Factors

Findings drawn from qualitative analysis of FGDs



Decision-making: Exogenous factors

Findings drawn from qualitative analysis of FGDs

• Barriers to movement

- Environmental barriers (e.g. flooding, desert areas with not enough food/water for journey)
- Socio-political barriers (e.g. ongoing insecurity, identity group-based divides)
- Many 'no-go zones' determined at household level: **different households may assess risk vs. benefit differently**
- Reported loss of access to certain areas over time as identity-group based affiliations and divides shift

• Access to resources

- Dependent on type of shock(s), e.g. seeking locations with good healthcare access following disease outbreak
- Typically still seek locations that can meet basic needs when fleeing insecurity
- Urban centres, IDP/refugee camps often seen as providing service/livelihood access and/or safety
- Lower-severity shocks OR lower mobility at household level often prompts smaller movements to nearby bush areas

Decision-making: Endogenous factors

Findings drawn from qualitative analysis of FGDs

• Household asset base

- Household assets often related to livelihoods profile
- Mixed effect of productive household assets: can delay or cancel out *need* for distress migration, but can also cause household to remain immobile despite insecurity
- Certain assets can restrict available movement routes, e.g. in Unity, households with cattle move towards dry mainland areas during displacement events, households without cattle moved to islands
- Ownership of transportation assets can increase movement possibilities, e.g. canoes during flooding shocks

• Wealth

- Can increase movement options by covering transportation and administrative costs of longer-distance travel (e.g. air travel costs, border crossing fees) to major urban centres or locations in other countries perceived as safer
- More vulnerable households may sometimes pursue long-distance travel despite lack of wealth, but at greater risk (e.g. traveling by foot, avoiding formal crossings)

Decision-making: Endogenous factors

Findings drawn from qualitative analysis of FGDs

• Social/Familial Networks

- Commonly-reported to seek destinations where same/allied identity groups were dominant during sudden-onset insecurity
- Reportedly common to seek familial support during times of resource stress UNLESS relatives perceived to be experiencing same level of resource stress
- Family and social connections to other countries appeared to facilitate cross-border travel

• Household Composition

- The presence of members with mobility challenges (e.g. elderly, people with disabilities, young children) reportedly affected households' ability and willingness to move longer distances
- Gender of household members facilitated tactic in **Unity** during food insecurity + physical insecurity:
 - Households with female household members seen as less likely to be abducted/killed would send them across frontlines to access better markets in the north
 - Households without female household members would have to go south (lower risk but less food)

Decision-making: Why people go where in a crisis

Findings drawn from qualitative analysis of FGDs

• **Cost/benefit analysis**

Findings suggested the following factors were balanced during decision-making, especially during overlapping shocks

- Physical security balanced against resource access
- Physical security versus potential for loss or destruction of assets
- Safety of individual household members versus long-term survival of entire household
- Projected duration of displacement versus livelihood disruption of leaving area

• **Household-level decision, but not household-level movement**

- Findings indicated movement decisions usually made at household level by head of household
- Communal decision-making for movement appeared to be rare
- Voluntary household fragmentation common during both normal livelihood movement and displacement in response to shocks
- Reliance on combination of mobility-based coping mechanisms
- Entire households moving sometimes sign of more severe shocks

Comparison of historic vs. contemporary movements

Findings drawn from quantitative analysis of PMB database

Routes in historic (1983-2012) and contemporary (2013-2019) periods

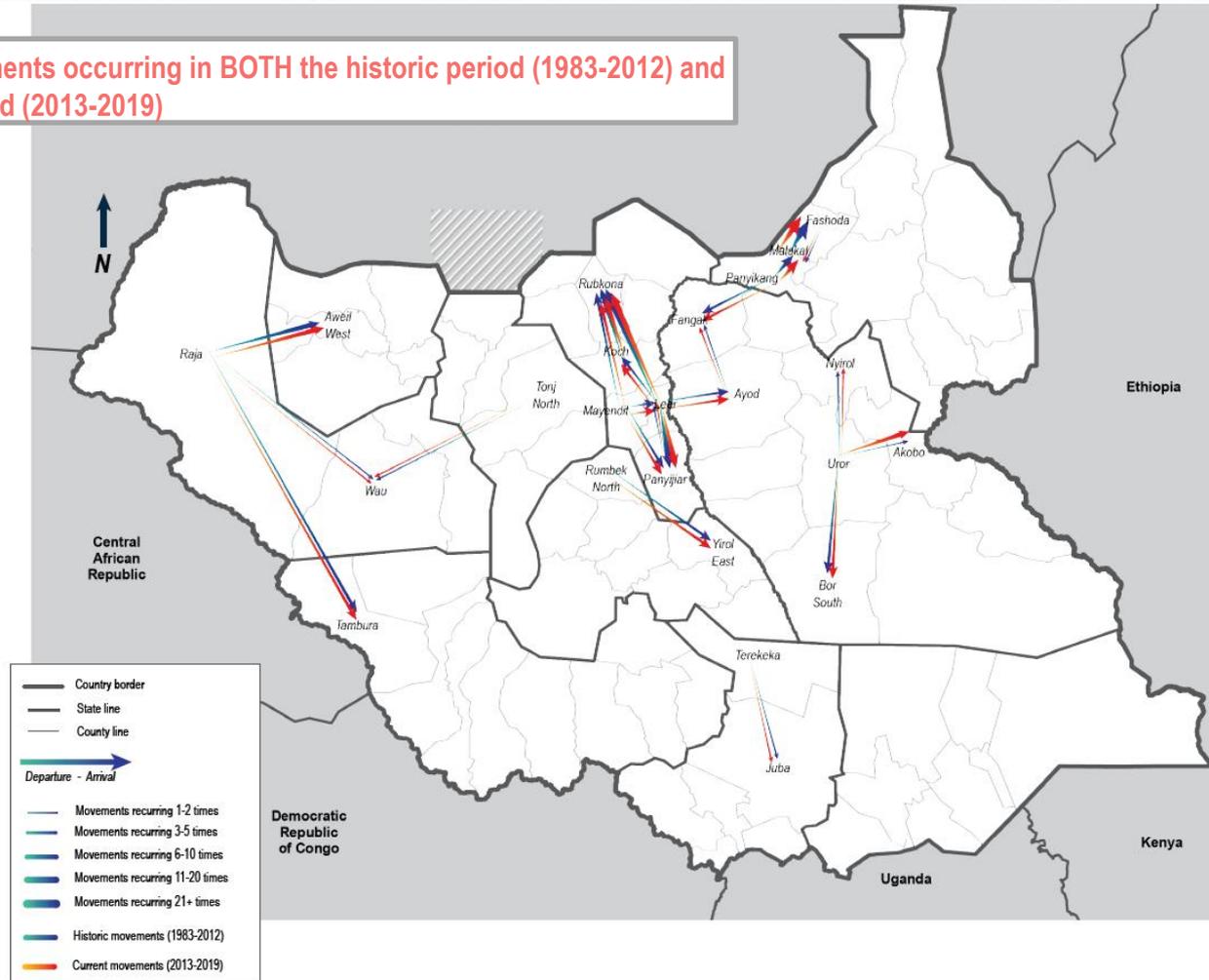
- Only **9.7%** of routes recorded in PMB database occurred in both periods
- Overlap in routes used during both periods in **Upper Nile** and **Unity**
- **Historic routes not necessarily predictors of contemporary routes**, although 67% of routes recorded in database were repeated (37% used once)

Top unique movement routes (inter-county) occurring in both historic and contemporary periods

<i>County-to-county route</i>	<i>Number of repeated movements for route</i>
Malakal to Fashoda	21 
Leer to Panyijiar	14 
Panyikang to Malakal	13 
Leer to Rubkona	11 
Uror to Akobo	8 
Koch to Rubkona	7 

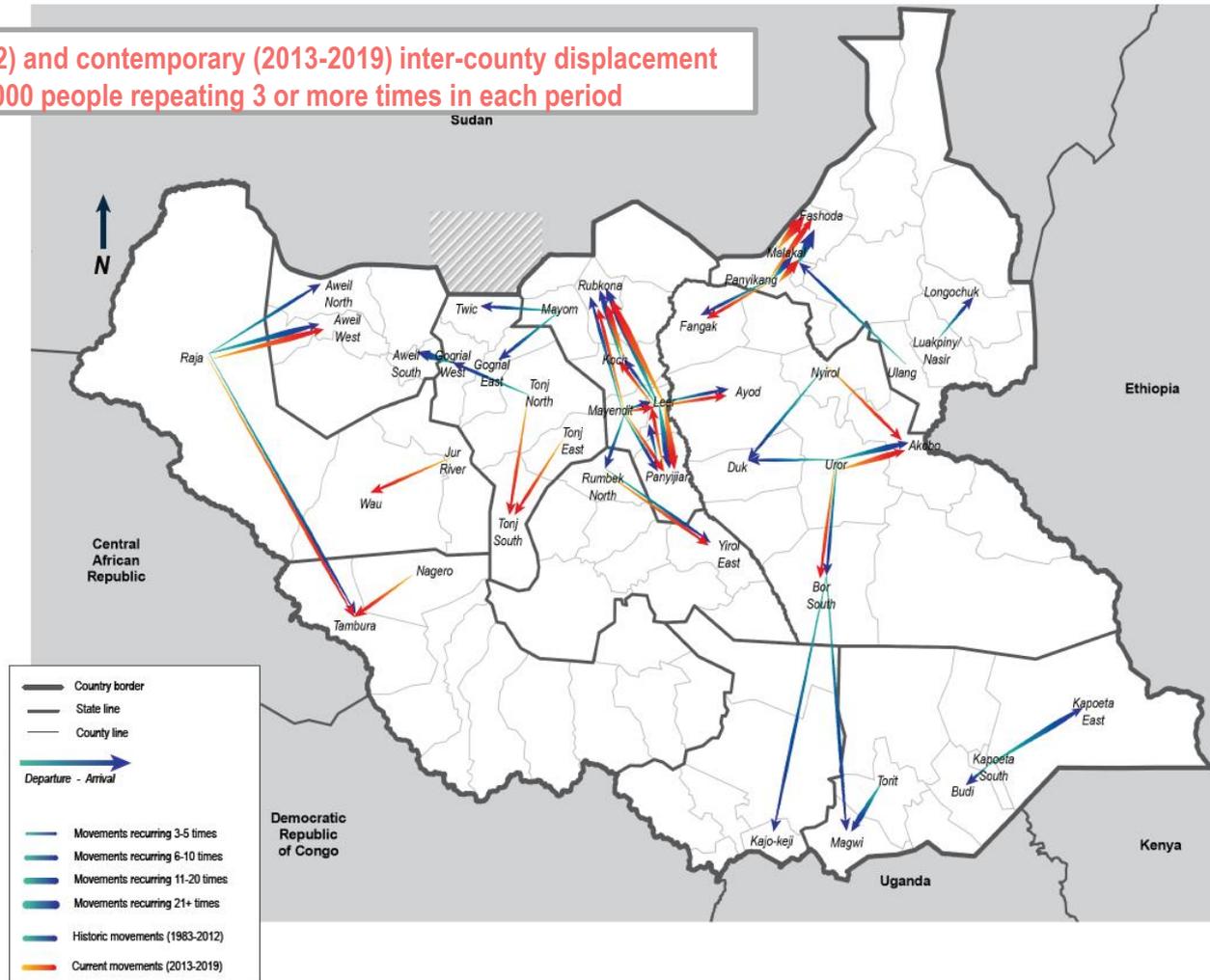
Overlap between historic and contemporary routes

Inter-county movements occurring in BOTH the historic period (1983-2012) and contemporary period (2013-2019)



Population Movement Baseline Database in Numbers

Historic (1983-2012) and contemporary (2013-2019) inter-county displacement movements of >5,000 people repeating 3 or more times in each period



Changing context of movement in contemporary period

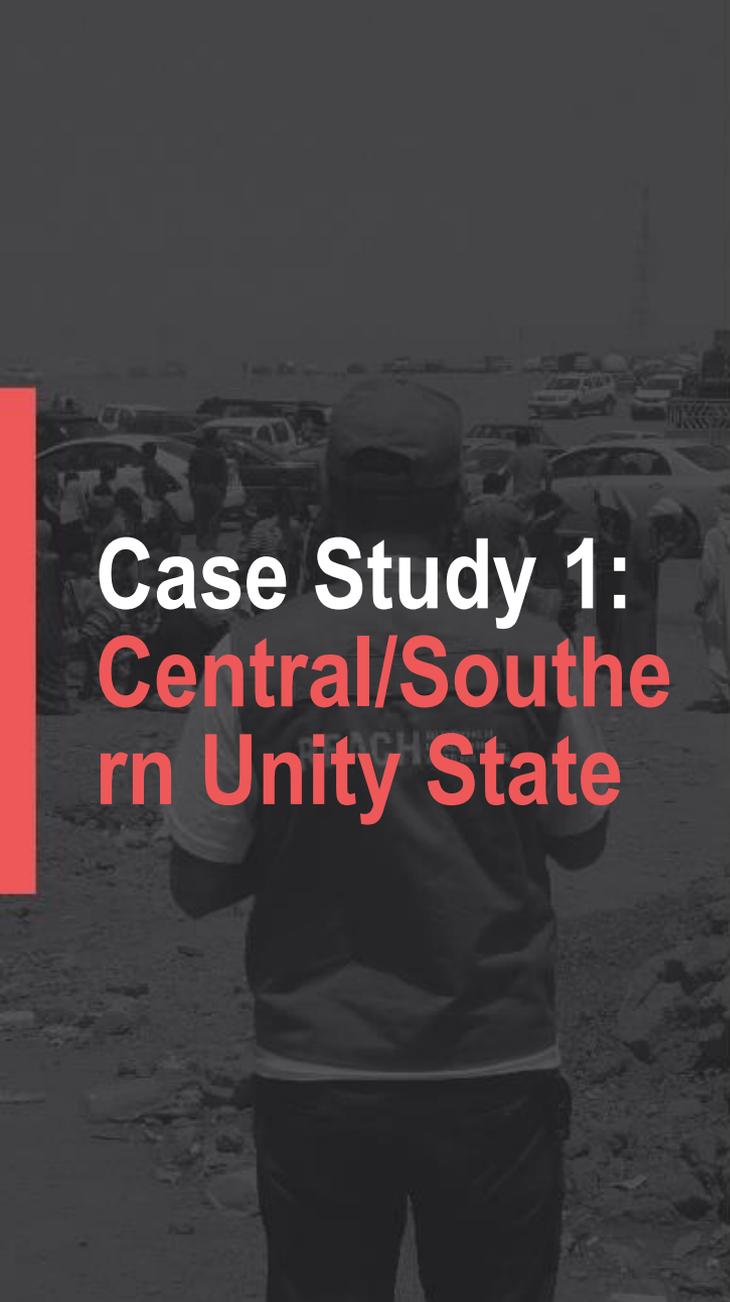
Findings drawn from qualitative analysis of FGDs

- **Increasing perception of physical risk**

- Perceived shift in type, number, and lethality of weapons being used
- Politicisation of social divides, increasing role of divisions between identity groups in national and sub-nation conflict
- Perceived increase in harm to civilians and to civilian housing, property and livelihood assets

- **Decreased household resilience**

- Cattle migration reportedly occurring less frequently (fewer cattle or less migration than before due to cattle theft)
 - Multiple years of interrupted harvests in contemporary period
 - More likely for property to be destroyed, household assets to be stripped, and productive household members injured or killed
- Combination of above factors causes those who can move to reportedly go farther for longer periods under increasingly restrictive movement environment (fewer route options); threshold for distress migration simultaneously lower due to decreased resilience
 - Conversely, for some, increased perception of risk cuts off livelihood/displacement movement completely, while some vulnerable households' depletion of asset base may impede movement

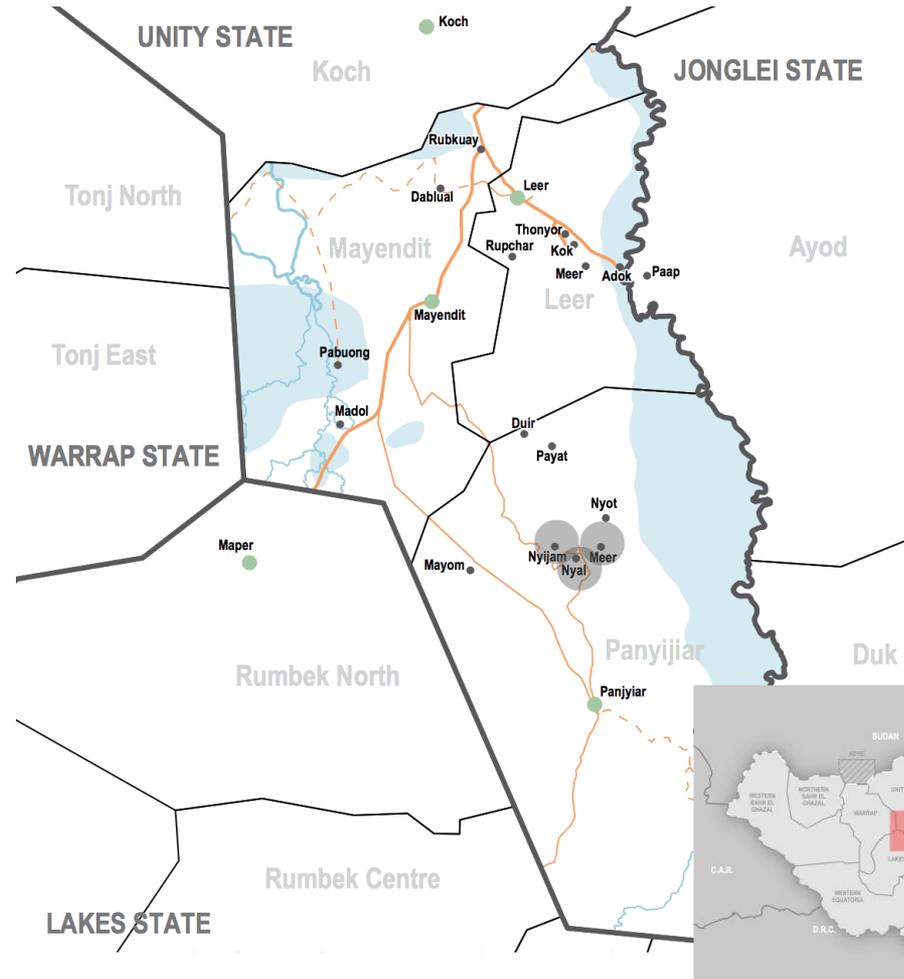


Case Study 1: Central/Southern Unity State

- **Central Unity at the forefront of conflict** in both Second Sudanese Civil War and in the most recent conflict
- **Mass forced displacement** in Northern Unity between 1998-early 2000s — depopulating oil-rich areas.
- **Major offensives in Central Unity in 2014, 2015, 2018** causing mass displacement
- 2015, 2017, 2018 — **Severe food insecurity** or IPC declared Famine from large-scale livelihood disruption
- **Asset stripping** and complete **loss of livelihoods**

Panyijiar County assessment methodology

- Objective: To assess large-scale displacement movements in response to historic shocks in Panyijiar County
- Participating agencies:
 - REACH
- Qualitative Methods
 - 11 FGDs with men, women, and mixed groups
- 3 locations in Panyijiar
 - Nyal Town
 - Meer Island
 - Nanjim Island
- 20-27 August 2019



Historic sequence of major shocks — Central/Southern Unity

Year	Local name	Event	Counties affected	Comments
1988	Ruon Nyakuajok	Severe food insecurity due to flooding	Panyijar, Leer, Mayendit (and most of Unity State)	Caused mass displacement to either northern Unity State, counties outside of Unity (Ayod, Rumbek North, Yirol East), or Sudan. Still had cattle for selling at this time.
1991	—	SPLA Split- conflict (Subsequent hunger)	Panyijar, Leer, Mayendit (and most of Unity State)	Caused mass displacement, especially dividing Warrap and Unity borders and Lakes and Unity borders.
1991-1992	—	Disease outbreaks	Panyijar, Mayendit	People moved south to Yirol East, where there was a hospital and hospitality from local community, stayed until 1995 fighting between Dinka/Nuer
1992/5?		Kalazaar outbreak	Most of Unity State	Many fled to hospital in Leer, some to Bentiu, some to Sudan
1996-2000	Ruon Magwar	Flooding, hunger	Panyijar	translation: “the time that many cows and people died” — flooding caused extreme food insecurity- no cultivation for 4 years straight. Many traveled to Leer or to the islands
1998	—	Oil pipeline built - depopulation	Northern Unity	Many from northern Unity state were pushed south into central and southern Unity
1999-2005	Ruon Galual Gai Ruon Peter Gatdet	Conflict	Panyijar, Leer, Mayendit	People moved south — many moved to Nyal, to the islands, and some to Greater Tonj and Lakes state
2001-02	Ruon Jalab	Conflict	Panyijar, Leer, Mayendit	“Jalab” is “arab” — Offensive from northern Sudan through Unity — movement general south
2012	Ruon Nyandeng	Conflict	Mayendit	Internal conflict within Mayendit County
2014	Ruon Toroboro	Conflict; Severe hunger	Leer, Mayendit, Panyijar	Displacement out of Unity State as well as mostly South in direction within Unity state, given the offensive from the north
2015	Ruon Kuang Biel; Ruon Nyuon Jock	Conflict	Leer, Mayendit, Panyijar	Movement South towards Panyijar, movement deeper into the swamps for those without cattle
2017	—	Famine	Leer, Mayendit	Some sent young girls north to Mayom to get food, others to Bentiu, Ayod
2018	—	Conflict	Leer, Mayendit, Panyijar	Movement to Nyal, no back movement towards Leer or Mayendit



Key takeaways

- **Micro-displacements** of shorter distance and duration were the most common form of movement in response to most drivers
- Farther and longer displacements were used more often in response to **more severe, widespread, or prolonged shocks**
- More severe, widespread, or prolonged shocks could also lead to **mobility restrictions, particularly for more vulnerable households**
- Movement restriction (lack of mobility) can be just as detrimental as forced displacement (often resulting in high levels of need) → **mobility is a resource**
- Households are influenced by a variety of **external factors** as well as “**internal**” **household attributes**; most households likely balance these factors to choose whether and where to move as individual units rather than whole communities
- The most vulnerable households generally have **fewer movement options** and are often forced to choose between **movement towards physical safety** and **movement to meet essential resource needs**
- Repetition of conflict and environmental shocks have shifted seasonal migration routes and disrupted livelihoods across multiple years, **eroding household resilience**
- Shift in nature of conflict (targeting of households, asset stripping) seems to have **changed movement patterns to be larger-scale and longer term**, while also leading to mobility restrictions for some vulnerable households

Operationalising PMB database and further exploration

- PMB database continues to track displacement events of 5,000+ people
- Launched separate informal movement tracker capturing *any* displacements, irregular seasonal migration, or returns (secondary sources + informal field updates) in March 2020
- Integration of new REACH Shocks Monitoring Index (tracking shock indicators from REACH Area of Knowledge data and other routinely-collected data from secondary sources) with the PMB Database
- Development of analytical framework for displacement decision-making
- Under-representation of displacement driven by non-insecurity shocks, especially climatic shocks → ongoing assessments focused on climate-driven displacement



THANK YOU