

Food Systems Resilience in Conflict Affected Areas

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Literature. The "food insecurity - conflicts" nexus

Out of the 155 million acutely food insecure, 100 million live in conflict-affected countries (FSIN, 2021)

What is documented ? Effects on agriculture

- Land are abandoned (Central Africa Republic, Blankespoor et al 2021 CSAE)
- Shift towards higher diversified agriculture = less risky (Nigeria, Fadare et al 2021 CSAE)
- Livestock decrease, shift towards smaller animals = less risky (Uganda, Rockmore 2020 JDS)
- As a result, lower agricultural production and incomes (Nigeria, George et al 2019 AJAE; Uganda Rockmore 2020 WD, Mali, Masset et al 2021 CSAE)



What is documented? Effects on food consumption

- Change of strategies HFIAS, lower caloric intake (iNigeria, George et al 2019 AJAE)
- Lower dietary diversity (Ivory Coast, Dabalen and Paul, 2014, WD)
- Related to higher prices and income shocks

Plus endogeneity issues (Martin Shield and Stojetz 2019 WD), use of micro data for causal interpretation (Bruck et d'Errico 2019 WD)



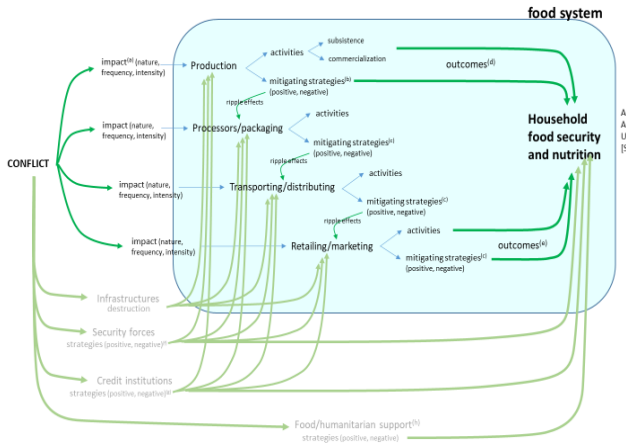
What is not or poorly documented?

- What's in the middle, between production and consumption? The food systems! How are food systems and their actors (producers, procesors, transporters, traders) disrupted by armed conflicts?
- Are food systems actors impacted in the same way?

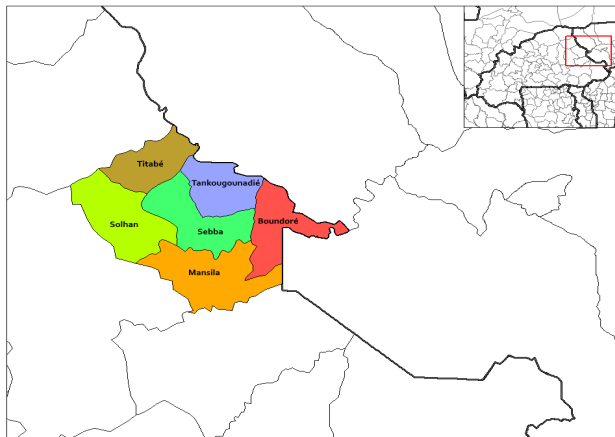
Resilience as useful lens : work on the heterogeneity (Bruck et d'Errico 2019, WD)



Mecanisms that relate armed conflicts to food insecurity

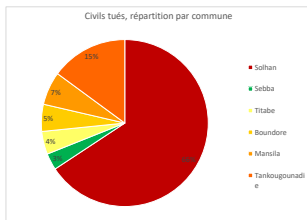
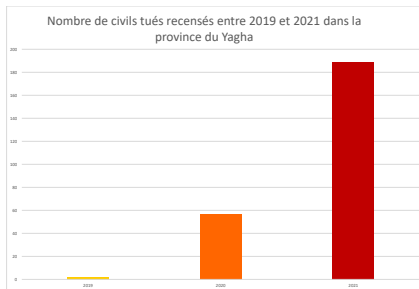


The Yagha province in Burkina Faso



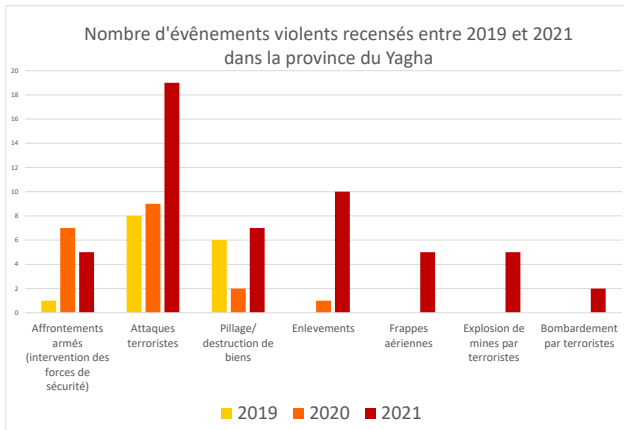
Data on conflicts in the Yagha : fatalities

ACLED data



Data on conflicts in the Yagha: violent events

ACLED data



Survey I (September 2021); Survey II (November 2021)

Mix between phone and face to face interviews

Sample

- Producers N=130
- Processors N=62
- Transporters N=57
- Traders N=93

40 percent had been direct victim of an attack in the last 12 months

Attrition 10 per cent in 2 months!!



Quantification of strategic changes in the last 12 months

- Producers. Average cultivated area from 3.9 to 2.2 ha, millet production from 114 to 40 kgs, cattle from 16.3 to 10.4 heads
- Processors. Average number of clients from 27 to 16
- Transporters. Average distance traveled from 277 to 125 km/ week
- Traders. Average market covered from 39 to 1.8

Working hours as a common indicator among actors : -19h/week on average



Heterogeneity. Some are more resilient than others. What could be the reasons?

- Assets. Rich individuals are expected to be more capable of maintaining their activity in the context of armed conflicts
- Social capital. Individuals having a large social network, are expected to be more capable of maintaining their activity
- Exposure to conflicts. Individuals being located in villages where few armed conflicts were reported are expected to be more capable of maintaining their main activity



Results

dimhour	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
events	.25672	.0890501	2.88	0.004	.0813623	.4320777
members	.5682912	.3277625	1.73	0.084	-.0771393	1.213722
nbbike	.0807455	1.096397	0.07	0.941	-2.078281	2.239772
nbmototaxi	-2.394045	2.258321	-1.06	0.290	-6.841134	2.053043
nbmoto	3.055968	1.227906	2.49	0.013	.6379725	5.473963
nbvan	41.29856	15.54568	2.66	0.008	10.686	71.91113
networkbefore	-4.795709	1.123399	-4.27	0.000	-7.007907	-2.583511
familybefore	-11.88214	4.188764	-2.84	0.005	-20.13066	-3.633618
relativebefore	-1.844749	2.500123	-0.74	0.461	-6.767995	3.078497
colleaguebefore	1.003713	2.643413	0.38	0.704	-4.2017	6.209125
kolweogobefore	-6.38528	3.998509	-1.60	0.112	-14.25915	1.488589
educ	-1.083725	1.976164	-0.55	0.584	-4.97519	2.807739
canread	2.825636	3.40438	0.83	0.407	-3.878273	9.529546
prod	2.154259	2.610898	0.83	0.410	-2.987125	7.295642
proc	0 (omitted)					
transp	6.53255	3.928103	1.66	0.098	-1.202676	14.26778
trader	4.631664	3.230462	1.43	0.153	-1.729766	10.99309
_cons	28.73032	6.304116	4.56	0.000	16.31625	41.1444



Conclusion

- Interventions on sound economies rather than on relief
- Understand mechanisms > maintain people into their economic activity as an objective > security of land titles, security of collective storage, security of roads and markets
- Data access is challenging
- Adaptative research to work with WFP, as situation is evolving rapidly.

Currently collecting on food systems and displaced people!
Next step on specific interventions on transporters and traders

