



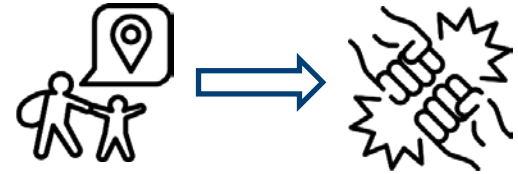
It's all about Politics?!  
**Migration and Resource Conflicts in the Global South**

Charlotte Wiederkehr, Tobias Ide, Ralf Seppelt, Kathleen Hermans

# Introduction

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- Security concerns associated with (climate-related) migration in political & public discourse
- But: heavily criticised and inconclusive evidence
- Importance of context-specific mediating factors



**What are contexts that are conducive to resource conflicts in migrant receiving areas?**

(Im)migration: different distances, times spans and degrees of (in)voluntariness

Resource conflict: renewable resource(s), use of violence, min. 2 social groups, local level

# Qualitative Comparative Analysis (QCA)

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- **Set-theoretic method** for systematic comparison and causal interpretation (Ragin 1987)
- Suitable for medium-N research designs
- Combination of qualitative and quantitative data
- Identification of **combinations of conditions** for an **outcome of interest**



# Case sample

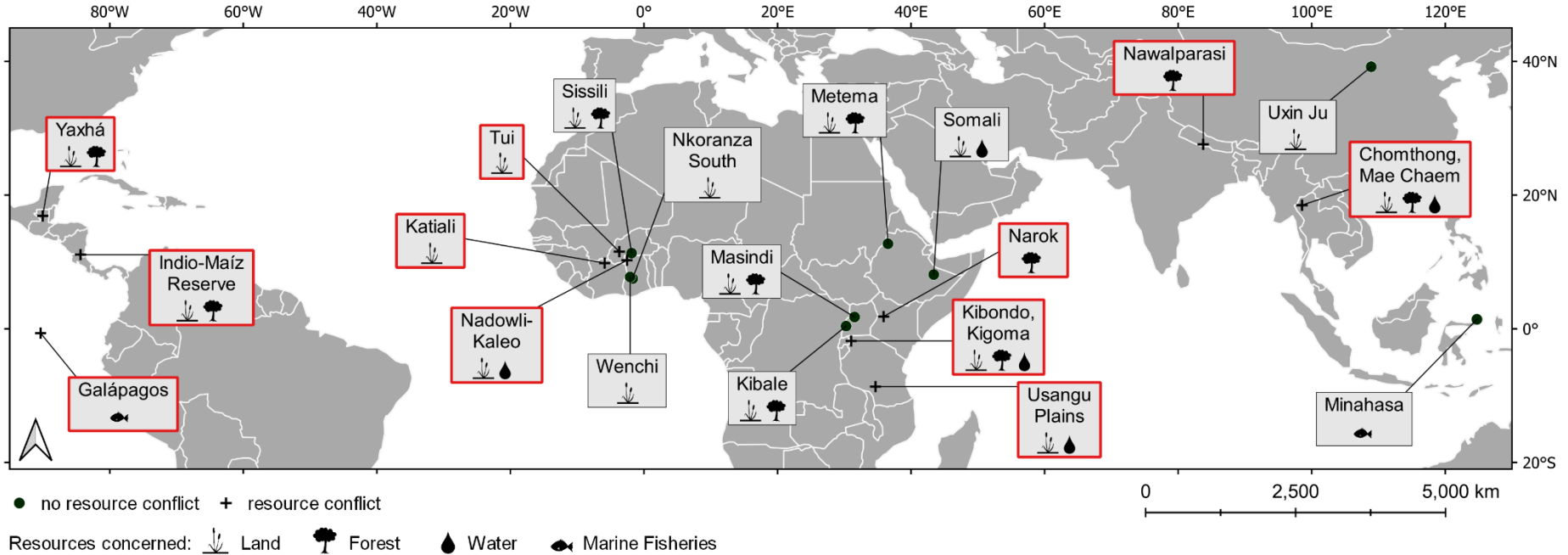






Figure 1. Sample of cases under study and type of renewable resource(s) concerned. Conflict cases are highlighted in red.

## QCA procedure

Conditions (aka variables) expected to influence outcome of interest:

- **Resource use restrictions** (*restrict*) 
- **Type of resource use** (*use*) 
- **Government attitude towards migrants** (*govern*) 
- **Blaming of the migrant group** (*blame*) 

Add. conditions tested (e.g., ethnic exclusion, human development indicators)

**Information sources:** case studies, grey literature, experts, data sets





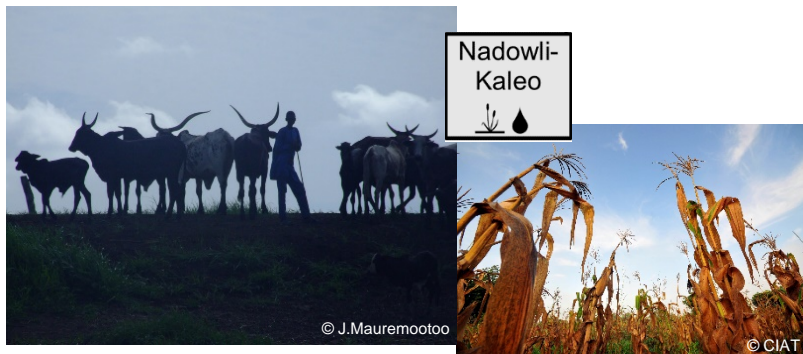
# QCA Results

## Causal pathway 1

*blame* \* *~use* → *conflict*



Cases covered: **4 out of 11**



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## Causal pathway 2

*~govern* \* *restrict* \* *use* → *conflict*



Cases covered: **4 out of 11**



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\* = and; + = or; ~ = absence of; → = sufficient for

## Qualitative Results

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**Government actions** contributed to conflict escalation in **10 out of 11** conflict cases, e.g. by

- resettling groups and granting resource access
- providing incentives for in-migration
- disadvantaging migrant groups
- reforming land tenure

→ impacting **local power relations** by defining resource access + distribution

## Conclusion & Outlook

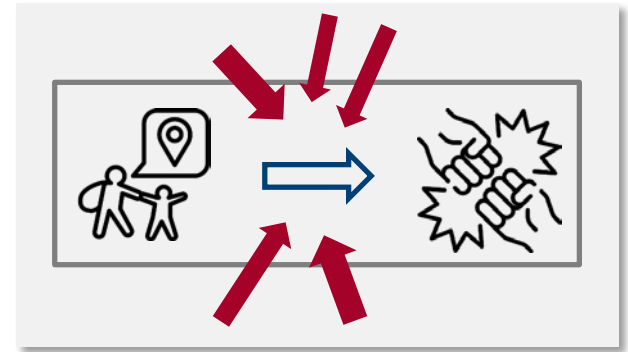
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**Main limitation:** binary calibration of outcome and conditions

**Main challenge:** data availability

### Take-home messages:

- **Social and political factors at various scales** play decisive role
- Refuting deterministic narratives of migration-conflict links
- More evidence needed on peaceful + cooperative outcomes





**Thank you for your attention!**

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## Annex: Conflict cases (1)

Study area location	Time period	Type of movement	Timing of migration	Migration background	Resource degradation trends
Nadowli-Kaleo District, Upper West Region, Ghana	conflict since mid-1970s, in 2016 still ongoing	cross-border	since 1960s/70s, refugees in 1987	droughts, environmental push & pull, conflicts in Ivory Coast	land degradation, increasing pasture scarcity, deforestation
Katiali, Korhogo Region, Ivory Coast	conflict since 1970s (peaks in 1974, 1980/81, 1986)	cross-border	since 1950s, especially 1960s and early 1970s	droughts	environmental degradation
Tui Province, Hauts-Bassins Region, Burkina Faso	conflict mainly in 1980s & 1990s	internal	since 1930s, especially 1970s & 1980s	droughts, population pressure, economic push & pull	land degradation
Narok County, Kenya	conflict in 1990s, settled in 2002	internal	since early 20 <sup>th</sup> century	population pressure, environmental push & pull	NA
Kibondo & Kigoma Districts, Kigoma Region, Tanzania	conflicts in 1990s	cross-border	mainly 1993-1998	refugees from DRC, Rwanda & Burundi	deforestation, water resource depletion, soil erosion, loss of wild animal habitat
Usangu Plains, Mbarali District, Tanzania	conflict mainly 1970s-1990s, ongoing in mid-2000s	NA	since late 1950s, mainly 1970s & 1980s	economic pull	water scarcity in rivers
Indio-Maíz Reserve, Rio San Juan Department, Nicaragua	conflict since 1990s (peak in 1998)	internal	since 1990s	economic pull, resettlement, returning refugees & IDPs	deforestation, poor soil quality
Yaxhá, Petén Department, Guatemala	conflict since 1991	internal	since 1960s, return of IDPs after 1986	economic push & pull, environmental push, returning refugees & IDPs	deforestation, land degradation, water scarcity, loss of biodiversity
Galápagos Islands, Ecuador	conflict since 1990s (peaks in 1995 & 2000)	internal	since 1980s/1990s	environmental push, economic & social pull	overfishing
Nawalparasi District, Terai Region, Nepal	conflict since late 1990s, in 2016 still ongoing	internal	since 1950s/60s	government resettlement (political & environmental motives)	deforestation, degradation of soils and water sources
Chomthong & Mae Chaem Districts, Chiang Mai Province, Thailand	conflict since 1980-84, particularly in 1980s and 1990s	cross-border	at least since 1930s	opium cultivation (political refugees?)	pressure on land, forest, water resources, deforestation, water scarcity & pollution

## Annex: Conflict cases (2)

Case	Conflict parties	Use interests at conflict
<b>Nawalparasi</b>	migrants (proximate users) vs. natives (distant users)	conservation, development and commercial interests, subsistence needs (incl. traditional use rights)
<b>Chomthong, Mae Chaem</b>	migrants vs. officials and natives	conservation, agri-businesses, subsistence needs
<b>Indio-Maíz</b>	migrant farmers vs. conservationists and authorities	conservation and development, agriculture (incl. wealthy cattle owners and smallholders)
<b>Yaxhá</b>	migrant farmers vs. conservationists and authorities	commercial activities (incl. tourism, logging, petroleum extraction, agricultural colonisation), conservation, subsistence needs
<b>Galápagos</b>	(migrant and native) fishermen vs. conservationists and authorities	commercial/ small-scale fisheries, conservation/tourism
<b>Nadowli-Kaleo</b>	migrant herders vs. local farmers	subsistence needs
<b>Katiali</b>	migrant herders vs. local farmers	subsistence needs (and gov. interest in meat production)
<b>Tui</b>	migrant farmers vs. local farmers	subsistence needs
<b>Narok</b>	Loita Maasai vs. Purko Maasai	subsistence needs (incl. traditional use rights), commercial agriculture (and potential gains from conservation, tourism)
<b>Kibondo, Kigoma</b>	refugees vs. locals (and gov. + NGO officials)	conservation and subsistence needs
<b>Usangu Plains</b>	farmers vs. herders (both incl. migrants)	commercial and subsistence agriculture, subsistence needs, conservation

## Annex: Non-conflict cases

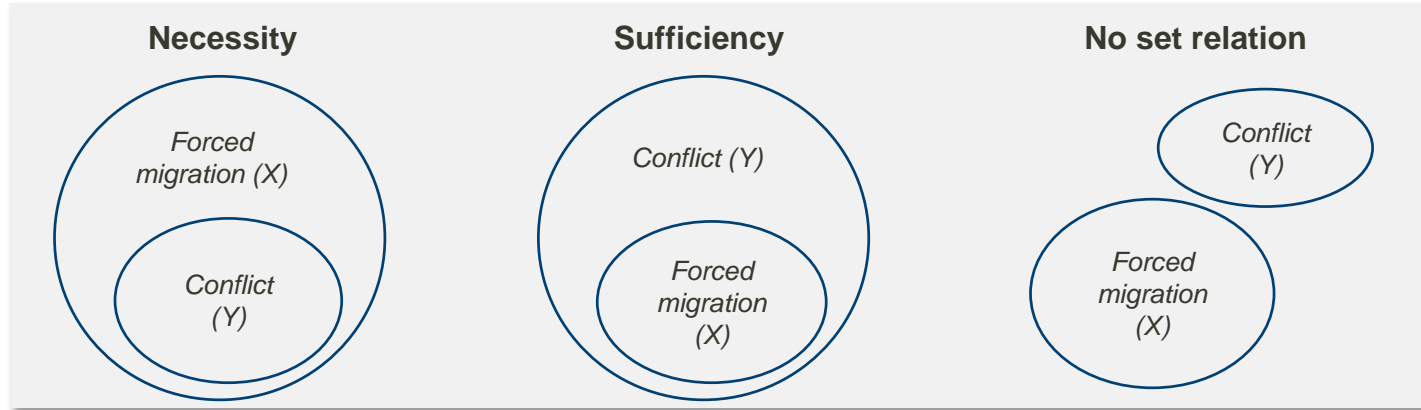
Study area location	Time period	Type of movement	Timing of migration	Migration background	Resource degradation trends
<b>Sissili Province, Centre-Ouest Region, Burkina Faso</b>	fieldwork in 2008	mostly internal	since 1970s, especially in 1980s	droughts, environmental & economic push, unrest in Ivory Coast	declining forest & woodlands
<b>Nkoranza South District, Brong Ahafo Region, Ghana</b>	fieldwork in 2014	internal	since 1960s, especially in 1980s	economic & environmental pull	NA
<b>Wenchi Municipal District, Brong Ahafo Region, Ghana</b>	fieldwork in 2014	internal	since 1960s	economic & environmental pull	soil degradation
<b>Masindi District, Bunyoro, Uganda</b>	fieldwork in 2007 & 2008	cross-border and internal	labour immigration since 1950s, refugee influx since 1960s (peak 1994-97), migration towards forest since 1998	economic & social push, refugees (IDPs, DRC, Sudan)	deforestation
<b>Kibale National Park, Toro Kingdom, Uganda</b>	fieldwork in 2009	internal	resettlement in 1950s, several waves 1950s-1990s	government resettlement population & land pressure), economic & environmental (tse tse flies) pull	declining soil fertility, forest conversion
<b>Metema, Amhara Region, Ethiopia</b>	focus on 1990s-2010	internal	immigration mainly since 1980s (coinciding with major resettlements)	government resettlement (drought, famine, partly forced), economic & environmental pull	deforestation, land degradation, water logging
<b>Yerer &amp; Daketa Valleys, Somali Region, Ethiopia</b>	focus on 1985-2005	internal	immigration in 1980s/90s	droughts, environmental pull	pressure on grazing land
<b>Minahasa District, North Sulawesi, Indonesia</b>	fieldwork in 1999 & 2001	internal	since 1950s, refugees in 1990s	economic and social pull, IDPs	(perceived) declining fish catches
<b>Uxin Ju, Inner Mongolia Autonomous Region, China</b>	cooperation especially since 1980s	cross-border/ internal (shifting borders)	since 1800s, recent waves 1950s & 1960s, 1996	drought, social unrest, economic and environmental push & pull, political factors	pasture degradation, declining groundwater level

# Qualitative Comparative Analysis (QCA)

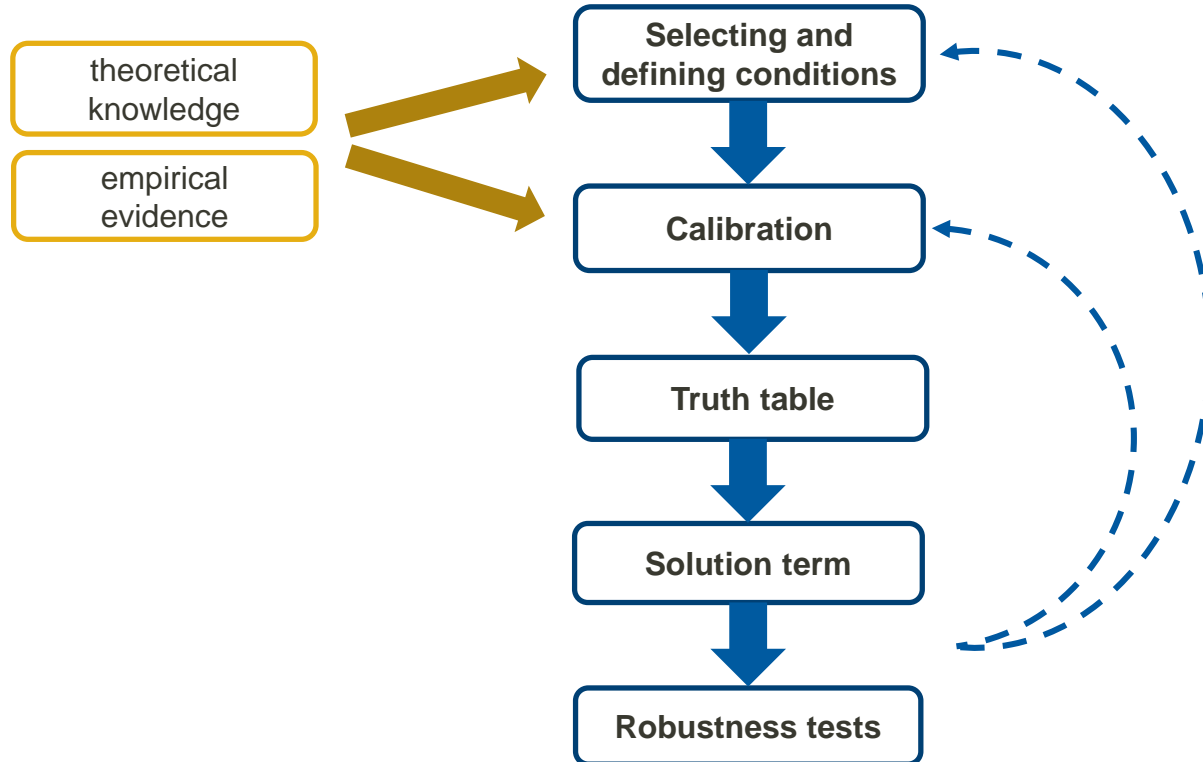
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Identification of **necessary and sufficient conditions (X)** for an **outcome (Y)** of interest

*Example: forced migration (X) contributing to resource conflict (Y) at destination*



## Annex: QCA process



## Annex: Definition of conditions

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- **Resource use restrictions (restrict):**

A case is calibrated as member of the set (=1) if significant formal (e.g., state sanctioned) resource use restrictions exist for important local groups in the study area (e.g., due to a protected area and regulated buffer zone). If formal restrictions for these groups are only marginal or absent (which may also be due to lacking enforcement of formal regulations), a case is calibrated as being out of the set (=0).

- **Type of resource use (use):**

If commercial or industrial resource use activities take place in the study area and significantly restrict resource access or use by local inhabitants (e.g., large-scale agriculture, industrial fisheries or logging), then a case is considered a member of the set (=1). If resource use is predominantly subsistence-based and/or small-scale, a case is considered out of the set (=0).

- **Government attitude towards migrant group (govern):**

A case is considered member of the set (=1) if the attitude of the destination area's national government was adverse or suspicious with respect to immigration and/or action was taken to reduce immigration or to discriminate against migrants (e.g., in terms of land allocation). If the national government's position was largely neutral, welcoming or even encouraging (e.g., sponsored resettlement or financial incentives), a case is considered out of the set (=0).

- **Blaming of the migrant group (blame):**

A case is considered member of the set (=1) if the migrant group is blamed for unsustainable resource use and/or for causing resource degradation by important local groups in the study area. If this is not the case, a case is calibrated as out of the set (=0). The emphasis here is on the perception of local groups, independent of whether resource use in the area is actually sustainable or not.



## Annex: Additional conditions tested

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### Based on external data sets:

- *Educational attainment (educ) and child mortality (u5mort)*: **Demographic and Health Surveys (DHS)** made available by US AID; *u5mort* refers to the under-five mortality rate, *educ* is operationalised as the share of the total population with no education
- *Quality of political institutions (instit)*: **Freedom House Index**, based on an average ranking of political rights and civil liberties at the national level (scale from 1 (free) to 7 (not free) \*
- *Ethnic exclusion (ethn)*: **PRIO/GRID** based on **GeoEPR/EPR datasets** from ETH Zürich; no. of politically excluded ethnic groups living within a given cell for any given year from 1946 \*
- *Conflict history (hist)*: data made available by the **Uppsala Conflict Data Program (UCDP)**; a case is considered a set member, if the study area was directly affected by an armed conflict during the five years prior to conflict onset (or the fieldwork for the non-conflict cases)

### Literature-based:

- *Refugee movement (refuge)*: captures whether refugees/IDPs or returning refugees/IDPs are a major part of the migrant group
- *Environmental migration driver (environ)*: captures whether a slow- or fast-onset environmental stressor (e.g., drought, land degradation) at the area of origin is indicated as major factor contributing to outmigration
- *Resource tenure (tenure)*: captures whether resource tenure is insecure for important local groups and/or tenure laws are unclear/ambiguous

\* focus on 5-year period before conflict onset or 20-year period before fieldwork (non-conflict cases)

## Annex: Truth table

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<b>govern</b>	<b>blame</b>	<b>restrict</b>	<b>use</b>	<b>Cases</b>
0	0	0	1	<i>Minahasa; Nkoranza South; Wenchi</i>
0	1	1	1	<i>Indio-Maíz Reserve; Yaxhá; Usangu Plains</i>
0	1	0	0	<i>Katiali; Tui</i>
0	0	1	0	<i>Nawalparasi; Kibale</i>
1	0	0	1	<i>Narok; Uxin Ju</i>
1	1	1	1	<i>Chomthong, Mae Chem; Masindi</i>
0	0	0	0	<i>Sissili</i>
1	0	0	0	<i>Somali</i>
1	1	0	0	<i>Nadowli-Kaleo</i>
1	1	1	0	<i>Kibondo, Kigoma</i>
0	1	0	1	<i>Metema</i>
0	0	1	1	<i>Galápagos</i>
1	0	1	0	Not covered
0	1	1	0	Not covered
1	1	0	1	Not covered
1	0	1	1	Not covered

## Annex: Detailed QCA results

<b>Causal pathway</b>	<i>blame * ~use</i>	<i>~govern * restrict * use</i>
<b>Consistency</b>	1	1
<b>Raw coverage</b>	0.36	0.36
<b>Unique coverage</b>	0.36	0.36
<b>Cases covered</b>	<i>Katiali; Tui; Nadowli-Kaleo; Kibondo, Kigoma</i>	<i>Indio-Maíz Reserve; Yaxhá; Usangu Plains; Galápagos</i>
<b>Cases not covered</b>	<i>Chomthong, Mae Chaem; Nawalparasi; Narok</i>	
<b>Solution formula</b>	<i>blame * ~use + ~govern * restrict * use → conflict</i>	
<b>Solution consistency</b>	1	
<b>Solution coverage</b>	0.73	

\* = and; + = or; ~ = absence of; → = sufficient for

*Raw coverage*: the degree to which the outcome is covered by a specific causal pathway

*Unique coverage*: the degree to which a specific causal pathway uniquely explains the outcome

*Solution consistency*: the degree to which the empirical information supports the claim that sufficiency exists. Here, 1 implies that there were no contradictory truth table rows included in the logical minimisation process.

*Solution coverage*: how much of the outcome is covered by the solution term

## Annex: Unexplained cases

govern	blame	restrict	use	Cases
0	0	0	1	<i>Minahasa; Nkoranza South; Wenchi</i>
0	1	1	1	<i>Indio-Maíz Reserve; Yaxhá; Usangu Plains</i>
0	1	0	0	<i>Katiali; Tui</i>
0	0	1	0	<i>Nawalparasi; Kibale</i>
1	0	0	1	<i>Narok; Uxin Ju</i>
1	1	1	1	<i>Chomthong, Mae Chem; Masindi</i>
0	0	0	0	<i>Sissili</i>
1	0	0	0	<i>Somali</i>
1	1	0	0	<i>Nadowli-Kaleo</i>
1	1	1	0	<i>Kibondo, Kigoma</i>
0	1	0	1	<i>Metema</i>
0	0	1	1	<i>Galápagos</i>
1	0	1	0	Not covered
0	1	1	0	Not covered
1	1	0	1	Not covered
1	0	1	1	Not covered



*Nawalparasi (Nepal):*  
differences in level of acceptance of use restrictions

*Narok (Kenya):*  
Sub-ethnic conflict and local political power struggles

*Chomthong, Mae Chem (Thailand):*  
Differences in level of social capital and resource dependence of migrants

## Annex: Robustness tests

#	Type	Test	Solution formula	Consistency	Coverage
1	-	Main analysis	$blame^{*\sim}use + \sim govern^{*}restrict^{*}use \rightarrow conflict$	1	0.73
2	1	Frequency cut-off 2	$\sim govern^{*}blame^{*}(\sim use + restrict) \rightarrow conflict$	1	0.46
3	2	Without Latin American cases	$blame^{*\sim}use + \sim govern^{*}restrict^{*}(use + blame) \rightarrow conflict$	1	0.63
4	2	Without Asian cases	$blame^{*\sim}use + \sim govern^{*}restrict^{*}use + govern^{*}use^{*}(\sim restrict + \sim blame) \rightarrow conflict$	1	1
5	2	Without fisheries cases	$blame^{*\sim}use + \sim govern^{*}restrict^{*}(use + blame) \rightarrow conflict$	1	0.7
6	2	Without cooperation cases	$blame^{*\sim}use + \sim govern^{*}restrict^{*}use + govern^{*}(\sim restrict + \sim blame) \rightarrow conflict$	1	0.82
7	2	Without refugee case	$blame^{*\sim}use + \sim govern^{*}restrict^{*}use \rightarrow conflict$	1	0.7
8	2	Without <i>Uxin Ju</i> case	$blame^{*\sim}use + \sim govern^{*}restrict^{*}use + govern^{*}use^{*}(\sim restrict + \sim blame) \rightarrow conflict$	1	0.82
9	3	+ <i>educ</i>	$blame^{*\sim}use + \sim blame^{*}restrict^{*}use + restrict^{*}educ + \sim govern^{*}restrict^{*}use \rightarrow conflict$	1	0.82
10	3	+ <i>u5mort</i>	$blame^{*\sim}use + restrict^{*\sim}u5mort + \sim govern^{*}restrict^{*}use \rightarrow conflict$	1	0.82
11	3	+ <i>instit</i>	$blame^{*\sim}use + restrict^{*\sim}instit + \sim govern^{*}restrict^{*}use \rightarrow conflict$	1	0.82
12	3	+ <i>ethn</i>	$blame^{*\sim}use + govern^{*\sim}ethn + \sim govern^{*}restrict^{*}use \rightarrow conflict$	1	0.82
13	3	+ <i>tenure</i>	$blame^{*\sim}use + govern^{*}use^{*\sim}tenure + \sim govern^{*}restrict^{*}use \rightarrow conflict$	1	0.82
14	3	+ <i>refuge</i>	$blame^{*\sim}use + \sim govern^{*}restrict^{*}use \rightarrow conflict$	1	0.73
15	3	+ <i>environ</i>	$blame^{*\sim}use + \sim govern^{*}restrict^{*}(use + \sim environ) \rightarrow conflict$	1	0.82
16	3	+ <i>hist</i>	$blame^{*\sim}use + \sim govern^{*}restrict^{*}use \rightarrow conflict$	1	0.73
17	4	Diff. calibration ( <i>Uxin Ju</i> )	$blame^{*\sim}use + \sim govern^{*}restrict^{*}use + govern^{*}use^{*}(\sim restrict + \sim blame) \rightarrow conflict$	1	0.82
18	4	Diff. calibration ( <i>Minahasa</i> )	$blame^{*}(\sim use + \sim govern^{*}restrict) \rightarrow conflict$	1	0.64
19	4	Diff. calibration ( <i>Yaxhá</i> )	$blame^{*\sim}use + \sim govern^{*}restrict^{*}use \rightarrow conflict$	1	0.73
20	4	Diff. calibration ( <i>Kibondo, Kigoma</i> )	$blame^{*\sim}use + \sim govern^{*}restrict^{*}use \rightarrow conflict$	1	0.73
21	4	Diff. calibration (weak enforcement)	$blame^{*\sim}use + \sim govern^{*}restrict^{*}use + govern^{*}blame^{*\sim}restrict \rightarrow conflict$	1	0.73