



„ MAPPING POLITICAL RISK“

METHODOLOGICAL APPROACHES AND VISUALIZATION OF POLITICAL RISKS IN
KIS

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THE PROBLEM

COSTS AND TIME

cost-intensive and time-consuming risk and security management

HIGH PERSONNEL DEMANDS

lack of experts and managers to do the job

DATA AND SOFTWARE

obsolete and unscientific risk models and tools



INCOMPLETE COVERAGE

impossibility of covering all risk areas on a regular basis

EXPERT BIAS

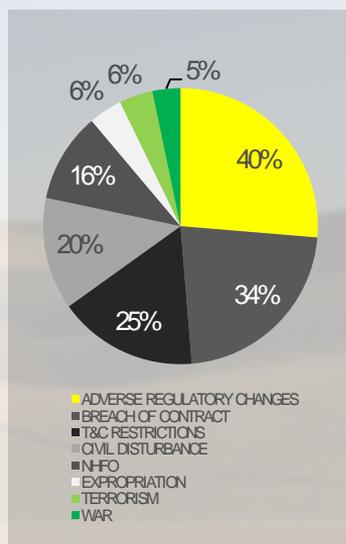
highly biased and underestimating risk and security assessments

DISTRUST

distrust towards risk and security management and personnel

WHERE BUSINESS FAILS

By using inappropriate risk and security architectures, most companies play with fire – and risk costly damages



FINANCIAL LOSSES DUE TO POLITICAL RISKS
(WORLD BANK, 2018)

EFFECTS OF POLITICAL RISKS

CONSTRAINTS OF POLITICAL RISKS	<i>almost 55% of decision-makers see political risk as major constraint for foreign investment in emerging countries</i>
DISRUPTION OF ECONOMIC ACTIVITY	<i>changing regulations, expropriations, increase of transportation costs, capital flight, higher costs for local employers, dropping of export volumes, ...</i>
COSTS OF NEGATIVE EXPECTATIONS	<i>"costs of fear", expectations of future violence</i>
FRAGILITY OF "ECONOMIC GAME"	<i>changing of legal framework and authorities, insecure property rights, ...</i>
POLITICAL INSECURITY	<i>local wars, social unrest, attacks, kidnapping, migration waves</i>
SITE/LOCATION INSECURITY	<i>evacuation costs, increase of security personnel costs, costs of surveillance and guarding</i>

POLITICAL RISKS COST

Bad risk assessment can damage foreign investments by up to 30%

We use big data to elaborate event-based models of risk monitoring and forecasting – our clients get a simple hands-on solution

FROM BIG DATA TO ANALYTICAL SOLUTIONS



MONITORING

- *scraping and analysis of security-relevant events*
- *spatial, temporal and semantic coding*
- *regional, national, local and POI analytics*



FORECASTING MODELS

- *highest forecasting quality (up to 80% accuracy)*
- *comprehensive monitoring and risk modelling*
- *scientifically validated models such as machine learning*

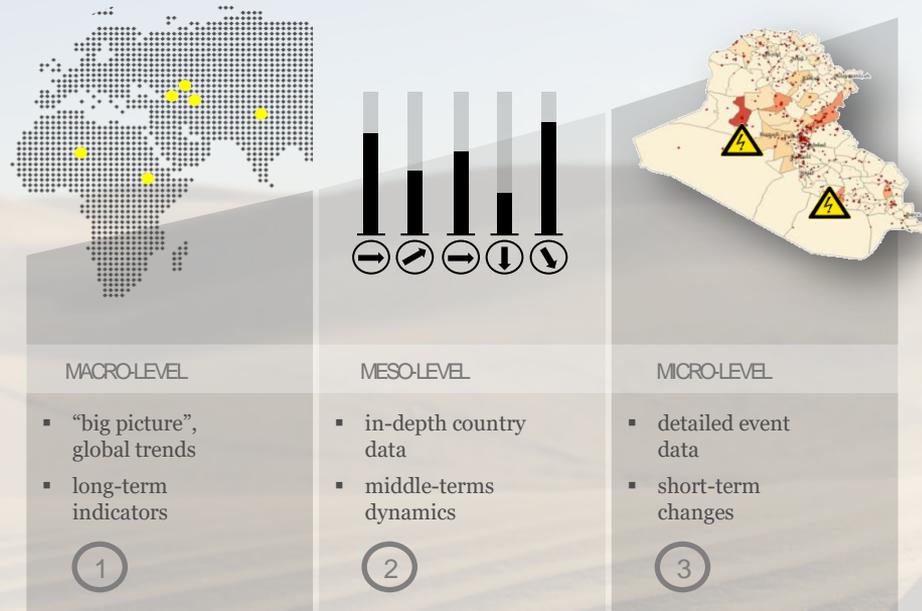


FORESIGHT APPROACHES

- *individual, IT-based platforms*
- *regular, custom-tailored reports and analyses*
- *real-time architecture and early warning systems*

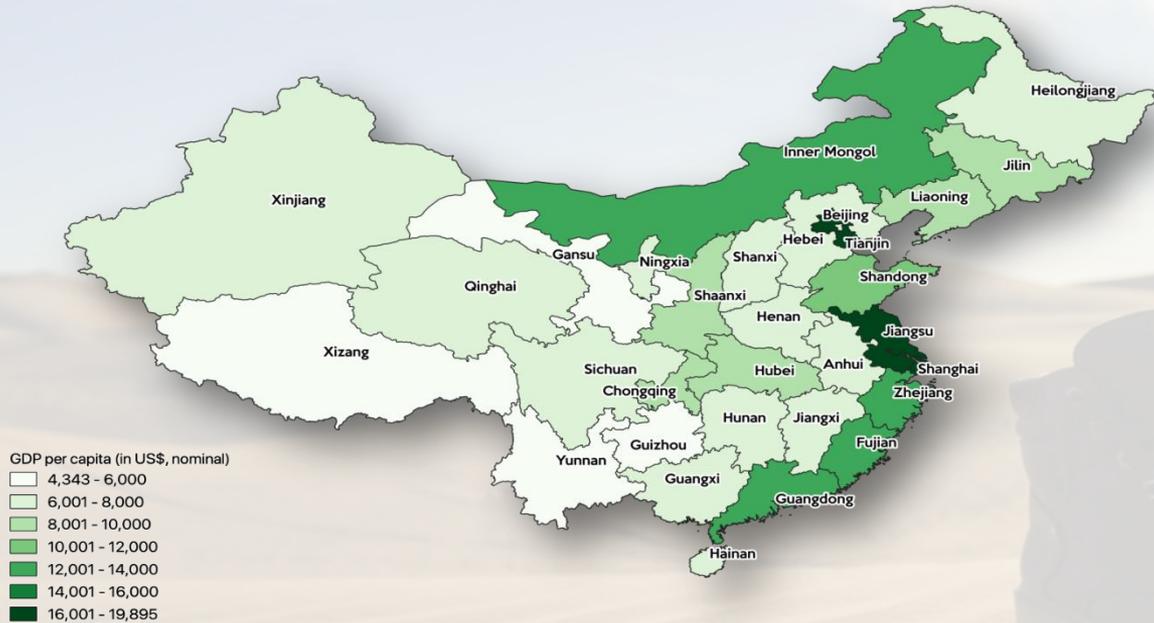
BASIC METHODS OVERVIEW

METHOD OVERVIEW – IDENTIFYING RISKS ON THREE LEVELS



We analyze risks on three analytic levels to derive the “big picture” of security issues

METHOD OVERVIEW – IDENTIFYING RISKS ON THREE LEVELS



STRUCTURAL DATA ANALYSIS

Subnational analyses can unveil “new” insights into macro-developments of a whole country

METHOD OVERVIEW – IDENTIFYING RISKS ON THREE LEVELS

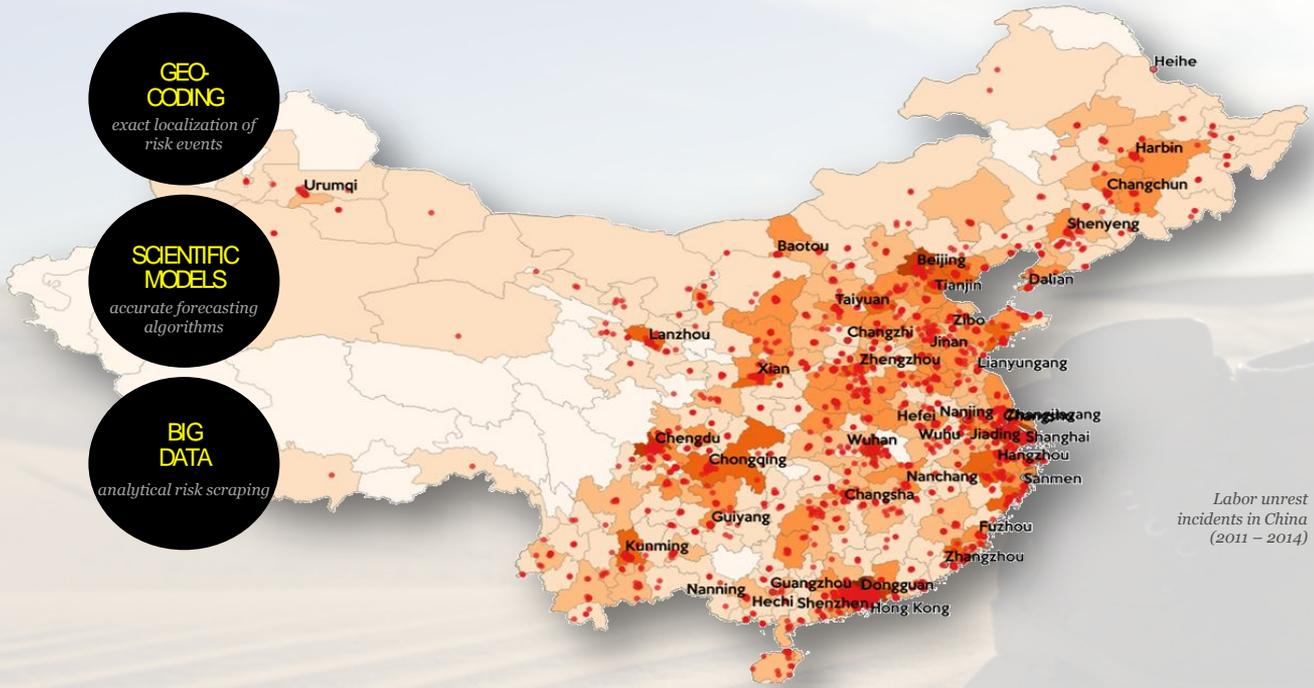
EVENT DATA ANALYSIS

Our vision is to cover and analyze all political risk events on the globe – in real time, at any place, in all dimensions

GEO-CODING
exact localization of risk events

SCIENTIFIC MODELS
accurate forecasting algorithms

BIG DATA
analytical risk scraping



Labor unrest incidents in China (2011 – 2014)

EVENT DATA ANALYSIS

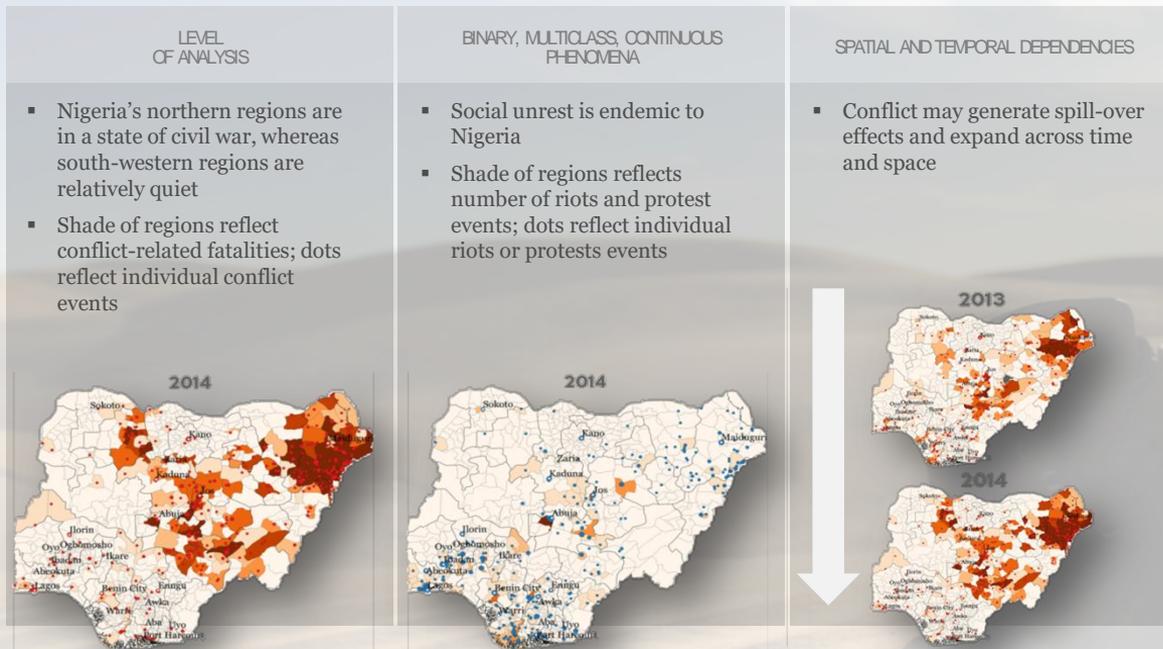
EXAMPLE OF EVENT DATA USE

Comparison between national data and subnational event data:
Most of Nigeria's assessment is biased through events occurring in "Borno" state

EVENTS BY CATEGORY	DATA "NIGERIA"	DATA "BORNO"
battle (no change of territory)	38	23
battle (non-state actors overtake territory)	0	0
battle (government regains territory)	19	11
headquarters of base established (by rebels)	0	0
non-violent activity by a conflict actor	5	2
riots/protests	51	3
violence against civilians	59	15
non-violent transfer of territory	1	1
remote violence	6	2
Σ Total	179	57
Fatalities	1,585	1,259



*Subnational analyses
can unveil "new"
insights into macro-
developments of a
whole country*

INPUT DATA – EXAMPLE “NIGERIA”


A variety of choices have to be made in defining the modelling approach

EVENT DATA ANALYSIS

Event data analyses can be used for various investigations on actor and conflict nature

EVENT DATA APPLICATIONS

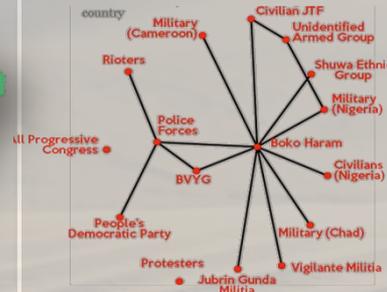
NEIGHBORING REGIONS

- event data to be obtained for neighboring regions
- these regions experienced 32 conflict events and 186 conflict-related fatalities



CONFLICT NETWORK STRUCTURE

- event data can reflect active actors in a country or a subnational region
- 16 actors could be identified and structured



CONFLICT TRENDS

- conflict trends observable as total number events
 - current month (February 2015): 57
 - current month (average last 3 months): 23
 - average last 3 months to average last 6 months: 8.33
 - average last 6 months to average last 12 months: -1.42





EXAMPLE

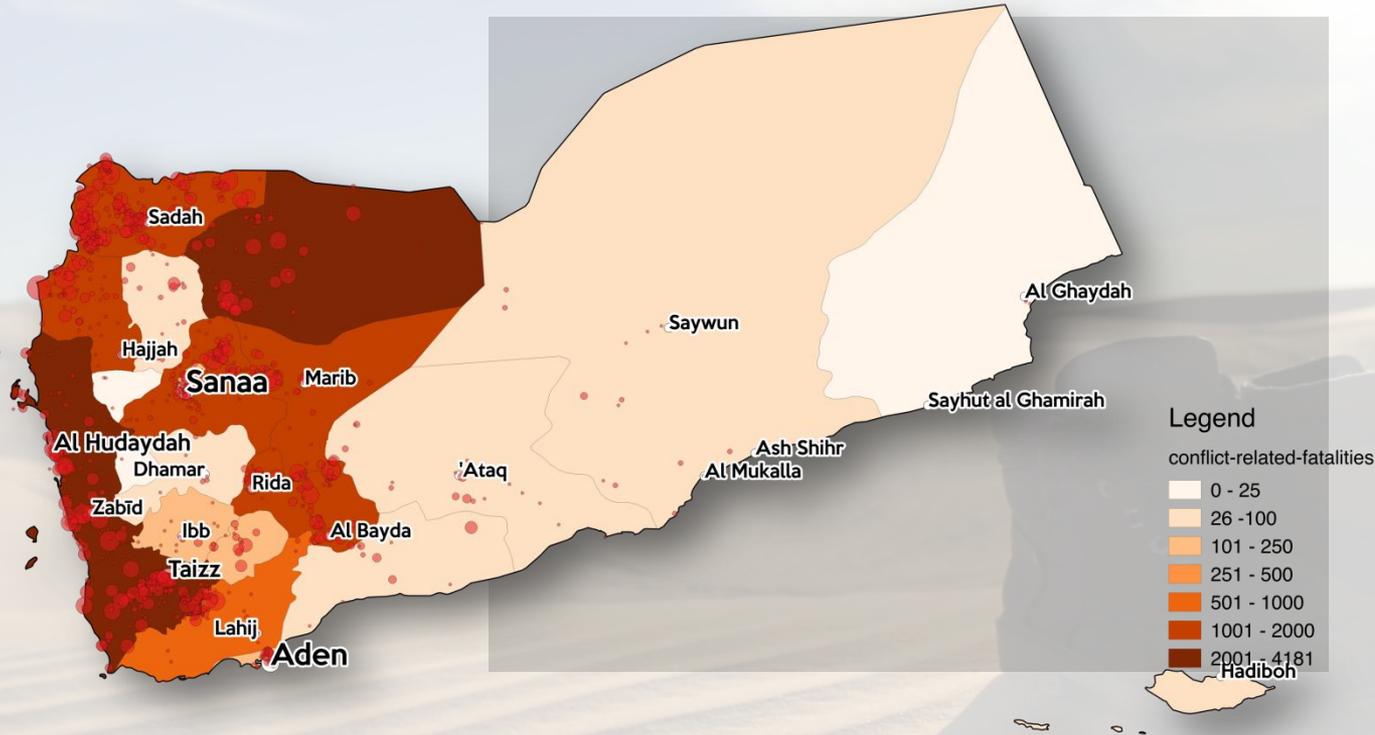
“**Pirates** boarded the **Safmarine Kuramo**, registered in **Singapore**, on **Feb. 6** as it headed to **Port Onne in Nigeria’s Rivers** state from **Pointe Noire in the Republic of Congo**, according to Olusegun Soyemi, a captain in the Nigerian navy. “We got a Mayday distress call that the ship was boarded by an unconfirmed number of **sea pirates** after entering the nation’s territorial waters,” Soyemi told reporters in **Port Harcourt**, the capital of Rivers, on Sunday. “We immediately dispatched a warship and **attack gunboats**. The **sea pirates**, apparently on sighting advancing **naval troops**, fled the scene.”

CONFLICT FATALITIES IN YEMEN 2018

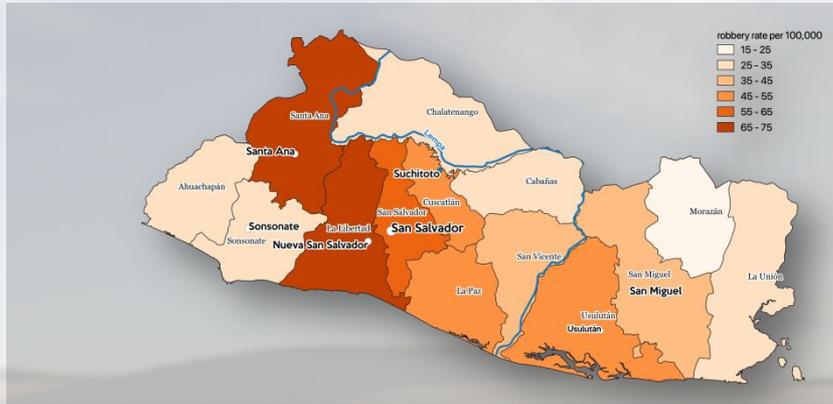
11/2019

CONFLICT FATALITIES 2018

Most violent clashes in Libya occur in the densely populated coastal regions and in the vicinity of oil infrastructure



EL SALVADOR ROBBERY AND THEFT 2019



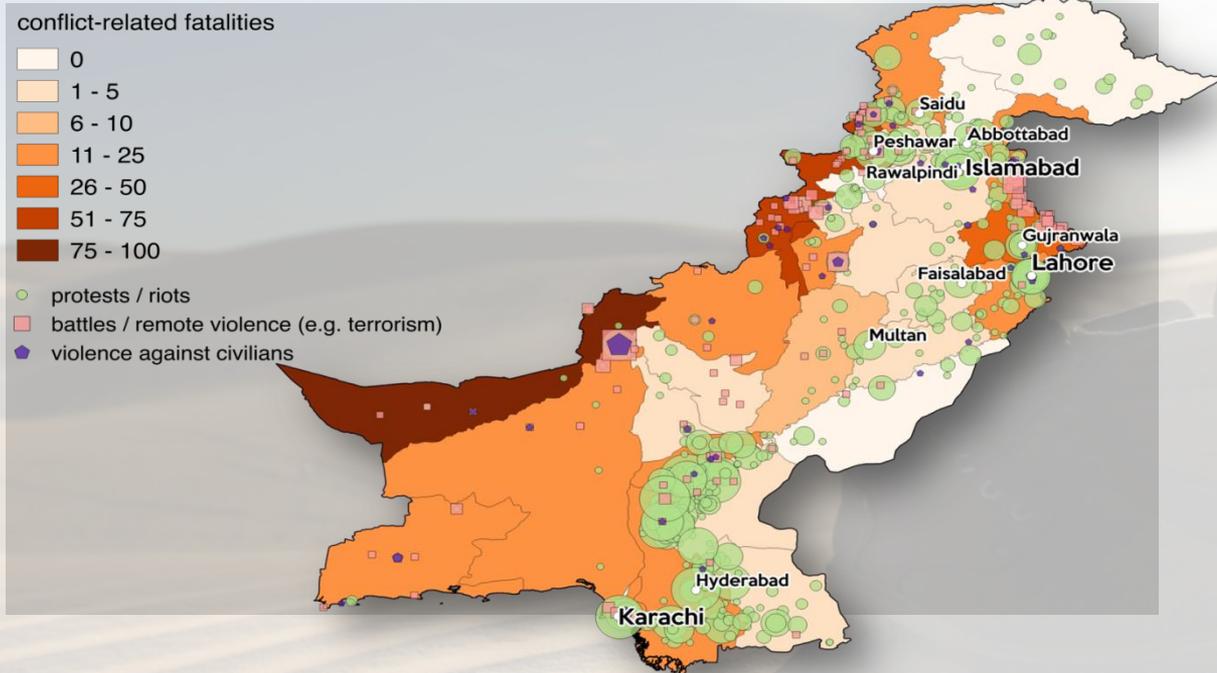
EVENT DATA ANALYSIS

Subnational analyses can unveil “new” insights into macro-developments of a whole country

11/2019

CONFLICT EVENTS IN PAKISTAN 2019

Pakistan is a high risk country that witnesses multifaceted violence on a daily basis. Terrorism, state vs. non-state actor clashes and protests are reported throughout the country



CONFLICT EVENTS 2019

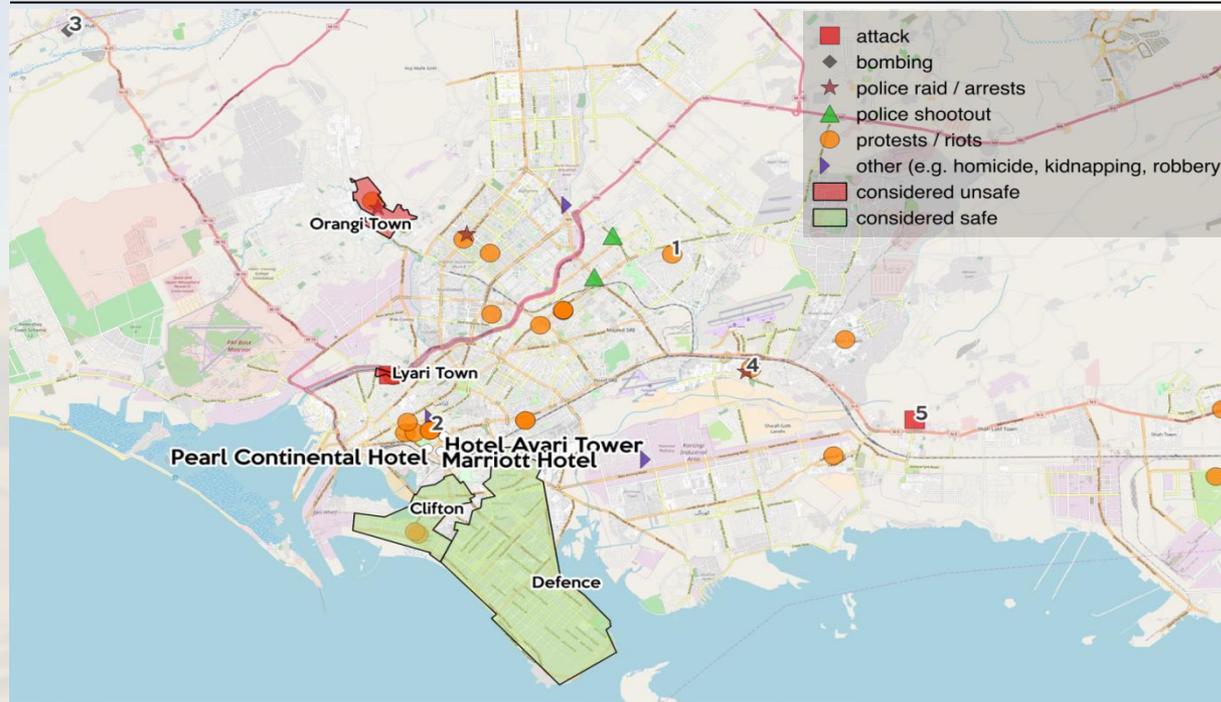
11/2019

Social unrest and occasional terror attacks plague Pakistani cities. Violent clashes between armed groups and security forces are concentrated along the Afghan-Pakistani and Indian-Pakistani border

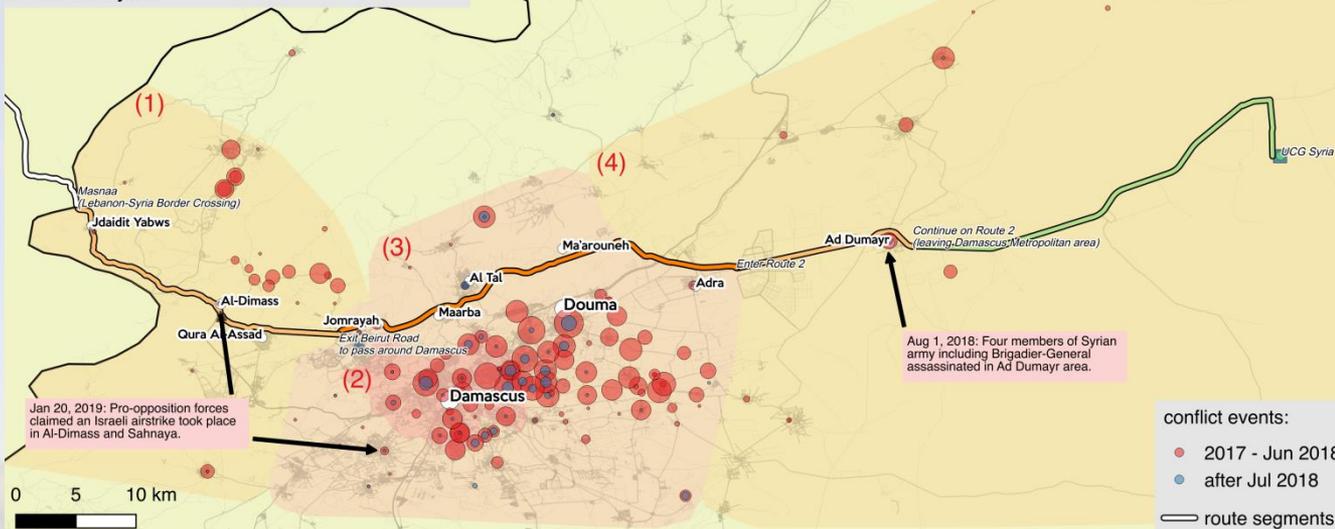
KARACHI SECURITY ANALYSIS

Protests and riots against government policies or related to current issues are common. Multiple terrorism related events and violent police raids / “encounter killings” occurred in the past months in the city

CONFLICT EVENTS IN KARACHI MAY – JULY 2018

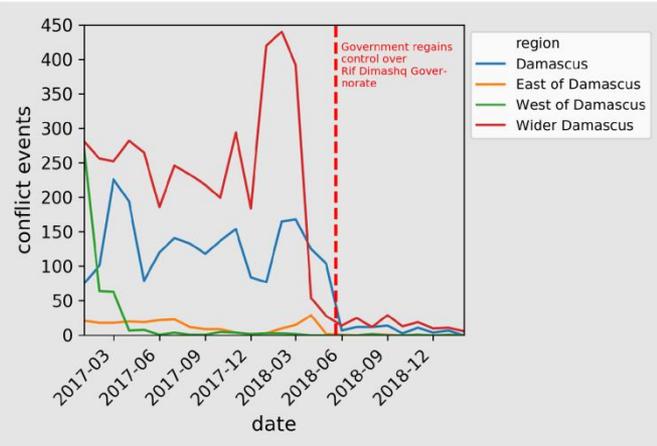


Lebanon-Syria Border Crossing to UCG Syria: Route Analysis



After over six years of fighting, the Syrian government and its allies achieved a decisive victory in Rif Dimashq Governorate and regained full control. Levels of violence have decreased massively in and around the capital region since then. However, incidents such as bombings or assassinations continue to occur and the region should be considered as unsafe for foreign travelers.

- (1) West of Damascus: Heavy fighting occurred to the west of Damascus until early 2017, with over 500 people killed in January 2017 alone. Conflict activity west of Damascus had largely ceased by mid-2017, with the government regaining control over the area.
- (2) Damascus: Thousands of people were killed in fighting in Damascus and its suburbs. With the government victory, levels of violence have subsided in the capital. However, a number of bombings and assassinations have occurred since then. In one of most serious incidents, 10 people were killed by an explosion in the al-Motahalleq al-Janoubi area on January 20, 2019. In addition, a large number of arrests have been made by regime forces in recent months.
- (3) Wider Damascus area: The suburbs of Damascus were among the most contested areas during the Syrian Civil war. With the government victory, levels of violence have decreased, but isolated incidents continue to occur. In addition, a large number of arrests has been made as part of a regime crackdown on suspected opposition members.
- (4) East of Damascus: Fighting in the sparsely populated area to the east of Damascus had mostly ceased by May 2018. However, in August 2018, clashes between Islamic State militants and government forces left six militants dead and an Islamic State assassination killed four Syrian soldiers.



ROUTE ANALYSIS LEBANON DAMASCUS

11/2019

HOW POLITICAL RISKS ARE INCLUDED IN KIS

NATIONAL LEVEL CODING SCHEME

TABELLE B (1) – NATIONALES RISIKOSCHEMA

7	Politische Stabilität hochgradig gefährdet	Politische Stabilität ist hochgradig gefährdet. Es besteht ein hohes Maß an Korruption, Ineffizienz oder mangelnder Rechtsstaatlichkeit. Hohe Kriminalitätsraten können auftreten. Darüber hinaus treten größere bewaffnete Konflikte in einzelnen Regionen auf oder das Risiko für das Auftreten derartiger Konflikte ist hoch. Ebenfalls können größere soziale Unruhen auftreten und eskalieren. Regimeumstürze sind nicht auszuschließen.
8	Politische Stabilität ist kaum vorhanden, laufende Konflikte oder hohes Risiko für Konflikte	Politische Stabilität ist kaum vorhanden. Institutionen arbeiten ineffizient. Korruption ist weit verbreitet. Die Regierung verfügt nur über geringe Legitimität. Größere bewaffnete Konflikte treten in einzelnen Regionen auf oder das Risiko für das Auftreten derartiger Konflikte ist hoch. Regimeumstürze sind nicht auszuschließen.
9	Politische Stabilität nicht gegeben, kriegsähnliche Konflikte oder hohes Risiko für derartige Konflikte	Politische Stabilität ist nicht gegeben. Institutionen arbeiten ineffizient. Korruption ist weit verbreitet. Die Kriminalitätsrate ist hoch. Darüber hinaus treten kriegsähnliche Konflikte in einzelnen Regionen auf oder das Risiko für das Auftreten derartiger Konflikte ist hoch. Regimeumstürze sind nicht auszuschließen. Die Regierung verfügt nur über geringe Legitimität.
10	Gescheiterter Staat	Der Staat ist als „gescheiterter Staat“ anzusehen. Institutionen arbeiten äußerst ineffizient oder sind gänzlich zerfallen. Korruption ist sehr weit verbreitet. Die Kriminalitätsrate ist hoch. Die Regierung verfügt nur über geringe oder keine Legitimität und verfügt oft nur über begrenzte Kontrolle über ihr Territorium. Darüber hinaus treten kriegsähnliche Konflikte in einzelnen Regionen auf oder das Risiko für das Auftreten derartiger Konflikte ist hoch. Regimeumstürze sind nicht auszuschließen.

SUB-NATIONAL LEVEL CODING SCHEME

TABELLE C (2) – SUBNATIONALES RISIKOSCHEMA

7	begrenzte organisierte Gewalt (limited organized violence)	Innerhalb der letzten 6 Monate fanden bewaffnete Kampfhandlungen zwischen/ unter staatlichen und organisierten nicht-staatlichen Gruppen (in Abgrenzung von spontanen Aufständen) statt, staatliche oder nicht-staatliche Gruppen haben Gewalt gegenüber Zivilisten eingesetzt oder es wurden Terrorakte durch derartige Gruppen verübt. Die Bedingungen für Kategorien 8, 9 und 10 sind nicht erfüllt.
8	andauernde organisierte Gewalt (sustained organized violence)	Bedingung 7 ist erfüllt. Derartige Handlungen fanden darüber hinaus an mehreren Tagen innerhalb eines Monats oder über mehrere Monate hinweg statt. Die Anwendung organisierter Gewalt in der Region ist somit durch eine gewisse Beständigkeit charakterisiert.
9	begrenzter Krieg (limited warfare)	Bedingung 7 und 8 sind erfüllt. Die aufgetretene Gewalt führte entweder zu mehreren Todesopfern in der Region oder, falls Bedingung 7 und 8 auch für Nachbarregionen erfüllt ist, war dies zumindest in angrenzenden Regionen der Fall. Im letzteren Fall lässt sich die Region als Teil eines größeren Konflikttherds charakterisieren.
10	Krieg (war)	Bedingung 7, 8 und 9 sind erfüllt. Die aufgetretene Gewalt führte zu einer Vielzahl von Todesopfern in der Region und/oder in Nachbarregionen.

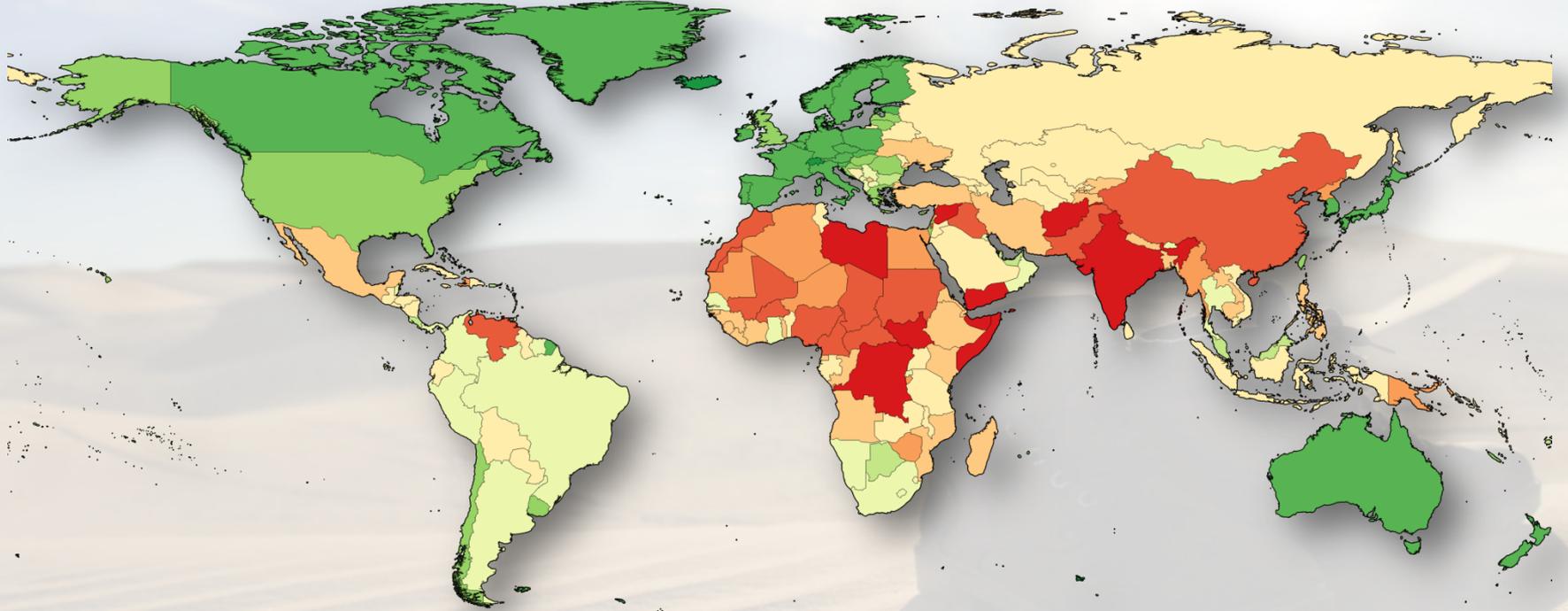
SECURITY
THROUGH
ANALYTICS

11/2019

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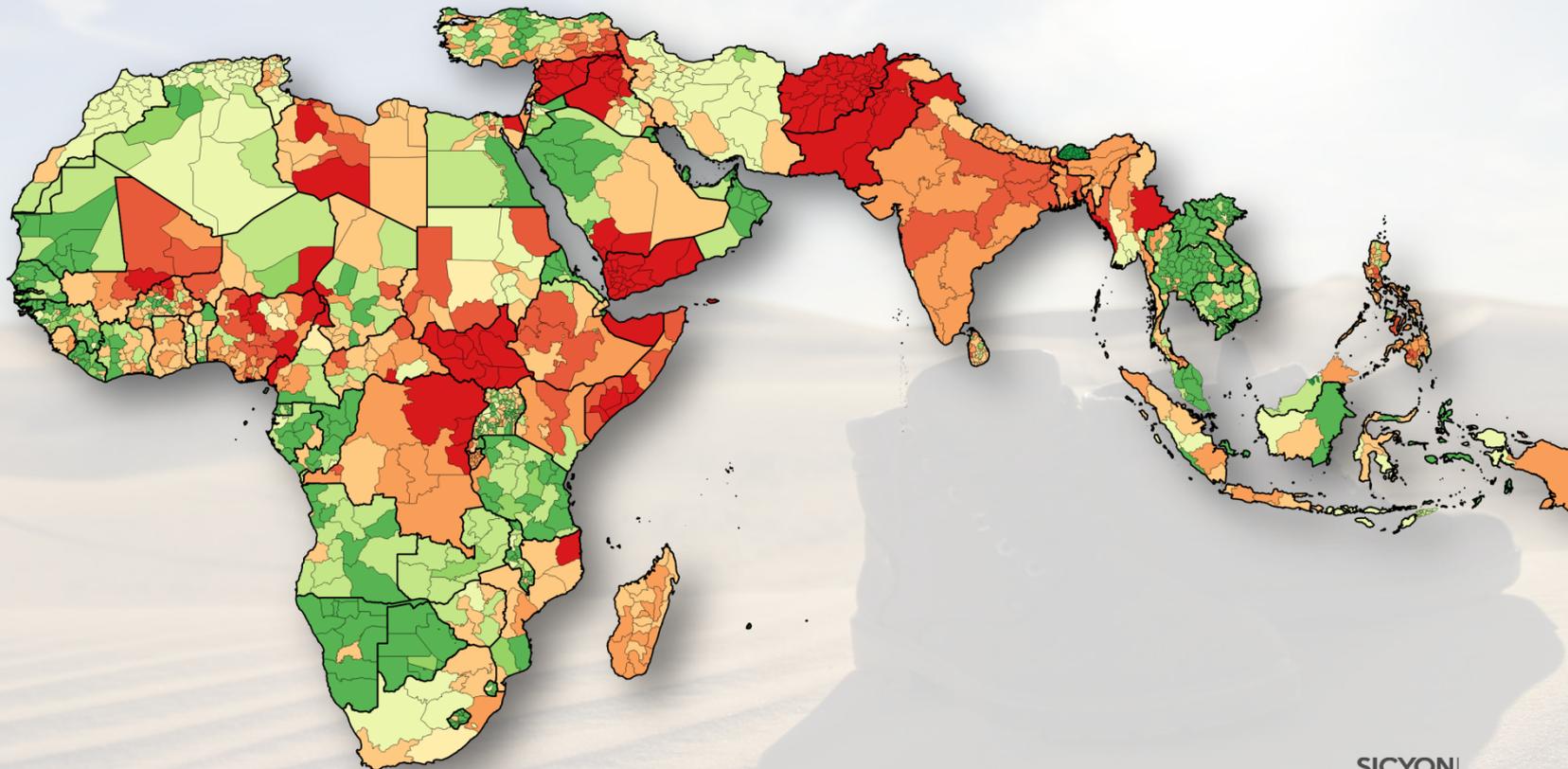
NATIONAL LEVEL CODING SCHEME

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SUB-NATIONAL POLITICAL RISK
LEVEL

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