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# **Population Growth and Security in Africa: Myth or Underestimated Risk?**

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<sup>1</sup> The attitudes and opinions expressed in this report are solely those of the authors and do not represent any official position(s) of the Federal Foreign Office or the German Institute for Global and Area Studies (GIGA).

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## **Executive Summary**

As recent projections estimate, population growth will remain a challenge throughout Africa, although growth rates have slowed over recent decades. Africa's population will continue to grow strongly over the next few decades, especially in sub-regions such as the Sahel. Many observers and practitioners have started to warn that population growth may escalate distributional conflicts and could increase related challenges such as uncontrolled migration.

Africa remains a trouble-ridden continent, and population growth can be one factor that fuels these conflicts. African countries with higher levels of population growth indeed show on average an increased risk of violent conflict. However, absolute population growth is most probably not the prime cause of conflicts across Africa or even worldwide. Demographics are rather a secondary factor, engendering or increasing risks only in conjunction with other factors, especially economic ones. However, differential population growth, in particular a high or growing share of (male) youth, seems to increase security challenges. Generally, societal divisions and economic suffering can worsen when population pressures increase and governments prove unable to tackle related challenges.

Our case studies of Egypt, Mali and Niger underscore these findings. All three countries have seen strong population growth and face multiple, multi-layered conflicts, often connected to jihadism and with international components. Absolute population growth itself, though, is not the main cause of conflict but rather contributes to challenges related to socio-economic development. Differential population growth and inequitable or insufficient access to natural resources, however, substantially increase conflict. In all cases, a male youth bulge represents a recruitment pool for violent and other extremist groups. Shrinking access to natural resources such as water and fertile land may increase food scarcity and often lead to increased conflict between social groups, especially between herders and farmers in the Sahel.

Previous policies devised to tackle the demographic challenge have largely failed in all three countries: While Egypt's family-planning programmes slowed birth rates, substantial population growth continues. In Mali and Niger, more modern family law could not be implemented due to pressures by influential conservative religious actors. However, strengthening the role of women in both the labour force and society at large remains a promising strategy. Empowerment of women leads to lower birth rates. Rising female education and economic participation typically boosts overall development. To deal with resistance from conservative religious actors, forming alliances with open-minded religious leaders seems crucial.

Any programme to further economic development is very likely to either reduce fertility rates or alleviate economic challenges resulting from population growth. Moreover, problems related to population growth need not escalate into violence. Conflict resolution and prevention remain key instruments that should be supported by the international community. Not only will African countries benefit from these efforts, but, indirectly, European countries will as well. The security community needs to create increased awareness of security risks associated with population growth – not only in international institutions but also among conflict parties. As only a combination of security and development will sustainably fix related problems, the dialogue between related communities needs to be deepened.

Finally, demographics in general deserve more attention by decision-makers and scholars, including challenges related to the economy, migration as well as tensions between ethnic and religious groups. In particular, an analysis of success stories regarding the management of population growth will reveal directly usable insights into effective policy design. Generally, demographics need to be taken seriously.

## Zusammenfassung

Jüngste Projektionen erwarten, dass die Bevölkerung in Afrika trotz sinkender Wachstumsraten stark ansteigen wird. Experten<sup>2</sup> und Entscheidungsträger warnen verstärkt, dass mit dem Bevölkerungswachstum auch Verteilungskonflikte gewaltsam eskalieren und, damit verbunden, mögliche Folgen wie ungeordnete Migration zunehmen könnten.

Tatsächlich fällt für Afrika die Konfliktbelastung generell hoch aus und die Konfliktwahrscheinlichkeit wächst für Länder, wenn diese überdurchschnittlich hohes Bevölkerungswachstum aufweisen. Der Zusammenhang ist auf den zweiten Blick jedoch komplexer. Verglichen mit anderen Faktoren stellt Bevölkerungswachstum alleine eine eher sekundäre Konfliktursache dar. Der internationale Forschungsstand zeigt, dass Bevölkerungswachstum nur dann eine Konfliktursache darstellt, wenn es zusammen mit anderen, insbesondere ökonomischen Problemen auftritt. Differentielles Bevölkerungswachstum, vor allem in Form eines hohen bzw. wachsenden Bevölkerungsanteils perspektivloser (männlicher) Jugendlicher, ist jedoch offenbar deutlich konfliktverschärfend.

Die Fallstudien zu Ägypten, Mali und Niger bestätigen diese Befunde. Alle drei Länder zeigen starkes Bevölkerungswachstum und sind mit multiplen Konfliktlagen konfrontiert, oft in Form von Dschihadismus und mit internationalen Komponenten. Der Bevölkerungsdruck stellt diese Länder vor zusätzliche Herausforderungen. Konkrete Zusammenhänge lassen sich vor allem im Bereich des differentiellen Wachstums identifizieren. Perspektivlose männliche Jugendliche sind besonders anfällig für extremistische Ideologien und Rebellion. Auch in Folge klimatischer Probleme gibt es neben Problemen bei der Ernährungssicherheit ein wachsendes Konfliktpotential beim Zugang zu natürlichen Ressourcen wie Wasser und fruchtbares Land – in Mali und Niger besonders zwischen Nomaden und Ackerbauern.

Bisherige Versuche der Politik, auf die Familienplanung direkt einzuwirken, haben sich als relativ erfolglos erwiesen, das Bevölkerungswachstum aufzuhalten. In Ägypten sind Geburtenraten infolge der Regierungspolitik zwar gesunken, aber in der vergangenen Dekade wieder angestiegen. Die Stärkung der Rolle der Frau durch moderne Gesetzgebung trifft in Mali und Niger auf zumeist konservativen religiösen Widerstand. Dennoch bleibt die Stärkung der Rolle der Frau ein besonders vielversprechender Ansatz. Bildung und die Integration von Frauen in den Arbeitsmarkt senken die Geburtenrate und stärken die Ökonomie insgesamt. Zentral dürfte es sein, aufgeschlossene religiöse Akteure für solche Politiken zu gewinnen.

Darüber hinaus scheinen herkömmliche Maßnahmen zur Stärkung der sozioökonomischen Entwicklung und zur Konfliktbearbeitung sinnvoll – sie können indirekt Bevölkerungswachstum dämpfen, aber vor allem die Eskalation von Verteilungskonflikten vermeiden helfen. Konfliktbearbeitung und Entwicklung bleiben zentrale Ansätze, die von der internationalen Gemeinschaft gefördert werden sollten. Davon würden sowohl Afrika als auch Europa profitieren. Nicht zuletzt gilt es, das Problembewusstsein in sicherheitspolitischen Kreisen zu stärken und den Dialog mit der Entwicklungspolitik zu vertiefen.

Schließlich besteht weiterhin Bedarf, dem Zusammenhang in Politik und Wissenschaft mehr Aufmerksamkeit zu schenken, insbesondere was das differentielle Wachstum verschiedener ethnischer Gruppen angeht – oder für verwandte Herausforderungen bei Wirtschaft und Migration. Die Analyse von Beispielen einer erfolgreichen Verringerung des Bevölkerungswachstums ist ein direkter Ansatzpunkt für Politikempfehlungen. Generell müssen Politik und Wissenschaft den Faktor Demographie ernst nehmen.

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<sup>2</sup> Hier sind sowohl weibliche als auch männliche Personen eingeschlossen.

## 1. Introduction

According to the World Bank, population growth rates have slowed globally, but Africa will nevertheless experience strong population growth throughout the foreseeable future. By the year 2050, the population of Africa is projected to double, reaching up to two and a half billion inhabitants. While population growth may accompany a multitude of challenges, many observers and decision makers – including the Federal Foreign Office of Germany – have started to issue warnings about population growth as a potential risk factor for conflict<sup>3</sup> or for diminishing security, along with related challenges such as increased and uncontrolled migration. Regarding conflict risks, high birth rates or other drivers of population growth can lead to population pressures that may create a greater scarcity of economic resources and, as a result, lead to violent conflicts over the distribution of such resources. Besides absolute population growth, so-called differential population growth can be particularly dangerous – for instance, when the relative share of (male) youth, urban dwellers or members of particular religious or ethnic groups increases. These growing groups may develop grievances or feel discriminated if their needs or demands remain unmet. Shrinking groups may develop threat perceptions vis-à-vis growing groups.

African countries with high levels of population growth indeed display a heightened risk of violence: Among the 20 countries with the highest population growth rates in 2019 worldwide, at least half of them are experiencing intrastate violent conflicts or instability, often with international components. Many of these countries are found in Africa (Burundi, Mali, Niger, Sudan, Ethiopia, Burkina Faso, and Cameroon). However, academic research on the topic has formed a rather marginal sub-field of conflict studies. Conflict research is biased towards other important phenomena such as economic problems, political institutions, and, increasingly, climate change. Given the huge number of potential conflict drivers, these variables must be taken into account regarding conflict risks. Matters are made even more complicated as high population growth can be a symptom of other, often economic problems, rendering it difficult to discern what the actual drivers of conflict are.

Against this backdrop it seems timely and pertinent to provide some more in-depth evidence in order to create a reliable basis for policy formulation and implementation by the Federal Foreign Office and other government authorities. This report asks the following questions:

- To what extent is population growth a security challenge in Africa and elsewhere?
- How and through what mechanisms does population growth create conflict and security risks, particularly in the selected cases (Egypt, Mali and Niger)?
- What policy recommendations follow from the analysis?

This report proceeds as follows: After providing a brief overview of developments regarding population growth, we explicate the academic state of the art on the link between population growth and security, including some evidence on population growth rates and conflict occurrence in Africa as a whole. We then investigate three pertinent cases in more detail – Egypt, Mali, and Niger. The report concludes by summarizing the findings and outlining recommendations for future policy.

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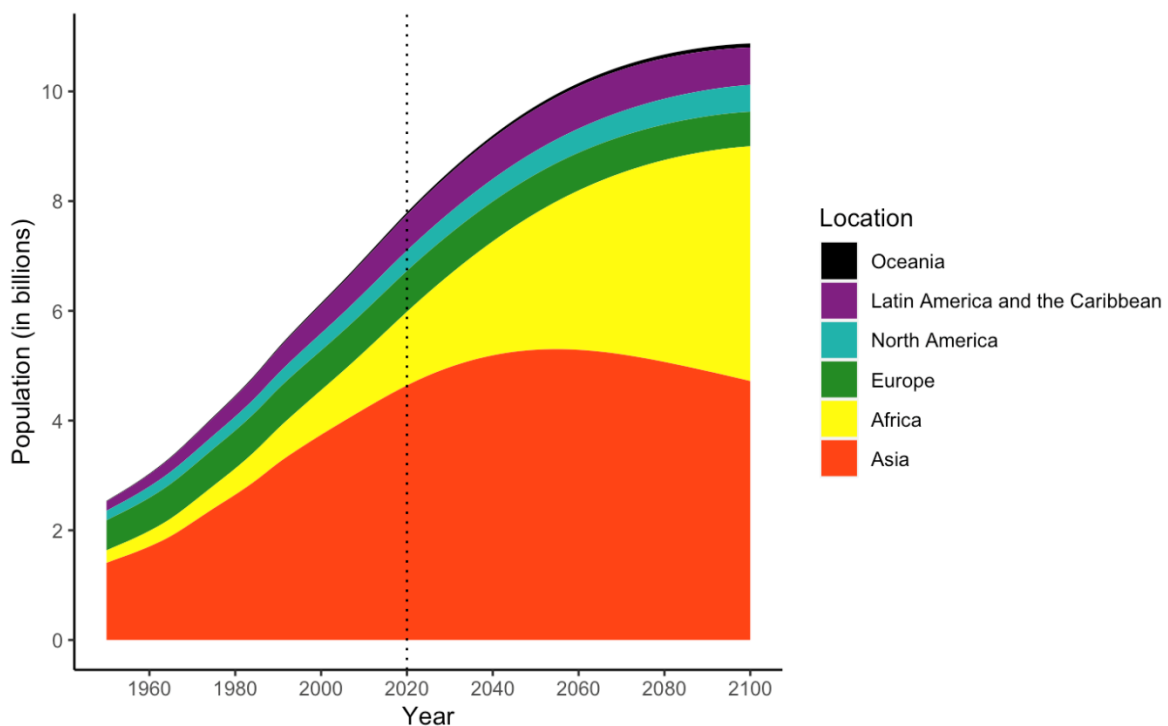
<sup>3</sup> In the remainder of this report we use the terms “security risks” and “conflict risks,” as well as related terms, interchangeably, thus employing a narrow understanding of security in the sense of “threat of violence.” If not explicitly indicated otherwise, it denotes the *risk of intrastate violent conflicts*.

## 2. Population Growth in Africa and Worldwide

After steep population growth in the 19<sup>th</sup> and 20<sup>th</sup> centuries, most of the world is now in the midst of a demographic transition, characterized by falling birth rates and increased life expectancy. In most OECD countries the total fertility rate (TFR) is below the replacement level of 2.1 children per woman. Without migration, populations will shrink – in fact, many have already started to (e.g. Japan, Eastern Europe). In Asia and Latin America the TFR is just at the replacement level, with considerable variation between countries.

In contrast to popular perceptions, many countries in the Middle East and North Africa, such as Morocco, Tunisia, Lebanon, Turkey and Iran also have TFRs of approximately 2.1. The exception is sub-Saharan Africa, where some countries, such as Niger (TFR of 7), have hardly shown any demographic transition at all. Global population growth will level out in the second half of the 21<sup>st</sup> century. In the medium scenario of the UN, the global population will soar from the current 7.8 billion to reach 9.7 billion in 2050 and 10.9 billion in 2100. Sub-Saharan Africa will account for the lion's share of this growth. Its share of the global population will increase from the current 14 per cent to 35 per cent by 2100, growing from 1.1 billion to 3.8 billion in that time frame (see Figure 2.1).

**Figure 2.1: Population Size by Region 1950–2100, Medium Scenario**



*Source: Author's compilation using United Nations data and World Population Prospects 2019.*

Globally, most youth bulges peaked in the 1980s – even in Africa, the share of the young in the overall population has trended downward over the last decade. While providing jobs for new labour-market entrées continues to be a high priority, aging societies will face new and different challenges such as ensuring pensions and healthcare for the increasing share of elderly in their populations – this also holds true to some extent for sub-Saharan Africa (e.g. Woeste 2019).

Skewed gender balances in some countries are another cause of concern. India and China have extremely skewed gender balances towards males in younger age brackets as a result of female feticide that is motivated by socio-cultural preferences for boys in both countries, the high costs

of dowries in India and the one-child policy in China (revised to a two-child policy in 2015). The skewed gender ratio has been identified as a long-term security risk, as there will be millions of men without the prospect of marrying, facing social and sexual misery in conservative societies where marriage is socially expected. An increase in crime, mental health problems, prostitution, human trafficking and radicalization could be distinct possibilities. Gender imbalances in Africa, however, are not pronounced: only in West and North Africa are there slightly more men than women. While population growth will continue for some time and considerable demographic imbalances exist in some countries, it is important to note that, in general, dystopian Malthusian predictions about the connection between population growth and growing resource constraints have been incorrect in the past (see Box 1).

### Box 1: Myths of Population Growth

Malthus' expectation that humankind would head towards an abyss as population growth outstripped agricultural production has been as popular as it has been inaccurate. Since he wrote his *Essay on the Principle of Population* in 1798, the **world's population has grown dramatically, but so has food production**, mainly driven by horizontal expansion of land until World War II and then by productivity gains aided by the increasing use of fertilizer, irrigation and the Green Revolution of the 1960s and 1970s. Writers who have followed Malthus' footsteps and expanded his analysis to natural-resource constraints in general were not much more accurate. The widespread fears about peak coal having been reached in Great Britain in the 19<sup>th</sup> century did not materialize, as the invention of pumps allowed for deeper mining; when the peak was actually reached around World War I, it did not have the terrible impact once thought, as coal from overseas and the advent of a new fuel – oil – made up for the shortfall. A similar fate was in store for Paul Ehrlich's warnings about a "Population Bomb" in 1968 and the Club of Rome report of 1972.

**Population growth**, the second ingredient of the Malthusian dystopia, **shows signs of abating**, even in the MENA region, which has had high growth rates in recent decades. Only sub-Saharan Africa is still expected to show very strong population growth for the foreseeable future. Given the already evident effects of scarcity, ecological backlash and climate change on agricultural productivity, Malthus' premonitions should not be taken too lightly. His disciples may finally get it right, but so far he stands corrected by the historical record. The possibilities of human ingenuity, adaptation, the food trade and more social equity should not be underestimated.

Another myth is that economic development – especially in countries with high population growth – leads to less migration. In fact, **economic development leads to more migration**, as it is typically well-educated, aspirational middle classes that harbour the wish to migrate, have the means to finance the often arduous journey and have the qualifications (e.g. language skills) to adapt in destination countries. The relationship between economic growth and a decrease in migration is, rather, that economic development is regularly associated with lower fertility rates.

Source: Woertz 2014: p. 490, slightly revised.

### 3. Population Growth as a Driver of Conflict: Mechanisms and Empirical Evidence

As indicated at the beginning of this study, population growth can be linked to security risks (see Box 2). When the population is growing, the relative size of available resources could shrink if the economy is not growing as much, which in turn can aggravate conflicts over access to welfare and power. If these conflicts are not managed properly, they can escalate into violence. The number of potential pathways to violence does not stop here. There is a second cluster of potential risks stemming from so-called differential population growth. Differential population growth happens



when specific societal groups increase relative to others, as a result or independently of absolute population growth.

One major pathway has been labelled “youth bulge.” As a result of fertility-driven population growth, the share of youth increases. As especially male youth between the ages of 14 and 29 are prone to violence, risks increase, especially when the economic needs and demands of these youth cannot be accommodated. A second mechanism refers to the relative shrinking and growing of identity groups, mostly ethnic or religious communities. If groups grow, they may demand better political representation or a greater share in the distribution of wealth. Relatively shrinking groups, in turn, may feel threatened and be eager to defend the status quo. A closely related mechanism expects an increase of the urban population as deteriorating living conditions in the countryside will drive people to urban centres, which are then unable to accommodate the needs of an ever-growing population, triggering conflicts as outlined for the other mechanisms.

### Box 2: Principal Causal Mechanisms: From Population Growth to Violent Conflict

#### Absolute population growth:

- **Population growth** (sometimes also density) higher than economic growth → relatively shrinking resources → aggravated conflicts over distribution → violence

#### Differential population growth:

- **Increasing share of (male) youth** → needs of youth cannot be accommodated → dissatisfied youth vulnerable to extremism and rebellion → violence
- **Increasing share of specific societal groups** (ethnic, religious, urban, etc.) → growing groups have increasing demands/shrinking groups feel threatened → intergroup tensions intensify → violence

Source: Authors' compilation.

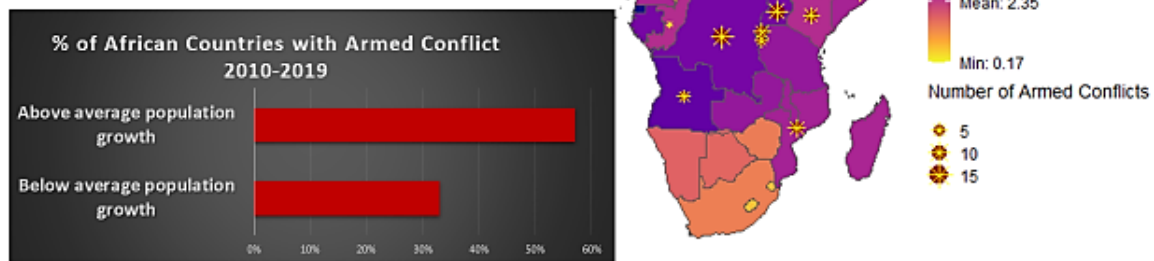
### 3.1 Overview and Anecdotal Evidence

We should expect, therefore, that countries with higher population growth rates also show a higher risk of conflict. Looking at a snapshot of the period from 2010 through 2019, we plot population growth rates in Africa against occurrences of armed conflict during the same period. What is striking at first glance is that no fewer than 26 out of 53 African countries for which comprehensive data is available experienced violent conflict during that period. Figure 3.1 illustrates that there is some, albeit imperfect, correlation with population growth. We find that African countries with above average growth have a conflict risk of 57 percent. In contrast, below the arithmetic mean show a risk of only 33 percent. As growth rates are generally lower in North Africa, we may look at sub-Saharan Africa separately. Here, the difference is even more clear-cut. Countries on or above average show a conflict risk of 61 percent while those below the average display a risk of around 18 percent.

Anecdotal evidence from country cases additionally corroborates the view that absolute and differential population growth increases conflict risks. For instance, some scholars argue that the genocide in Rwanda in 1994 was a result of population growth that particularly increased population density in the small country in the heart of Africa. Access to fertile land became increasingly contested and intensified tensions between the major ethnic groups that were additionally fuelled by a supremacist ideology of the Hutu majority. After several mass killings and instability after independence in 1961, a civil war culminated in the genocide in 1994.



**Figure 3.1: Population Growth Rates and Risk of Armed Conflict in Africa, 2010-2019**



*Source: Authors' compilation based on the Uppsala Conflict Data Programme CDP and World Bank,*

In Côte d'Ivoire, differential population growth of certain ethno-religious groups might have been one cause of the civil war that started in 2002. During colonial times, cacao production led to an increased influx of the labour force from neighbouring countries such as Burkina Faso and Mali. When cacao prices plummeted in the 1980s, economic conditions became increasingly strained and so-called "Nordists" were met with increasing rejection in the southern part of Côte d'Ivoire. The cleavage was first exploited after the death of founding father Félix Houphouët-Boigny, when the idea of "Ivoirité" – which basically only accepted Southerners as true Ivoirians – was designed to exclude a promising presidential candidate with Northern and Muslim origins (the current president, Alassane Outtara). Disgruntled Northern military members staged a failed military coup that triggered a civil war in 2002.

Population growth, especially through a "youth bulge," might have also contributed to the onset of civil war in Algeria. When oil prices fell in the 1980s, the regime proved incapable of accommodating the needs of an ever-growing youth. Open elections in 1991 were won by the Islamist opposition. The military regime swiftly annulled the elections, leading to a violent Islamist insurgency that was finally contained only in the early 2000s. Jihadist Islamism spilled over to the Sahel region, most notably to Mali, in 2012. In the Sahel region, population growth remains the highest in Africa, and population pressures have arguably contributed to the current crisis in the region (see the case studies on Mali and Niger in 4.2 and 4.3).

### 3.2 Results from Multivariate Studies

The brief account of historical examples, however, demonstrates that other variables need to be taken into account. In Côte d'Ivoire and Algeria, the drop in prices of key cash-crop commodities was a crucial economic-context condition. In Rwanda and Côte d'Ivoire, ethno-nationalist ideologies added fuel to the fire. Militant Islamism proved a poisonous ideology in Algeria, and it has now contaminated large parts of Africa. In all three cases, elite behaviour, especially manipulation of elections and ethnic exclusion, is key to explaining the escalation. In addition, colonial factors have favoured subsequent dynamics. Some scholars argue that colonial practice constructed the Hutu-Tutsi divide in Rwanda (and Burundi) in the first place. In Côte d'Ivoire, cacao production and the influx of Northerners began in the colonial period.

**Box 3: Empirical Findings on Absolute Population Growth and Conflict**

- **Population size** and conflict: Overall, population size is a significant indicator explaining the onset of civil war (Blattman and Miguel 2010; Hegre and Sambanis 2006; Bricker and Foley 2013; Urdal 2006). This only implies that countries with large populations are more likely to experience civil war; this does not necessarily translate to countries with strong population growth, where economic and political indicators take primacy (Hegre and Sambanis 2006).
- **Population growth** and conflict: There is little to no evidence that population growth alone incentivizes countries to start an armed conflict over scarce resources. Collier and Hoeffler (1998) and Farzanegan & Witthuhn (2016) found no significant effects. Tir and Diehl (1998) found only a modest increasing effect on the likelihood of interstate military conflict. Income and political institutions are substantively more important.
- **Population density** and conflict: There is no support for the theory that population density impacts the onset of conflict (Buhaug and Rød 2006; Collier and Hoeffler 1998; Hegre and Sambanis 2006; Theisen 2008; Tir and Diehl 1998; Urdal 2005).

The following **interactions** of population pressures (i.e. growth and density) with other conditions modestly increase the risk of an onset of violent conflict. The “&” denotes the interaction of the conditions:

- **Population growth & land scarcity**: There is weak support for increased risk of armed conflict (Urdal 2005; Diehl & Gleditsch 2001).
- **Population growth & population density** and **population growth & water scarcity**: The likelihood of conflict in poor countries is weakly increased by these combinations (Urdal 2008).
- **Population density & deforestation** or **& land degradation** or **& water shortages**: The likelihood of low-level domestic conflicts is slightly increased. The effect is secondary to political and economic factors (Hauge and Ellingsen 1998; Ellingsen and Hauge 2001).
- **(Rural) population growth & rural density**: There is a weak effect of rural population growth and density in India on armed conflict initiation. Disaggregated results on the local levels provide somewhat more support for the onset of violent political events (Urdal 2008).
- **(Rural) density & low agricultural yield**: Regional differences in access to resources increase the risk of armed conflict and political violence (Urdal 2008).
- **Population growth & scarce resources**: Across countries and within Mexico, growing population size makes violent conflict over scarce resources more likely. The effect is more pronounced during times of economic hardship (Acemoglu et al. 2019).
- **Low socio-economic development & population growth**: The risk of conflict increases (Hegre and Sambanis 2006).

*Source: Authors' compilation; see also selected bibliography.*

At a more abstract level, many variables form theoretical causes; scholars agree only that a multitude of variables decide the outcome – but not what factors actually play a role, to what extent, and in what combination.<sup>4</sup> The theoretical – and related methodological – problem is even more challenging: High population growth is often accompanied by low socio-economic development and it remains unclear whether it is population growth that has led to conflict – or whether population growth is a mere symptom of the low development, which is the actual cause of conflict.

<sup>4</sup> Thinking along the lines of mechanisms, one can argue that their functioning requires the presence of other conditions such as poor economic conditions or failing conflict resolution.

So-called multivariate statistical studies can at least partially tackle these challenges, as they simultaneously analyse several potential conflict drivers. Such studies generally provide a mixed bag of results due to different methods, models and operationalizations, and because of differences in the countries or regions they investigate. Only a fraction of studies are on Africa. The literature, as is often the case, is far from reaching a consensus. According to an expert survey (Mach et al. 2019), “population pressures” pose a moderate conflict risk, but the exact effect remains highly uncertain. As shown in detail in Box 3, quantitative studies provide little to no support for the conventional wisdom that absolute population growth, per se, induces resource scarcity and increases the likelihood of violent conflict. Leading scholars such as Henrik Urdal warn that such assumptions ignore other systematic and historical causes of violent conflicts discussed above (e.g. Urdal 2005). The empirical results also show that some population growth patterns may lead to peace rather than to conflict – under favourable economic circumstances, population growth will additionally boost further economic prosperity by providing a labour force, the so-called “Demographic Dividend.”

*However, absolute population growth can contribute to conflict under certain conditions:* Such circumstances include a combination of population growth and poor socio-economic conditions, summarized in the second part of Box 3. Though the effects are rather moderate, especially in comparison to economic and political effects, recent global and sub-national studies provide more substantial support for the population-growth-plus-resource-scarcity theory, indicating that it functions on the local level (e.g. Acemoglu et al. 2019 on Mexico and India).

In contrast to the findings for *absolute* population growth, there is more evidence for security risks resulting directly from *differential* population growth (see Box 4). In particular, studies find wide support for the *effect of youth bulges* on the onset of conflict. Other factors such as development and regime type are more important, but the effect of youth bulges on conflict is even more pronounced under certain socio-economic and political conditions. The mechanism seems to particularly play out when there is a *male* youth bulge. By contrast, urban population growth may even have a positive effect, decreasing the risk of conflict. Other differential growth, such as growing ethnic groups, seems to have some potential to increase security risks, but few studies have been conducted.

#### **Box 4: Empirical Findings on Age Structure & Other Differential Population Growth**

- **Youth bulge** on conflict: Youth bulges significantly increase the likelihood of armed conflict (Bricker and Foley 2013; Urdal 2004, 2006, 2008) and domestic political instability (Weber 2013; Urdal 2006). However, the effects of development level and regime type on conflict are more pronounced (Urdal 2006, 2008). Note: Due to a “flawed” measure, Fearon and Latin (2003) & Collier and Hoeffler (2004) originally found no effect of youth bulges. Analyses using an alternative indicator for youth bulges tend to find an effect.
- **Differential ethnic growth** on conflict: There is comparatively little research on this. Rising minority power and changes in the relative group size are generally associated with an increase in the likelihood of civil war (Toft 2007), and differential growth in the case of India was shown to increase the risk of armed conflict (Urdal 2008). The effect is secondary to linguistic/religious fractionalization.
- **Differential urban population growth** on conflict: There is no increasing effect of high urban population growth on conflict in cross-national and sub-national studies (Urdal 2005, 2008). The effect rather runs in the opposite direction (Collier & Hoeffler 2004; Urdal 2005; Buhaug & Urdal 2013).

**The following interactions of youth bulges with other conditions show strong correlations with the onset of conflict (interaction denoted by “&”):**

- **Youth bulge & low economic growth** and **youth bulge & expansion of higher education**: Each of these interactions increases the risk of terrorism but not armed conflict (Urdal 2006).
- **Youth bulge & high dependency ratio**<sup>5</sup> and **youth bulge & urban inequality**: These combinations lead to an increased risk of riots and violent demonstrations but not armed conflict (Urdal 2006, 2008).
- **Youth bulge & regime type**: The effect of youth bulges is pronounced in autocracies (Urdal 2006).
- **Youth bulge & corruption**: Youth bulges catalyse the effect of corruption on political instability, negatively affecting a country's stability. The effect of corruption on the political stability is conditional on the share of youth (Farzanegan and Witthuhn 2016).
- **Youth bulge & large male population**: The effect of the youth bulge on the onset of several forms of conflict is more pronounced when men form the majority (Urdal 2008; Weber 2013).
- **Youth bulge & low education**: This combination significantly increases the likelihood of domestic armed conflicts (Barakat and Urdal 2009).

*Source: Authors' compilation; see also selected bibliography.*

### 3. Case Studies


In the following we investigate the effect of population growth on security in three pertinent African countries, Egypt, Mali and Niger. Cases were selected according to pertinent criteria, mainly because of strong population growth, occurrence of violent conflict, and related relevance for German foreign policy. The country cases are investigated in a systematic manner: First, we provide an overview of the state of population growth and security challenges. We then examine in more detail possible direct and indirect connections between the two phenomena. Finally, we outline those government policies germane to population growth and security, and offer preliminary recommendations on how the problems can be tackled.

#### 4.1 Case Study Egypt

In February 2011, following two weeks of popular protests, Egypt's Hosni Mubarak stepped down after 30 years in power. While economic and political grievances led to the protests that erupted across the country and contributed to the fall of Mubarak's regime, it has been acknowledged that the country's demographics played a prominent role in spurring the country's instability. Egypt is the most populous country in the Middle East and North Africa – the region Egyptians identify with – and the third most populous in Africa. Greater Cairo, the capital city and its surroundings, is the largest metropolitan area on the African continent. According to the World Bank, Egypt's population of approximately 69 million in 2000 had increased to 83 million by 2010, by 2019 reaching 100 million. Put differently, Egypt's population increased by 31 million people in the last 20 years. Projections by the UN Population Division show an expected 50 per cent increase in Egypt's population over the next 30 years. Thus, while the country's fertility and population growth rates have decreased in recent years, absolute population growth has not slowed.

<sup>5</sup> The dependency ratio refers to the age-population ratio of those typically not in the labour force (the dependent segment, ages 0 to 14 and 65+) and those typically in the labour force (the productive segment, ages 15 to 64). It is used to measure the pressure on the productive population.

**Table 4.1: Population Growth in Egypt at a Glance**

		<b>Egypt</b>	<b>Global/regional average</b>
	Population size (2019)	100,388,073	-
	Population growth (1990–2019)	2.0%	Africa: 2.4% MENA: 2.1% World: 1.3%
	Population growth (2010–2019)	2.1%	Africa: 2.3% MENA: 1.9% World: 1.2%
	Fertility rate (2018)	3.3 children/ woman	Africa: 4.2 MENA: 2.8 World: 2.4
	Life expectancy (2018)	71.8 years	Africa: 63.8 (2018) MENA: 74.1 World: 72.6
	Migration stock as percentage of total population (2015)	0.5%	Africa: 3.2% MENA: 9.41% World: 3.3%

Sources: World Bank; UN World Population Prospects.

Perhaps the most pressing demographic challenge in Egypt is the population's age structure. The median population age in Egypt is approximately 25 years, much lower than the world's average age of 31. More than half of the population is under the age of 25, and approximately 13 million male Egyptians are between the ages of 15 and 29, ages at which male youth are typically prone to the use of violence. The government visibly lacks the capacity to accommodate the economic and political needs of the country's younger generations. The population explosion, along with a poor economy, threats of water and food shortages and rapid urbanization combine to present challenges for the security of the country. It is thus no coincidence that Egypt's president, Abdel Fattah Al Sisi, has placed population growth on the national agenda, declaring it the top threat to Egyptian security, alongside terrorism.

#### 4.1.1 Security and Conflict in Egypt

*Government vs. Islamist and secular opposition:* After the fall of the longstanding Mubarak regime, the Muslim Brotherhood's Mohamed Morsi was the first civilian ever to be democratically elected as president of the country. However, in 2013 the Egyptian military sided with popular dissatisfaction with Morsi and ousted him from office. The 2013 military coup followed popular protests over worsening economic conditions in the country and the increasing monopolization of power by the Muslim Brotherhood. After Al Sisi assumed office in 2013, the military has repressed dissent leading to serious human rights abuses against secular as well as Islamist opponents. Egypt's "anti-terrorism" law of 2016 has been used to arrest political opponents and to silence dissent. As a result of the government's widespread repression, a generation of government dissidents is held in Egypt's prisons. The government's determination to continue its crackdown on the Muslim Brotherhood and secular opposition raises the risk of radicalization.

*Government vs. terrorism ("War on Terrorism"):* Following the 2011 uprisings, several jihadist terrorist cells emerged, concentrated in Egypt's northern Sinai. After Al Sisi assumed power and vowed to crackdown on the Muslim Brotherhood and its supporters, terrorist attacks in the country significantly increased. Most notably, the local group Welayit Sinai (formerly known as Ansar Bait al Maqdis) pledged allegiance to ISIS and dramatically increased violence in Egypt's Sinai. The attacks have largely targeted Egyptian security forces. According to government sources, more than 1,180 terror attacks were carried out in Egypt since Al Sisi took office. The lack of economic and political opportunities in the country gives terrorist groups the chance to



legitimize their attacks and opens up a large pool of potential recruits. While the number of attacks is now reduced and is mainly concentrated in the Sinai Peninsula, terrorism and population growth sit atop the government's agenda. Currently, Egypt's anti-terrorism law is increasingly being used to crack down on the political opposition, potentially further heightening the risk of radicalization.

*Sectarian violence against Egypt's Coptic community:* Christian Copts are the largest minority group in Egypt and comprise the largest Christian minority in the MENA region. While government estimates of Copts in Egypt range from 6 to 9 per cent, the church asserts higher numbers. The Coptic community has a history of facing social discrimination and state barriers to religious freedom. Following the 2013 coup, and as sectarian violence increased, the Coptic Church sought increasing closeness with Al Sisi's regime for a shield of protection. While the current government is engaged in efforts to provide security to the Coptic community, hate crimes against them, in addition to existing limitations on the freedom of religion, have led to some dissent by the Coptic community vis-à-vis the church's protection strategy.

*Egypt vs. Libya's Government of National Accord:* Closely linked to Egypt's "war on terrorism" and in response to terrorist violence originating from Libya and carried out against Egyptians, Egypt intervened militarily in Libya in 2015. Moreover, Egypt has been supporting General Khalifa Haftar's Libyan National Army (LNA) against the UN-recognized Government of National Accord (GNA) with arms and training to protect national border security and counter significant attacks by terrorist cells residing in Libya. In July 2020 President Al Sisi warned that any attempt by the GNA, which is backed by Turkey, to take over the Libyan city of Sirte and the Al-Jafra air base will threaten Egypt's national security and provoke a direct military intervention. Later that month, Libya's Eastern-based parliament and Egypt's parliament authorized Egyptian military intervention in the Libyan war. Most recently, the LNA and GNA have agreed to a ceasefire and are engaged in talks under the auspices of UNSMIL and within the framework of the Berlin Process. In that regard, Egypt hosted direct military and security talks facilitated by UNSMIL between the LNA and GNA in September in efforts to achieve a lasting ceasefire.

*Egypt vs. Ethiopia:* While Egypt was coping with the aftermath of the 2011 uprisings, Ethiopia started constructing the Grand Ethiopian Renaissance Dam (GERD) on the Blue Nile. Given that Egypt is a downstream country and that 85 per cent of Egypt's Nile water flows down from the Ethiopian Highlands, the construction of the hydroelectric dam will aggravate water shortages in Egypt during the filling phase. This issue has intensified domestic pressure on the Egyptian government to address energy and water shortages. The failed negotiations between Egypt and Ethiopia have escalated tensions between the two nations.<sup>6</sup>

#### 4.1.2 Population Growth and Security in Egypt

*Population growth, the economy and conflict:* Egypt's economy has been deteriorating since before the 2011 uprisings, complete with rising levels of unemployment, high rates of inflation and significant reductions in the country's foreign currency reserves. Today, every third Egyptian is living below the poverty line and one out of five children is malnourished. In response to the rising prices of electricity, high inflation, rising taxes and food shortages in the second half of 2016, small-scale protests across the country have erupted. To add to the frustration, the military has increasingly taken over some sectors of the economy and moved from operating in the shadows

<sup>6</sup> Egypt's foreign relations are also marked by its cold peace with Israel. We do not discuss this in the report as it is not a current security threat for the country, especially as the two nations also now cooperate in counterterrorism.

to publicly managing large-scale projects. Youth bulges in combination with high unemployment were shown to have affected Egypt's stability in 2011 and 2013. While the peak of the youth bulge is now older, its "echo" – namely, the generation made up of children of the youth bulge generation – has actually grown. Egypt's current population structure indicates that at least for the next two decades the country will continue to have a disproportionately large share of young citizens.

Moreover, it is projected that by the end of 2020 the demographic echo of the youth bulge generation will reach working age, thus increasing pressures on the labour-market supply that has proven difficult for the government to meet. This indicates that the current combination of youth bulges and high unemployment rates puts the country's security at risk. While the country's overall unemployment rate of 10 per cent is not overly problematic, unemployment among youth (aged 15-24) is more than 30 per cent. Employment opportunities for young women are even dimmer, with an unemployment rate among young Egyptian women (aged 15-24) reaching a shocking 42 per cent. The problem of youth unemployment also notably concerns individuals with a college degree, as unemployment levels are even higher for college graduates. Added to this are the high number of young individuals that are underemployed in insecure, low-status and low-paid positions. Egypt is suffering from a discrepancy between education and occupation: The number of university graduates continues to rise due to the population's age structure and free education system. However, the public and private sector cannot take in the annually available tens of thousands of fresh graduates.

To counter youth unemployment and facilitate the transition from educational setting to the labour market, the government started an initiative that provides employment training to university graduates. Yet, the private sector continues to perceive public university graduates as technically unskilled. Instead of solving such structural barriers to youth employment, the government is encouraging people to take on low-skilled and low-paid jobs as a solution. Yet, such insecure jobs lead to youth frustration, anger, and depression. As a result of the lack of secure white-collar jobs, Egypt's informal sector currently accounts for more than 50 per cent of the economy. An entire generation is encountering a combination of scarce economic opportunities and a lack of political channels that would allow them to express their frustration with the government. This sense of deprivation not only increases the probability of popular protests but also makes the youth vulnerable to radicalization.

*Urban population growth and conflict:* Egypt's total land area consists of nearly one million km<sup>2</sup>. Yet approximately 96 per cent of the population inhabit only 4 per cent of Egypt's land, which is concentrated in the Nile Valley and Delta. Thus, while most of Egypt's land is untouched or underpopulated, the metropolitan area of Cairo houses more than 22 million people and 2019 alone saw approximately half a million new inhabitants. Today, approximately 60 per cent of the residents of Greater Cairo live in informal settlements. The infrastructure of metropolitan areas such as Cairo, Alexandria and other cities along the delta has surpassed its capacity. If not adequately managed, urban violence may increase, with Cairo particularly at risk.

To deal with Egypt's urban municipalities that are outgrowing capacity, the government announced the construction of 20 new mega-cities, including a new administrative capital in Egypt's desert that will increase the country's inhabited areas to approximately 12 per cent. But the new administrative capital has been widely criticized, as only few Egyptians will be able to afford housing in these new developments. In effect, the majority of Egyptians living in informal settlements will continue to be packed into the old capital, and overpopulation will continue to increase while most of the government's spending will be diverted to new cities. Their



construction attracted wide public frustration as it came at a time when the government has repeatedly claimed that there are no economic resources available in the country and was cutting food subsidies. The government prioritized the construction of a new administrative capital that would house Africa's largest building, mosque and cathedral and allocated a budget that is around three times higher than the annual combined spending on healthcare and education.

*Water scarcity, climate change and conflict:* Population growth is putting pressure on the availability of water resources and exacerbating existing issues such as Nile contamination and water shortages, which could increase the risk of local violence over water access. Over the years, violent protests over water access in Egypt have occurred in response to water shortages. For example, protests broke out in Beni Sueif and Fayyoun over water shortages. Similarly, in Minya and Qalioubiya violent protests erupted over chronic water problems and pollution. Poor water management along with the higher number of droughts are expected to further strain Egypt's water supply. While the country's water share per capita is already lower than the international water scarcity level of 1,000 m<sup>3</sup> of annual water per person the country is still left with an annual shortfall of water.

The situation is aggravated by the government's lacking capacity to adapt to climate-related challenges. Egypt's Nile Delta has also been declared one of the areas most vulnerable to climate change on the global level. Climate variability and the rise in temperature reduce Nile river flows to Egypt. This affects not only the country's freshwater supply but also its energy sector. Through the Aswan High Dam, Egypt relies on Nile River flows to generate approximately 10 per cent of the country's electricity. Moreover, global warming increases saltwater levels, and due to the Nile Delta's low altitude, the freshwater supply is declining. This is a serious concern, as approximately 97 per cent of Egypt's freshwater needs can currently be met only by the Nile. By 2025, Egypt is expected to have critical shortages of water.

*Food shortages, climate change and conflict:* Continued urban expansion and water shortages are also spoiling Egypt's fertile agricultural land. As the agricultural sector accounts for approximately 12 per cent of Egypt's GDP and approximately 25 per cent of the labour market, shortages in fertile land not only affect the nation's economy, but also increase rural-to-urban migration, which can engender social problems. Climate variability, rising seas in the Nile Delta and the difficulty of maintaining irrigable land coupled with population growth will affect the government's ability to feed its growing population.

Due to Egypt's bulging population, the scarcity of arable land and shortages in water, approximately 40 per cent of the country's food and agricultural needs are imported. Consequently, Egypt is highly dependent on food imports and is the largest wheat importer in the world. The government expects that climate change will cause additional restrictions on the production of crops such as wheat, further increasing Egypt's dependence on food imports. This knowledge has sparked fears of social unrest, especially as 60 million Egyptians receive bread through the food subsidy programme. Egypt has a history of instability caused by rising global food prices that intensify economic and political disaffection in the country. For instance, the slogan of Egypt's 2011 uprisings was "Bread, Freedom, Social Justice." More recently, protests erupted across the country in 2017 after the government cut bread subsidies.

*Migration and conflict:* Egypt is both a prominent source of and a popular destination for migrants in the Global South. For example, it is the largest source of migrant labour in the Middle East, as poor employment opportunities serve to stimulate outward migration. It is also emerging as a

transit country for sub-Saharan Africans crossing through towards Europe. As a migration destination, Egypt is home to a large Sudanese community (estimates range between 750,000 and four million Sudanese nationals) and has also become a destination for Syrian nationals fleeing the Syrian armed conflict (according to Egyptian government estimates, approximately 300,000 Syrians currently reside in Egypt). Like other MENA countries, Egypt's immigration and refugee policies, as well as their legal frameworks, are purposely unclear so as to give the government leeway in migration management. Migrant and refugee communities from sub-Saharan Africa inflict notable economic pressure on the mostly impoverished areas they reside in, increasing the strain on basic services, such as education and health, and on the informal labour market. Within the Syrian migrant/refugee community, there are significant differences: Syrians who migrated with very little live in Egypt's impoverished areas and are stuck in low-skilled informal sector jobs. By contrast, middle-income Syrian migrants or those who have managed to acquire residency permits – after a complex and expensive process – are economically well integrated and have reportedly boosted the Egyptian private sector, accounting for approximately 800 million USD in new investments and expertise. In general, migration does not seem to be a source of major episodes of instability in the country.

#### 4.1.3 Policy Response and Recommendations

*Population growth:* Countering Egypt's population growth has been a government priority for more than three decades now. Mubarak's family-planning campaign, supported by USAID, which managed to reduce the average fertility rate from approximately six children per family to three children per family, underlines that government strategies to reduce population growth can succeed in Egypt. Egypt's fertility rates, which had reached a dramatic low of three births per woman in 2006, bounced back to 3.5 in 2014. This prompted Al Sisi's government to take up the issue, launching the nationwide "Two is Enough" campaign that particularly targets rural areas. While the campaign failed to hit its target, it is notable that since 2018 fertility rates have once again been declining. The government should invest in and focus on preventing a reversal of this downward trend as it would carry grave consequences for Egypt's education and health systems in the near future, and for its labour market in the distant future.

Future campaigns should increasingly rely on religious preachers to counter traditional religious and cultural attitudes against family planning. Furthermore, the government should invest in three areas to decrease fertility rates: health, education, and employment. First, access to sexual and reproductive healthcare should be universal. Second, investments in girls' education should be prioritized to promote smaller families and prevent childbearing at a young age. Third, the public and private sector should increase female participation in the labour market through quotas and flexible working hours.

*Youth unemployment:* Egypt's current population structure indicates that at least over the next two decades the echo effects of youth bulges will continue. To prevent future political instability, a national strategy should be pursued to combat youth unemployment through the promotion of vocational training, investments in public universities and encouraging the private sector to take on public university graduates. Currently, one government strategy is to provide entrepreneurship training to graduates to encourage them to start their own businesses instead of being dependent on scarce opportunities in the labour market. For this to work, innovative funding opportunities must be established as the entrepreneurship scene in Egypt is highly exclusive. Finally, international investments in Egypt's economy should be further expanded. For the Egyptian market to be more attractive, the military's role in the economy must be reduced.

*Rapid urbanization and housing:* The government's plan to construct new cities and increase Egypt's inhabited land from 4 to 12 per cent is a logical strategy. However, the government must prioritize the provision of affordable housing and at the same time ensure that enough money is left to update the infrastructure of Egypt's "old" cities. It must combat illegal housing developments not only by fighting corruption and enforcing strict building regulations but also by seeking public-private partnerships to incentivize the private sector, through a reduction of inflated land prices, to co-develop low-cost housing that can provide an affordable alternative to illegal housing.


*Resource scarcity and climate change:* Regional and international support must be gathered to establish a mediated agreement between Egypt and Ethiopia over the filling and operations of the dam, as Egypt's very existence depends on the Nile. Water shortages in Egypt are not only caused by shortages in supply but also arise due to contamination, outdated management systems, and inequitable distribution. While the government is engaging in large-scale efforts to improve water use and waste management, international investors should be sought to help Egypt update its water management system and build wind and solar power capacity. Lastly, Egypt should work together with the African Union to develop a multilateral strategy that combats climate risks on the African continent.

*Terrorism:* While Egypt's "war on terrorism" significantly reduced the number of attacks across the country in recent months, it has failed to eradicate the risk of terrorism. Not only should the national strategy include armed counterterrorism but the rule of law must be also strengthened and the current legal frameworks that allow for broad-brush arrests and prosecutions in the name of counterterrorism must be scrapped. This would prevent the alienation of dissidents, decrease risks of radicalization, and reduce the pool of recruits for militant groups.

## 4.2 Case Study Mali

Mali's population growth rate is one of the highest in Africa and the world. Over the last three decades, the Malian population has grown on average by nearly 3 per cent per year. The population more than doubled from 1990 (8.4 million) to 2019 (19.7 million). The main driver of the population growth is the high fertility rate of Malian women, who gave birth to 5.9 children on average in 2018, a slight decrease from an average of 7.2 children per woman in 1990. Moreover, life expectancy increased from 45.7 years in 1990 to 58.9 years in 2018. Infant mortality decreased from 229.8 deaths per 1,000 live births in 1990 to 97.8 deaths in 2018.

**Table 4.2: Population Growth in Mali at a Glance**

		<b>Mali</b>	<b>Global/regional average</b>
	Population size (2019)	19,658,030	-
	Population growth (1990–2019)	2.9%	Africa: 2.4% World: 1.3%
	Population growth (2010–2019)	3%	Africa: 2.3% World: 1.2%
	Fertility rate (2018)	5.9 children	Africa: 4.2 World: 2.4
	Life expectancy (2018)	58.9 years	Africa: 63.8 (2018) World: 72.6
	Migration stock as percentage of total population (2015)	2.1%	Africa 3.2% World: 3.3%

Sources: UN Population Prospects; World Bank.

Despite the impressive population growth rates, Mali cannot be considered as overpopulated. The country has a surface area of 1,240,190 km<sup>2</sup> and, on average, 15.6 people live on 1 km<sup>2</sup>. This is far below the respective global (59.6 people/km<sup>2</sup>) and sub-Saharan African (50.8 people/km<sup>2</sup>) averages. However, Mali's population is geographically unevenly distributed due to the harsh environmental conditions in the northern desert zones. The majority of Malians live in the southern part of the country. In 2019, 43.1 per cent of Malians lived in urban areas. Bamako's population is currently estimated at 3.3 million (17 per cent of Mali's population). As of 2012, the fertility rates did not differ much between regions. Only in the capital, Bamako, was the fertility rate lower than the rest of the country, at 5.1 children per woman. A survey comparing the number of children of women belonging to different ethnic groups did not reveal any strong differences.

#### 4.2.1 Security and Conflict in Mali

Mali has a history of recurrent Tuareg insurgencies that goes back to the 1960s. At the end of 2011, a new Tuareg rebellion started that, unlike previous insurgencies, also included jihadist groups, which consisted of Tuareg and other Malian ethnic groups in addition to foreign fighters. These jihadist groups soon marginalized secular Tuareg rebels and, since 2012, have been the most significant non-state violent actors, targeting the Malian state and civilians. By 2012, Tuareg groups along with jihadist groups had occupied the Northern Mali regions of Gao, Kidal and Timbuktu. Since 2013, French military (operations "Serval" and "Barkhane") and international peacekeepers (MINUSMA) have been present in Mali. The former aims to fight terrorism and force jihadist groups out of the region, while the latter is mandated with implementing the 2015 peace agreement (with secular Tuareg) and re-establishing the presence of the Malian state in northern and central Mali. While the international military missions were initially successful in pushing jihadist groups back, insecurity has increased in recent years.

Conflicts in Mali are multi-layered, and jihadist violence is intertwined with local, intercommunal conflicts. The security situation in Mali has seriously deteriorated since 2017. The year 2020 seems to have become the deadliest one since the beginning of these conflicts. In the first half of 2020, the Armed Conflict Location and Event Data set (ACLED) counted 1,835 fatalities in Mali – almost as many fatalities as were counted in the whole year of 2019 (1,887). By comparison, 538 and 883 fatalities were reported in 2012 and 2013, respectively. While the North used to be the main conflict area, violence has shifted to central Mali in recent years. More than 1,100 fatalities occurred this year in the Mopti region. Following a peace agreement in 2015, secular Tuareg rebels have largely ceased fighting in recent months. Currently, the conflict between jihadist groups and the Malian state, as alongside intercommunal violence, are the main threats to security in Mali.

*Jihadist violence:* Since the beginning of the conflict, the names, structures and affiliations of militant groups, along with the alliances between them, have changed several times by means of the creation, merging and splitting-up of various groups. Currently, the main Islamist groups are Jaamat Nusrat al-Islam wal Muslimeen (JNIM) and the Islamic State in the Greater Sahara (ISGS). JNIM is an Al-Qaeda-affiliated group that was created in 2017 and merged Ansar Dine, Al-Qaeda in the Islamic Maghreb (AQIM), Al-Mourabitoun and Katiba Macina under the leadership of Iyad Ag Ghaly. Since its creation, JNIM has continuously increased its attacks on the Malian army and the UN peacekeeping mission MINUSMA through landmines or directly targeting military bases. It has since expanded its scope of action into Burkina Faso.

ISGS is led by Adnan al-Sahrawi, who previously served in leading roles in the Mouvement pour l'unicité et le jihad en Afrique de l'Ouest (MUJAO) and Al-Mourabitoun. ISGS was accepted as a

member of the Islamic State in 2016 after it had launched a number of attacks in Mali, Burkina Faso and Niger. In 2019, ISGS was officially integrated into the Islamic State West Africa Province (ISWAP) but it still seems to operate separately. In the first half of 2020, the rivaling groups JNIM and ISGS engaged in heavy fighting against each other. ACLED counted 34 armed clashes with more than 300 casualties.

*Intercommunal conflicts in Central Mali:* Intercommunal conflicts have sharply increased in central Mali since 2015. The expansion of jihadist groups in the region in conjunction with the Malian army's response have contributed to the intensity and the ethnicization of local conflicts. Conflicts between farmers and herders for land and water have a long history in the region. These conflicts have occasionally also involved retaliatory acts to settle scores. However, in recent years violence has massively scaled up. Jihadist groups have recruited supporters by capitalizing on local grievances such as land conflicts, corruption and other competition for livelihood. They have mainly targeted the pastoralist Fulani (locally known as Peulh) communities, while the Malian army supported the creation of self-defence groups among the farmer communities Bambara and Dogon to protect themselves against jihadist attacks. The most prominent such group is the Dogon militia Dan Na Ambassagou. Different (other) ethnic groups arm themselves in response to insecurity in the region, which aggravates the situation, not least because the groups use militias to expand their local power bases.

The example of a spate of attacks in 2019 can illustrate how the conflict between the Malian state and jihadist groups is interwoven with local conflicts: In March 2019, the Fulani villages Ogossagou and Welingara were destroyed, with more than 150 villagers killed. Allegedly perpetrated by Dan Na Ambassagou, the attack was considered by some sources to be a retaliatory act for an attack on the barracks of Malian soldiers by JNIM/Katiba Macina and attacks on two Dogon villages allegedly carried out by Fulanis. A few months later, the Dogon village Sobane-Kou was attacked, which caused at least 35 fatalities and is considered a score-settling by Fulani militants. Insecurity along with armament of local groups leads to tit-for-tat strategies that further escalate violence.

#### 4.2.2 Population Growth and Security in Mali

Population growth does not directly cause violent conflict, but it further adds to difficult socio-economic conditions that are conducive to conflict. According to the Human Development Index, Mali is one of the poorest countries in the world. A growing population makes it more difficult to improve socio-economic conditions because the demand for education, nutrition, health services, and employment opportunities increases correspondingly. At the same time, violent conflict additionally hampers socio-economic development. Population growth not only aggravates socio-economic development, but it also has the potential to further aggravate existing conflicts through specific, more direct mechanisms, especially regarding a) competition over natural resources and b) youth bulges as a pool for recruitment either by violent groups or by protest groups.

*Conflicts caused by resource scarcity:* Food scarcity remains a problem in Mali. A share of 30 per cent of children under five years of age suffer from malnutrition. In July 2020, 6.8 million Malians – roughly a third of the overall population – were in need of humanitarian assistance, according to the United Nations. The heightened competition for natural resources can stir conflict, especially between herders and farmers. Competition for resources is not a new phenomenon in Mali. In the inland Niger Delta in the Mopti region, sedentary farmers, pastoralists and fishers have coexisted for centuries. Pastoralists come to the delta during the dry season to graze their livestock and move northwards during the rainy season. Competition between farmers, fishers



and pastoralists is partly governed by a complex land-use system whose roots can be traced back to the 14<sup>th</sup> century. Nevertheless, conflicts can arise due to changes in land use caused by agricultural policies or changing climatic and other environmental conditions.

For quite some time, the Malian government has prioritized agricultural transformation. Since the 1970s, the World Bank-funded project Office du Riz Mopti (ORM) has promoted the transformation of land into rice fields, leading to many conflicts between farmers and pastoralists in the Mopti region and contributing to the marginalization of the latter. In the last two decades, land use for farming has expanded drastically. Between 2001 and 2016, the area of cultivated land has increased by 26 per cent in Mopti, by 146 per cent in Kayes and by 162 per cent in Sikasso, according to calculations by the International Crisis Group. In southern Mopti, the expansion of land for farming has instigated conflicts between Fulani and Dogon. Yet, attempts to increase resources available for herding can also trigger conflicts. One project in the Mopti region built new wells to make more areas suitable for livestock. However, the wells made the land more attractive not only for Fulani herders but also for Dogon farmers, and new conflicts arose that could be resolved neither by state authorities nor by communal authorities. More recently, the increase of insecurity also had a negative effect on the use of land. In November 2019, the World Food Program reported a decrease of farming in areas affected by violent conflict.

*Youth bulge as a recruitment pool for violent groups:* In 2017, nearly 20 per cent of the Malian population was between 15 and 24 years old, including approximately 1.8 million young men. As discussed above, a large share of (male) youth in the population increases the risk of armed conflict. Employment opportunities in the formal sector are very limited, and the large majority of young males live in rural areas, making them a potential recruiting pool for jihadist groups. Indeed, Katiba Macina is recruiting combatants in central Mali, mainly among Quranic school students and Fulani herders but also to a smaller extent from Arab, Bambara and Dogon communities.

However, a study on jihadist recruitment in the Mopti region shows that in its recruitment of fighters, Katiba Macina capitalizes on local grievances such as unresolved land-use conflicts, corrupt practices by state agents, and a feeling of being neglected by the Malian state. These strategies are particularly targeted towards Fulani communities who feel marginalized by decades of agricultural policies favouring farmers. Moreover, they perceive that they receive less protection than other ethnic groups against violent attacks by the Malian army and international troops. There are no exact numbers available on the extent of recruitment by jihadist groups in Mali. Young men represent a recruitment pool not only for jihadist groups but also for local militant groups formed by Bambara and Dogon communities to defend against jihadist attacks.

*Political instability through crisis of representation:* Youth bulges can also have an indirect effect on violent conflict. In urban settings, young people are a mobilization base for political protests that can destabilize governments. Socio-economic grievances enhance the mobilization of young people. The International Labour Organization (ILO) estimates that approximately 25 per cent of Malians between 15 and 24 years of age are unemployed. Moreover, the ILO assesses that only 4.7 per cent of Malians older than 15 can be considered as skilled labour. Thus, Mali's youth is neither trained for employment nor do they have access to formal employment, which significantly constrains their opportunities to build an independent future.

The coup d'état of August 2020 was preceded by months of protests against the alleged fraud in the parliamentary election, corruption and the perceived government failure by then-incumbent

Ibrahim Boubacar Keïta (“IBK”). A survey conducted by the Friedrich Ebert Foundation in November 2019 revealed high levels of discontent with his government. Accordingly, 61.9 per cent of Malians were dissatisfied with the then-president’s rule. In the same survey, respondents identified the security problem and youth unemployment as the country’s most pressing problems. This also points to a possible crisis of political representation. In recent decades, Mali’s ruling elite has been characterized by continuity and relatively old age in comparison to the population. Mali’s ousted president Ibrahim Boubacar Keïta is 75 years old, and the main opposition leader – Soumaïla Cissé – is 70 years old. By contrast, the median age in Mali is 16, and 47 per cent of the population is younger than 14, while only 2.5 per cent of the Malian population is older than 65. The failure to give Mali’s young generation a voice and to tackle their problems might generate political instability.

#### 4.2.3 Policy Responses and Recommendations

In Mali’s development plan for the period 2019–2023, the government set a goal to better manage population growth in order to alleviate poverty and promote sustainable development. However, the plan does not specify to what extent Mali wants to reduce its population growth rate or the fertility rate of Malian women. In Mali’s action plan for family planning, the Malian government envisages the increase in usage of modern contraceptive methods from 16.4 per cent of people in 2018 to 30 per cent of people in 2023. Since 2015, Mali has been a member of the Ouagadougou Partnership for Family Planning and the Sahel Women’s Empowerment and Demographic Dividend project, funded by international donors. Yet, the implementation of the national and international policies has been slow, partly due to security problems in the centre and north of the country and partly due to insufficient budgetary allocations to the education and health sectors. Societal values make a strong deceleration of Mali’s population growth in the near and intermediate future unlikely. According to a DHS survey in 2018, Malian women wish on average to have six children. This wish corresponds to the fertility rate of 5.9 children per woman. Malian men, on average, would prefer to have 8.1 children.

Past efforts to strengthen the position of women in Malian society – a measure that in most other countries of the world has led to lower fertility rates – failed. In 2009, a new family law was passed by the Malian National Assembly after years of consultation. The innovations of this law were, among others, a minimum age of 18 years for women to be married and the dismissal of a wife’s obligation to obey her husband. After protests by conservative Muslim actors, the president at the time, Amadou Toumani Touré, sent the law back to the National Assembly, and the progressive articles were removed. Along a similar vein, a new textbook on sexual education that also included information on contraception had to be withdrawn in 2018. Muslim protesters labelled the textbook anti-Islamic because, they claimed, it would incite homosexuality. The strength and success of these protests indicates that a less conservative approach to the empowerment of women and to reproductive questions will be very difficult to achieve.

Regarding broader development issues, the international community should continue to support Mali in implementing existing policies on socio-economic development despite the challenging security situation in the country. Socio-economic development efforts should especially focus on the education and employment opportunities of the younger generation as well as on reproductive health, including family planning. This education should also comprise elements that prepare young people for being democratic citizens. Malian politicians should be encouraged to integrate the perspective of young people into their policymaking, for instance through consultations with youth and the active promotion of young politicians within political parties.




To prevent population growth from intensifying existing conflicts, a multi-dimensional approach to these conflicts must be adapted. Such an approach requires elements that address conflicts on the local level and make conflict transformation between different communities possible. For this purpose, the land governance system in Mali needs to be improved to be able to resolve land conflicts on the local level in a timely and legitimate manner. Moreover, as already practiced in development cooperation, all projects require a conflict assessment to ensure that they do not trigger new conflicts. The prevention of further conflict escalation necessitates that human rights violations by the Malian army need to be prosecuted and that the Malian army as well as the Malian state as such invest in the building of trust with local communities.

### 4.3 Case Study Niger

Population growth is a massive challenge for socio-economic development in Niger – the poorest country in the world according to the UN's 2019 Human Development Report. In 2019, Niger had the highest population growth rate in Africa at 3.8 per cent. In the last three decades, the population grew on average by 3.7 per cent per year, the second-highest rate in Africa. The country's population almost quintupled from 8,026,591 people in 1990 to 23,310,720 in 2019. Half of Niger's population is younger than 15 years and will only begin its reproductive years in the future.

**Table 4.3: Population Growth in Niger at a Glance**

		Niger	Global/regional average
	Population size (2019)	23,310,720	-
	Population growth (1990–2019)	3.7%	Africa: 2.4% World: 1.3%
	Population growth (2010–2019)	3.9%	Africa: 2.3% World: 1.2%
	Fertility rate (2018)	6.9 children	Africa: 4.2 World: 2.4
	Life expectancy (2018)	62 years	Africa: 63.8 (2018) World: 72.6
	Migration stock as percentage of total population (2015)	1.5%	Africa 3.2% World: 3.3%

Sources: *UN Population Prospects; World Bank.*

The main cause of Niger's strong population growth is the fertility rate, which is the highest in the world. On average, Nigerien women gave birth to 6.9 children in 2018. The fertility rate has remained fairly stable over recent decades. In 1990, a Nigerien woman had on average 7.8 children. In addition to the high fertility rates, the life expectancy of Nigeriens sharply increased from 43.5 in 1990 to 62 in 2018. Like in Mali, Niger's population is unevenly distributed across the country. Agadez, the largest region in terms of surface area, is also the least populated one. The highest number of people live in the central Nigerien regions of Zinder, Maradi and Tahoua. For the period 2001–2012 the regions of Zinder, Diffa and Tahoua had the highest population growth rates. In the same period, growth was lowest in Dosso and in the capital, Niamey. Roughly 80 per cent of Niger's population lives in rural areas. There is no data available on differential growth across different ethnic groups in Niger.

#### 4.3.1 Security and Conflicts in Niger

Niger has a history of violent conflict between Tuareg communities and the state but – unlike in Mali – these conflicts have been more successfully mitigated by integrating leading Tuareg figures

into the government and administration and by channelling development programmes to areas populated by Tuareg, at least since the last insurgency in 2008. In many rural areas, farmers and pastoralist herders have coexisted for centuries. The differing needs of those undertaking farming-based vs. livestock-based livelihoods mean there is an inherent potential for land disputes and intercommunal conflicts, but there are also traditions and experiences vis-à-vis managing such conflicts peacefully.

*Jihadist violence:* The main drivers of violent conflicts in Niger are currently external ones, spilling over from neighbouring Mali and Nigeria. The Malian and Nigerian governments (and, in Mali, also international forces) have been fighting Islamist groups for years. Through these spillovers, two hotspots of violent conflicts between the Nigerien state and jihadist groups have evolved in recent years: the Southern Diffa region on the borderland with Nigeria and the Western Tillabéri region, neighbouring Burkina Faso and Mali.

In southern Niger, the Islamic State West Africa Province (ISWAP) and Jamaatu Ahlis Sunna Liddaawati wal-Jihad – better known as Boko Haram – carry out attacks on villages, conduct abductions and commit suicide bombings against civilian and military targets. Since 2012, Niger has assisted the Nigerian military in fighting Boko Haram. After joining the Islamic State in 2015, Boko Haram/ISWAP upped its attacks on Nigerien soil. The bloodiest year in Diffa in terms of fatalities was 2015, but the conflict has lingered. In the first half year of 2020, ACLED counted roughly 200 ISWAP-related fatalities in Diffa.

In the Tillabéri region, Islamist violence has spilled over from neighbouring Mali in recent years. The central Islamist player in this region is the Islamic State in the Greater Sahara (ISGS), a joint force of Al-Qaeda affiliates Al-Murabitun and MUJAO. ISGS was accepted into the ranks of the Islamic State in 2016. ISGS officially merged with ISWAP in 2019, but the two groups seem to still operate separately. ISGS operations in Niger have scaled up since 2019. Activities include attacks on military camps of the Nigerien army and assassinations of local leaders who cooperate with the Nigerien government. ACLED reports 566 fatalities in Tillabéri in the first half of 2020.

#### 4.3.2 Population Growth and Security in Niger

Population growth is without doubt a huge challenge for the Nigerien government, which has to provide education, health services, infrastructure, and employment opportunities for an ever-growing population. Yet, there are no signs that population growth as such forms a direct driver of violent conflict in Niger. Still, dissatisfaction with the government's performance in tackling socio-economic grievances can create tensions that may engender violent conflict, while population growth makes the alleviation of poverty even more difficult. Levels of dissatisfaction with the government's efforts are indeed high. The latest round of the Afrobarometer survey in Niger in 2018 revealed that three quarters of Nigeriens deem the government's endeavours to alleviate poverty as poor. A similar share considered efforts to create jobs as insufficient, and 68 per cent did not think that the government does enough to cater for the needs of the youth.

The main driver of violent conflict in Niger is currently the conflict spillover from neighbouring states, which instigates local conflicts and creates conditions that impede the state from making headway in socio-economic development, which in turn can exacerbate existing conflicts or even lead to new ones. Nevertheless, population growth can affect security more specifically through two mechanisms that resemble those present in Mali: a) conflicts can be caused by resource scarcity, and 2) youth bulges can be exploited as pools for potential recruitment by militant groups.

*Resource scarcity as a cause of conflict cause:* As discussed above, empirical studies show only weak support for population growth in combination with resource scarcity being a conflict driver; depending on the local context, however, population growth combined with resource scarcity *can* incite violent conflict. A closer look at Niger shows that there are problems related to scarcity of land and water, but that these are not constants. Moreover, not only resource scarcity but also a resource boom can drive conflict.

Arable land is a scarce resource in Niger. In 2005, it was estimated that only 10 per cent of Niger's land area is suitable for rain-fed agriculture, and it was determined that this land is fully farmed, which means that there is not much potential for the expansion of land for agricultural use. In addition, land is used in Niger traditionally by farmers as well as by pastoralist herders. While there are old customs that regulate the co-use of land, conflicts between farmers and herders also have a long history and they occasionally turn violent. Agricultural policies that seek to scale up the production of food often involve the expansion of land exclusively used for farming and therefore always bear the risk of instigating conflicts between farmers and pastoralists. In recent years, pastoralists in Niger came under increasing pressure because, according to the International Crisis Group, between 2008 and 2014 approximately 28,500 km<sup>2</sup> of pastoralist land were expropriated for farming or extractive industry activities, or fell prey to illegal land deals. While Niger's 2010 pastoral code protects the rights of pastoralists, it is insufficiently implemented – in particular, it fails to protect pastoralists in the regions affected by violent conflict.

Aside from population growth, another factor that can increase pressure on land and lead to conflict is climate change. It is unclear how this issue will evolve in the future. Niger suffered from severe droughts in the 1970s and 1980s, which damaged harvests and killed livestock in great numbers. The International Panel on Climate Change predictions on how climate change will affect rainfall in the Sahel are uncertain and contradictory. In the last decade, rainfall has increased in Niger. In the Agadez region, rainfall almost doubled. This has led to more floods, which also damages crops and livestock. Moreover, floods increase the risk of locust swarms that can destroy harvests. Though the increase of rainfall also creates more arable land, observations from these regions show that conflicts arise due not only to resource scarcity but also to resource expansion. In some places, farmers took control of newly arable land that had previously been used by herders, which stirred conflicts on land use.

*Youth bulge as recruitment pool:* As in Mali, young men are considered to be at risk for recruitment by violent groups. In Niger, 18 per cent of the population are between 15 and 24 years old. In 2017, there were roughly two million young men between the ages of 15 and 24 in Niger, similar to the number in Mali. The majority of these young men live in rural areas where subsistence agriculture is the main source of livelihood, but surveys show that young people do not want to pursue this way of life. Young people in Niger's rural areas are poorly educated and have little knowledge about the Nigerien state: a survey by the *Centre National d'Études Stratégiques et de Sécurité* (CNESS) in 2020 revealed that 80 per cent of the rural youth had never heard of the Nigerien Constitution and that 95 per cent of them did not know anything about its content. The same survey shows that in Diffa and Tillabéri – the two regions in which most violence occurs – respectively 63 per cent and 75 per cent of the respondents had never attended school. In both regions, more than 90 per cent of the young men have studied the Qur'an, but 71 per cent and 65 per cent, respectively, know only a few suras. Such studies assume that limited knowledge of the Qur'an makes it easier for Islamists to convince people of a radical interpretation of Islam. Yet,

there are also studies that show that holding radical views does not necessarily lead to a person committing violent acts in the name of the given cause.

The jihadist groups ISGS/ISWAP and ISWAP are said to recruit combatants in Niger, but little is known about the scope of these recruitment activities. ISGS's leader Al-Sahrawi specialized in the recruitment of local people when he founded ISGS's predecessor, MUJAO, in Mali. He used to target mainly Fulani communities, but today ISGS also recruits from among other communities. ISGS is said to capitalize on people's socio-economic grievances, such as feelings of being neglected by the state, to portray itself as an alternative to the state. ISWAP has adopted a strategy of combining intimidation and financial incentives to recruit new fighters. The scope of recruitment for both groups is difficult to assess, because many of their members remain in their communities, provide intelligence services and serve as stand-by fighters. Apart from being recruited by the main jihadist groups, young men also organize themselves in community-based self-defence groups – for instance, in Northern Tillabéri.

#### 4.3.3 Policy Response and Recommendations

Niger has several policies in force that govern reproductive health and are designed to reduce population growth. In 2006, Niger adopted the Reproductive Health Law (*Loi sur la santé de reproduction*), which guarantees reproductive freedom, permits contraception, allows abortion (though only if the life and health of the mother or child are in danger) and regulates the structures of reproductive health services. Since 2012, Niger has been member of the Ouagadougou Partnership for Family Planning and the Sahel Women's Empowerment and Demographic Dividend project. Both initiatives are funded by international development organizations, including the World Bank and the UN Population Fund. Within the framework of these initiatives, Niger committed itself to increasing the prevalence of modern contraceptive methods by women of reproductive age from 12 per cent in 2012 to 50 per cent in 2020. To this end, the government quadrupled its family planning budget between 2012 and 2013. In Niger's Development Plan for the period 2017–2021, the government commits to decrease the fertility rate of Nigerien women from 7.3 children in 2015 to 5.6 children in 2021. However, these commitments may have been overly ambitious: in 2018, the fertility rate of Nigerien women was at 6.9 children, and just 15 per cent of women of reproductive age used modern contraceptive methods in 2020.

Policies to reduce fertility rates and population growth contradict Nigerien society's values and the religious beliefs of much of its population. According to the latest DHS survey in 2012, 79.4 per cent of Nigerien women wished to have more than six children. Asked for the ideal number of children, Nigerien women reported on average 10.9 children while Nigerien men wished on average to have 11.5 children. This corresponds to a low share of 15 per cent of Nigerien women who have a self-reported unmet need for modern contraceptive methods.

Attempts to promote women's rights through the reform of Niger's family law have met with strong resistance from conservative religious actors over the last several decades. During the democratic transition in the early 1990s, women's associations had advocated for the introduction of a family law, among whose many provisions was one that would set the minimum age for marriage for women at 16 years old. Increasing the age of marriage is considered as one important measure to reducing fertility rates, because it shortens the reproductive period. The most recent DHS survey (in 2012) showed that the average age of marriage for women was 15.7 years. By the age of 18, 76 per cent of Nigerien women are married. However, the government halted both the adoption process of the law and the public awareness campaign after protest by conservative Muslim organizations who portrayed the family law as anti-Islamic and publicly

cursed the women activists. After the coup d'état in 2010, the issue returned to the agenda and the transitional government organized a participatory process with different religious and civil society groups across the country. Yet, the adoption of the final draft in 2011 was again stopped by protests of conservative Muslim activists who labelled the law “satanic” and publicly burned the draft.

Taking these societal and religious realities into account, a rapid deceleration of Niger's population growth will be very difficult to achieve in the near and medium future. While support for Niger's attempts to improve reproductive health, girls' education and women's rights should continue, a focus on conflict mitigation is necessary. The international community should continue to monitor the implementation of existing policies for socio-economic development. Measures that invest in education and employment opportunities for young people should be emphasized. To prevent conflicts, local conflict-resolution mechanisms that strengthen the dialogue between different communities should be supported. Experiences from Agadez show that local dialogue and trust-building can deter the influx of jihadists, their propaganda and recruitment activities. Attempts by the Nigerien state to promote local peacebuilding in Tillabéri have experienced serious setbacks, including the assassination of local leaders. Nevertheless, the Nigerien state should try to continue this strategy while better protecting local partners. Niger has a framework to govern land titles and to settle land disputes, but it should be better implemented. Development projects require a conflict assessment to ensure that they do not trigger new conflicts.

## **5. Conclusion and Policy Recommendations**

Though the three countries exhibit important differences, they share a number of relevant features. First, all of them have experienced high population growth in recent decades and witnessed their populations skyrocket. Although the overall levels of development and rates of population growth differ substantially – Egypt being less poor and showing a lower relative increase in population size than the two Sahelian countries – all have struggled with economic problems that have made it difficult to accommodate the needs of their ever-growing populations. Second, all three countries have gone through fierce and often highly violent conflicts in recent years, these conflicts often being related to jihadism. The military is an important political force in all countries, each country having had at least one military coup in the last 10 years. At the time of writing, Egypt and Mali are practically military dictatorships. While it is not unlikely that Mali will return to some form of “defective democracy” in the foreseeable future following the coup in August 2020, only Niger's government can claim to be democratically elected. Third, in all three cases security risks have an international dimension. Egypt has a manifest conflict with Ethiopia over the Nile dam under construction in the latter – there is potential for escalation if this issue is not addressed adequately. Egypt has also been increasingly involved in the Libyan civil war. In Mali and Niger, jihadist violence is significantly fuelled, if not mainly caused, by spillover from neighbouring countries, especially Algeria and Nigeria. In Mali, French-led international forces and a UN peacekeeping mission (MINUSMA), the latter including a German contingent, have struggled to stabilize the situation.

However, the relationship between population growth and security challenges is neither direct nor does it play out as the main cause of conflict in any of the three cases. There are three more or less indirect visible links between population growth and security in all three cases. First, the ever-growing population is a tough challenge for all three countries, especially given the desire to create sustainable progress in terms of socio-economic development. Relatedly, the governments struggle to accommodate the economic and social needs of the younger generations, creating



grievances and making especially young men vulnerable to recruitment by extremist groups or otherwise increasing the potential for rebellion against the state. Another challenge in relation to demography is the management of natural resources, especially renewable ones such as water and fertile land. In Mali and Niger, in particular, herders and farmers have increasingly clashed over access to such resources, and these ethnic conflicts have taken an increasingly religious overtone, as herders such as the Fulani have been accused of supporting the jihadists.

**Table 5.1: Population Growth and Conflict in Comparative Perspective**

	<b>Egypt</b>	<b>Mali</b>	<b>Niger</b>
Population growth and related demography	Increase in life expectancy; above-average fertility; large segment of population of child-bearing age (age structure)	High fertility rates; early marriages; large segment of population of child-bearing age (age structure); increase in life expectancy	High fertility rates; early marriages; large segment of population of child-bearing age (age structure); increase in life expectancy
Conflicts and future risks	Government vs. Islamist & secular opposition; government vs. jihadists; Libyan civil war; government vs. Ethiopia	Government vs. jihadists; inter-communal violence; population vs. government (→ military coup 2020)	Government vs. jihadists; inter-communal violence
Main mechanisms linking population growth and conflicts	Increasing (youth) unemployment and poverty → risk of radicalization & unrest; lacking political representation; rapid urbanization; resource scarcity	Increasing resource scarcity; large youth cohort as pool for jihadist recruitment; political instability through youth mobilization	Increasing resource scarcity; large youth cohort as pool for jihadist recruitment

*Source: Authors' compilation.*

Generally, however, low and slow socio-economic development, exclusion of and tensions between ethnic and religious identity groups, lack of control over the state's territory, weak state institutions, bad governance, and misguided efforts at conflict resolution form the major causes of conflict. In sum, population growth seems to aggravate other problems, becoming a partial manifest cause of conflict in interaction with economic problems and poor governance in various forms.

Another commonality is that previous and current government efforts to manage population growth have largely failed – the recent decreasing growth rates, in particular in Egypt, notwithstanding. In Mali and Niger, efforts to reduce growth rates have met with stiff resistance by conservative societal forces. Especially conservative Islamic actors have resisted any policy designed to promote smaller family sizes or to improve gender equality and female participation in the labour market – the latter two being well established means to reduce the number of children women bear and to contribute to further economic development. The case of Egypt shows that cooperation between the government and religious leaders for family planning under the Mubarak administration at least partially worked.

Future policies should address the problem with a wide range of measures, and they can “interrupt” the mechanisms whereby population growth leads to violence at various stages (see Box 2). Starting from the end of the mechanism(s), conflict resolution or transformation can preclude escalation or reduce violence. Such efforts will also have to address the so-called root causes in the field of socio-economics and politics. Generally, development and better governance

are likely to fix many of the related problems. Recommendations targeted at reducing population growth should draw on existing success stories globally and in Africa (see e.g. Klingholz et al. 2019), and especially multilateral initiatives in Africa such as the Ouagadougou Partnership on Family Planning as well the AU Roadmap on Harnessing the Demographic Dividend. Corresponding efforts include campaigns for a lower number of children, although whether they can be sustainably successful is questionable, given past failures. A smarter approach centres on gender equality, which may address two or even more challenges at the same time: More women's rights and education will lead to more female participation in the labour market, and economically and otherwise empowered women will have fewer children on average. Gender equality is also regularly associated with higher development. However, one has to address the challenge posed by conservative, mostly religious actors. The case of Egypt shows that it is advisable to cooperate with preachers to create incremental change.

There are several imperatives for the security community: First, the community needs to create increased awareness of security risks associated with population growth – not only in international institutions but also among conflict parties. As only a combination of security and development will be able to sustainably fix related problems, the dialogue between related communities needs to be deepened. Both communities have a tendency to operate independently. Taking demography seriously should also result in more sophisticated early-warning instruments that systematically include all parts of the causal chain, starting from the drivers of population growth to manifest violent conflict. This may also include mediation efforts between groups, for instance where strong population growth of particular groups creates threat perceptions with opposing groups. Missions by the United Nations and the EU can include special officers to increase awareness about the several risks connected to population pressures, especially regarding the more complex interactions between differential population growth and socio-economic challenges. Such awareness-building requires long-term foresight, not merely ad-hoc warnings when intergroup tensions have already become manifest. Finally, any international effort should be sensitive regarding perceptions that it is a “Western” policy imposed on the given countries. African challenges require African responses.

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