

Outmigration, Development, and Global Environmental Change:

A Review and Discussion of Case Studies from
the West African Sahel

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Abstract

This working paper gives an overview over literature on emigration from the West Sahel, with a selective focus on resource-dependent livelihoods and how they are connected to outmigration from the Sahel, especially regarding Senegal and Niger. To complete the picture, we also cover some studies on urban population groups and regions beyond the Sahel, although mostly restricted to Africa. The last section of this working paper offers some conclusions regarding the most important findings, hypotheses, and research desiderata emerging from this review as far as they are concerning rural, resource-dependent populations in the West African Sahel, and discusses them against the backdrop of general (global) migration theories. Our review finds that the agency of migrants and their aspirations shaped by culture, structural labour demand, and economic development are most important to understand current emigration trends. In contrast, environmental change appears to mainly trigger internal migration.

Preface

The mandate of the Swedish International Centre for Local Democracy (ICLD) is to contribute to poverty reduction by promoting local democracy in low and middle-income countries. In order to fulfil this mandate, we offer decentralized cooperation through our municipal partnership programme, capacity building programmes through our international training programmes and exchange of knowledge through our Knowledge Centre. ICLD documents and publishes key lessons learned from our ongoing activities, initiates and funds relevant research and engages in scholarly networks and organizes conferences and workshops. We also maintain a publications series. This working paper, “Outmigration, Development, and Global Environmental Change: A Review and Discussion of Case Studies from the West African Sahel”, by Stephan Hochleithner and Andreas Exner, is part of a series of four review papers that provide background for the research project “Political Representation under a Changing Sky”, financed by ICLD. This project aims to understand the multiple causes for climate-related migration from the Sahel towards Europe and the role of local political representation by local government in facilitating or moderating this migration.

This working paper presents an overview of literature on emigration from the West Sahel, with a selective focus on resource-dependent livelihoods. Contrary to a common understanding about the links between poverty and emigration, the authors found the general tendency that poverty reduction increases emigration. Thus, the authors make a call to focus on the agency of migrants and their aspirations shaped by culture, structural labour demand, and economic development to understand current emigration trends. Finally, environmental causes appear to mainly influence and shape short-distance migration.

I hope this study provides the reader with an increased understanding of the role of local government to listen to the needs and the aspirations of their people. Local governments have a crucial role to represent those aspirations and allow for better participation and representation of their communities. In this way, we hope to contribute to increase knowledge to achieve the sustainable development goals.

Visby, Sweden, October 2018



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Introduction

This working paper is part of a series of three that resulted from extensive research on (theoretical) framings and empirical studies of migration and local government with a focus on the West African Sahel (see for the other two parts Hochleithner and Exner 2018a and 2018b). The overview presented in the working paper series provides background for the “Political Representation under a Changing Sky”¹ research project of the International Centre for Local Democracy (ICLD). This project aims to understand the multiple causes for climate-related migration from the Sahel towards Europe and the role of local political representation by local government in facilitating or moderating this migration. The project examines the roles of local governments – particularly their function of representation – in generating, mediating and reducing the current trend in which rural people are migrating out of areas in Sub-Saharan Africa in regions where climate change is viewed as a driver of outmigration.

The project seeks to identify means to make policy and practical responses to climate change supportive of local democracy – to make these responses emancipatory – and therefore a transformative force for equity, justice, and security for those deciding their future in place or abroad. The field research for this project is conducted in the Tambacounda Region of Senegal and in the Dantiandou and Say Districts of Niger, where outmigration is prevalent and where the consequences of this migration are often dire: many migrants die in route to Europe or simply disappear, leaving their communities and families with less labour, a great loss from having invested in the migration of their children, and with the grief of loss. Their decision to migrate is multi-dimensional, as this review implies and as the preliminary field research is already indicating.

This working paper gives an overview over literature on emigration from the West Sahel, which is part of the large and diverse bodies of literature on migration in the West Sahel. The emphasis is put on publications featuring resource-dependent livelihoods and how they are connected to outmigration from the Sahel, especially regarding Senegal and Niger.

To complete the picture, we also cover some studies on urban population groups and regions beyond the Sahel, although mostly restricted to Africa. We explore the case studies with attention to the emphasis they put on different dimensions of migration, which range from history and the mobility transition, to economic pressure and opportunities to geopolitical conditions, and to the role of aspirations and imaginaries, and finally to environmental factors, inter alia in relation with conflict. The last section of this working paper offers some conclusions regarding the most important findings, hypotheses, and research desiderata emerging from this review as far as they are concerning rural, resource-dependent populations in the West African Sahel, and discusses them against the backdrop of general migration theories as outlined in Hochleithner and Exner 2018b.

Our review finds that the agency of migrants and their aspirations shaped by culture, structural labour demand, and economic development are most important to understand current emigration trends. In contrast, environmental change appears to mainly trigger internal migration. Emigration to Europe is insignificant for poorest countries, but can be important for richer ones. As a general tendency, poverty reduction increases emigration. Aspirations are of crucial importance to understand migration, and are subject to change. Structural labour demand in Europe and adjacent regions is decisive.

1. The research for this project is being conducted by Dr. Papa Faye, Executive Secretary of CADRE (Centre d'Action pour le Développement et la Recherche en Afrique – CADRE) in Dakar, Senegal; Professor Jesse Ribot, University of Illinois, Urbana-Champaign; and Professor Matthew Turner, University of Wisconsin, Madison. See for details: <https://icld.se/en/article/climate-or-economic-migration-local-democracy-and-vulnerability-reduction-in-africa-political-representation-under-a-changing-sky>

General cross-country patterns

Scholars have repeatedly emphasized the high degree of mobility within the West African region in general, which has pre-colonial roots and was enhanced first by colonialism, then by regional economic integration efforts, namely the ECOWAS (see e.g. for various historical aspects Arthur 1991; see also Findley et al. 1995; Overå 2001; Konseiga 2005; Jónsson 2008; Akyeampong 2010; Boesen et al. 2014; OECD/SWAC 2014; Lucas 2015; Flahaux and de Haas 2016; Snorek 2016; see Traore 1994 for an assessment of more recent migration patterns in Senegal and their connections to ethnically specific histories). Choplin and Lombard (2014) describe contemporary mobilities in the area, and how they are impeded by control policies promoted in the frame of EU interventions. The adaptive function of African migration in view of climate variability (e.g. Findley 1994; Henry et al. 2004) or climate change has increasingly been highlighted in recent years (e.g. McLeman and Hunter 2010; Black et al. 2011; Kniveton et al. 2012; Scheffran et al. 2012; for a critical discussion under a general critical perspective on migration in general: Bettini 2014; 2017; Ransan-Cooper et al. 2015; Bettini et al. 2016; for a general critical perspective: Ribot 2014; Turner 2016). The overwhelming share of West African migration takes place within West Africa itself (Charrière and Frésia 2008; Lessault and Beauchemin 2009; Flahaux and de Haas 2016; de Melo 2017; UNICEF 2017), and only a minor to miniscule share of migration from West African countries is thus actually directed towards Europe (Kohnert 2007; Charrière and Frésia 2008; Flahaux and de Haas 2016).

Within West Africa, only Gambia and Ivory Coast are clearly immigration countries, and only Cap Verde and Mali are definitely emigration countries. For other West African countries, this distinction is blurred, for they variously function as origin, transit, and destination countries for different migration trajectories (Charrière and Frésia 2008; Neumann and Hermanns 2017). Against the overall African trend, emigration from West Africa within the continent has remained high (Flahaux and de Haas 2016). In general, emigration rates in Africa are very low in international comparison (e.g., Shimeles 2010; Flahaux and de Haas 2016). Nearly nine out of ten African migrants settle in Africa (WFP 2017).

The by far largest share of African migrants entering Europe originates from North Africa, with Morocco taking on a leading position. Most African migrants reach Europe legally, de Haas (2008) reports. In a recent article, de Haas (2017) states that at least nine out of ten immigrants (from all non-European countries) enter Europe legally. Although this general estimation does not specify the probable share of undocumented immigrants from West Africa, it might be considered rather low, given the overall number of West Africans in total EU immigration numbers from Africa, and of Africans in total immigration numbers to the EU. De Melo (2017) shows that migrants from the Sahel increasingly enter Europe instead of moving within Africa, but only moderately so: while in 2000, 3.8% of all Sahelian migrants headed towards Europe, the share increased to 5.7% in 2015. This same trend is visible for Maghrebian migrants, too, but on a lower scale.

Looking at the Sahelian countries Burkina Faso, Mali, Mauretania, Niger, and Chad, the turning point in migration to Europe was 2004, when emigration from Mali surged, while migration numbers from the other countries of this group remained more or less stable. Between 2004 and 2015, immigration from these Sahelian countries to Europe remained constant on average. Regarding destination countries, the shift from Spain towards Italy and France was the most noticeable between 2000 and 2014 (de Melo 2017). Lessault and Beauchemin (2009) emphasize the minor share of migration from Sub-Saharan Africa to France. Although this part of immigration strongly increased since the 1960s, this happened on a low level. According to data issued by Frontex², between January 2009 and June 2017, detected illegal border crossings by migrants from Niger on all routes to the EU are non-existent to insignificant, while those attempted by Senegalese are slightly higher, but still low in comparison with certain other African countries such as Nigeria or Eritrea, and even lower when compared to Syria or Afghanistan. Inter-year variation of detected illegal border crossings often is considerable (cf. EC 2017³).

2. <http://frontex.europa.eu/trends-and-routes/migratory-routes-map/> [16.8.2017]

3. see also <http://www.europarl.europa.eu/thinktank/infographics/migration/public/> [16.8.2017]

In 2005 it was estimated that 7 to 8 million undocumented immigrants from Africa were living in the EU, mostly in its southern parts. In 2005, about two thirds of Africans in the EU were from Northern Africa. West Africans represented the largest share from Sub-Saharan Africa, mostly from Ghana, Nigeria and Senegal (Kohnert 2007). Dominant political narratives of emigration from or through the Sahel are flawed insofar as they frequently disregard proportions. Flows of people through emblematic sites such as Agadez in Niger are often indiscriminately depicted as attempted immigration to the EU, most glaringly in media reports (not only by tabloids). Criticizing what they assess as misconceptions of migration by EU policies, Molenaar and El Kamouni-Janssen (2017) state:

“In reality, an estimated 20 percent of migrants travelling on this route [between West and North Africa, author’s note] ultimately take the boat to Europe, with the remainder of trans-Saharan migration constituting a circular and temporary intra-African livelihood protection strategy. Insufficient attention is paid to the need to distinguish between these different migratory logics and their contribution to local livelihoods and stability” (El Kamouni-Janssen 2017: 2).

That only a minor share of all migrants to the North are heading towards Europe is supported by comparing estimated passages through Agadez with arrivals in Italy. Nigeriens are practically absent in Italian arrivals but head for Algeria and Libya. The share of migrants in Agadez attempting to enter Europe is even lower, i.e., 10%, as estimated by RMMS in 2016 (RMMS 2016). However, “the hardened migration climate in the region combined with practices of migrant exploitation in Libya also forces migrants to travel on to Europe – even if they never intended to go there in the first place” (Molenaar and El Kamouni-Janssen 2017: 18; see also WFP 2017; cf. on the shifting character of migration aspirations e.g. De Clerck 2015; and the function and effects of the overarching exploitative labour regime in the wider region e.g. Cross 2013). Hall (2016) notes that Nigerien migration is more likely to follow traditional cyclical migration paths to North Africa and back again than those of non-Nigeriens.

Historically, migration in West Africa was organized on family and village basis and served to diversify risks. Reviewing the literature on West African migration, Charrière and Frésia (2008) highlight that these patterns are subject to change, mainly because of increasing refugee flows and growing impediments to migration. According to their review, new trends developed since the 1990s. The authors notice an increasing volatility and circularity of intra-regional movements; the diversification of destinations outside the region, repatriation movements and new refugee flows; and individualization, feminization, and jeopardizing of migration projects.

Concerning the hypothesis of increasing feminization of migration, a study by Toma and Vause (2013) however emphasizes the relative lack of knowledge on this assumed trend, and demonstrates that autonomous migration of females from Dakar did not increase – contrary to female emigration from DR Congo – and is more selective, in terms of educational degree and social network access characteristics, than male migration in Senegal. Ungruhe (2010) briefly reviews further empirical studies that support the feminization hypothesis and links it to growing autonomy of girls and women in African contexts, where migration is increasingly serving to “enjoy youth”, but also trends to replace marriage and child-bearing as a female rite of passage, together with educational attainment and economic success. Hall (2016) mentioned feminization of Nigerien migration (often to North Africa) recently, coupled with the aspiration of “getting rich” and defying known threats to life.

According to Charrière and Frésia (2008), mixed migration predominates in West Africa in general: first, people taking the same routes migrate for a variety of reasons, however face the same problems when crossing borders or settling in a sub-region; second, mobility factors often combine political, economic, cultural and social causes. While UK and France were closing immigration, unsatisfied foreign labour demand in Southern Europe attracted African immigrants. With tightening immigration laws in Europe, journeys became longer and transit hubs moved southwards.

This also led to an increasing heterogeneity of local population groups that are constituted by an ever more diverse range of migrants. Partly, migration of young people is argued as being driven by the desire to emancipate from family control and social pressure to share income, Charrière and Frésia (2008) state (see case study evidence on this dynamics in e.g. Jónsson 2008; Willems 2014). Often, migrants in Europe are symbols of success, which is displayed back home by particular consumer goods allowing to perform conspicuous consumption. It is thus often social and not only economic reasons that drive migration, the authors emphasize. An increased prestige of adventure and getting by as new models of success is identified (see also Bredeloup 2013), combined with a trend of youth migration taking on a dimension of rite of passage (see also Jónsson 2008; Charrière and Frésia 2008; Mondain and Diagne 2013; Loprete 2016). Competition between brothers for wives is especially strong in polygamous households, which strengthens migration motivations. Charrière and Frésia state that “[r]efugees, asylum-seekers or economic migrants are not in general the poorest or most vulnerable of the people who set out on the routes to Europe. The majority have small trades, others are well qualified and still others have exhausted all legal avenues of immigration” (Charrière and Frésia 2008: 20; see also Hall 2016 and studies referring to the theorem of the mobility transition; Hochleithner and Exner 2018b).

De Haas (2008) as well as Flahaux and de Haas (2016) argue that international migration from African countries positively correlates with national wealth (see also de Haas 2007). Thus, low income countries have the lowest emigration rates⁴, which span a range between the comparatively rich Cap Verde (25.5%) to Niger (0.09%), characterized by endemic poverty. Only the wealthier and smaller countries Cap Verde, Seychelles, Sao Tome, Mauritius and Comoros have rates higher than 5%. The emigration rate of Senegal amounts to 2.44%, according to data from 2004. Niger, Lesotho and Burkina Faso have the lowest rates in Africa (Belloc 2015).

Belloc (2015) moreover demonstrates that the level of official development aid (ODA) correlates with international migration from African countries. The concrete mechanisms that explain this cross-country pattern

have not been fully clarified (see van den Hogen 2015 for an anthropological case study of relevant social processes in the Philippines). According to Belloc (2015), the positive effect of ODA on migration works through increases in income and the building of social networks. Long-term co-development programs of France with Senegal including efforts to increase the return of migrants, for instance, did not reverse emigration, but went along with an increase. Statistical analyses show that in the African context, destination countries of migration are disproportionately those that are most important in providing ODA to a given origin country. According to Belloc (2015), war has no statistic correlation with emigration rates, as has the last colonizer country, while Internet and TV-consumption have a positive and significant relation with migration. De Haas (2008), Flahaux and de Haas (2016) and Belloc (2015) thus support the migration transition hypothesis for the particular case of Africa (as does Shimeles 2010), according to which migration rates increase with growing wealth of a country until a certain threshold (see Hochleithner and Exner 2018b, including a critical discussion of Naudé 2008 on Sub-Saharan Africa; and the results of Dustmann and Okatenko 2014 for Africa; and Runfola and Napier 2016 for Malawi). Moreover, de Haas (2008) emphasizes that with increasing development, mobility is growing in general. He suggests that development creates the economic and cultural resources necessary for emigration, and also instils the aspirations to look for a better life elsewhere (see also Carling 2014).

4. According to OECD data from 2004 which divide the expatriate population (aged 15+) from a given country by the native-born population (aged 15+) of the same country.

However, de Haas (2008) equally stresses the demand for cheap labour in European countries (see also e.g. Hooghe et al. 2008; Zoubir 2012; Cross 2013; Gaibazzi 2013; Seeberg 2013; Baizan and González-Ferrer 2014), the necessary complement to migration aspirations and capabilities in the origin countries. According to de Haas (2008), neither the origin nor the destination countries have a material interest in curbing (irregular) immigration from Africa, since their economies have become in part reliant on cheap migrant labour – which is not only relevant for EU countries, especially in Southern Europe, but increasingly for the Maghreb – and remittances. The interest of the EU to not effectively curtail migration from Africa is also emphasized by Cross (2013) with relation to cheap labour demand (see also e.g. Kohnert 2007), while Molenaar and El Kamouni-Janssen (2017) highlight the many economic and political interests by various actors in origin regions connected with international migration in Sub-Saharan countries partly directed towards the EU, which make its reduction by EU policies rather unlikely in their view (see Hall 2016 for a similar account focusing on the local situation in Agadez, with wider political implications).

Resuming this strand of research, Flahaux and de Haas (2016) counter the image of Africa as being a “continent on the move” driven by poverty, underdevelopment and violence. They rather point towards a long term decrease of intra-African migration, alongside an acceleration and spatial diversification of intra-continental migration (on diversification see also Pelican 2013), essentially reflecting societal transformation and processes of development, which are changing aspirations and capabilities. Flahaux and de Haas (2016) contrast their position with the assumption that “environmental refugees” will “flood” Europe, that income gaps will create a “South-North exodus”, or that “development failures” cause migration. Likewise, they oppose the perceived “long term solutions” of trade, aid, and remittances. About 86% of contemporary African migration is not related to conflict, according to Flahaux and de Haas (2016). They challenge conventional push-pull-models by arguing that development increases rather than decreases migration. Importantly, they question the concept of push factors, which in their view delegates

Africans to objects being passively “pushed around”. Rather, they claim that aspirations and capabilities are crucial for migration. Flahaux and de Haas thus refute the idea of push-pull-models that a migration equilibrium might be reached. They highlight the contribution of the state in origin regions for explaining migration, emphasizing a robust positive correlation between political freedom and emigration with reference to de Haas (2010; cf. on this issue also Czaika and de Haas 2012).

In contrast to these studies, many other authors argue – with varying emphases – that poverty, civil unrest, conflict, unemployment, weak infrastructures and agricultural resources, as well as climate change are the prime drivers of emigration from African countries (e.g. Findley et al. 1995; Adepoju 1995, 2000; Kohnert 2007; Leighton 2007; Naudé 2008; Min-Harris 2009; Zoubir 2012; Werz and Conley 2012; Cross et al. 2006; Attir and Larémont 2016; Reitano 2015; Werz and Hoffman 2016; Loprete 2016; de Melo 2017; WFP 2017; Wetlands International 2017; UNICEF 2017). This reasoning is not only characteristic for part of the scholarly literature, but is prevalent in policy and mass media reports in particular. In this context, population growth is also frequently indicated as a cause of migration movements (see UNICEF 2017 for one example among many).

A study published by WFP (2017; see above for the results of its statistical analysis), for example, explains migration from Africa to Italy by poor economic conditions and recurring crises in origin countries. In focus group interviews conducted in Lampedusa and Rome, “[m]ost West African migrants emphasized a lack of livelihood opportunities, rather than any specific shock or crisis” (WFP 2017: 52). Conflict in north-eastern Nigeria and political instability in The Gambia are exacerbating poverty, according to the report. The prime reason for West Africans to leave as expressed in interviews were lack of job opportunities. Most migrants were employed in the informal sector before leaving. The younger West African migrants that took part in the interviews were often forced to stop attending school for lack of school fees.

Food insecurity was a recurring issue before migration in many countries. Some simply dreamt of Europe as a place for a better life. However, “[t]he West Africans did not express an overwhelming desire to get to Europe” (WFP 2017: 58). Eritreans, on the other hand, often wanted to escape military service, besides lack of employment. According to an IOM survey in Libya in 2016, 80% of migrants left their home countries because of economic hardship. The WFP study finds that most West and East African migrants first moved one or two times within their origin countries, mostly from rural areas to cities before crossing the border. The majority simply hoped to find stable work, where ever that would be. Often, the intention was to enter Libya, but because of security issues, people felt forced to move on to Europe. As these elements indicate, the report understands migration routes as the outcome of a set of incremental steps “driven by the search for stable livelihoods – including economic opportunities, education, and food security” (WFP 2017: 58). This interpretation corresponds to the critical interrogation of the concept of transit migration put forward by Schapendonk (2012) and de Clerck (2015; see also Wissink et al. 2013; Molenaar and El Kamouni-Janssen 2017; and Cross 2013 for a wider political economy context).

Although Kohnert (2007) acknowledges determinants related to the theorem of the mobility transition, he also emphasizes absolute poverty and civil unrest as important factors that shape migration. He thus assumes that West Africa has a higher potential for immigration to Europe than any other region in the world due to economic crisis and political turmoil. Kohnert claims that the major part of current migration is due to pull factors, apart from push factors such as poverty, violent conflicts, human rights violations, population pressure and degradation of natural resources. Notably young people, but not from the poorest households, see Europe as their El Dorado, fleeing unemployment and lack of perspectives, Kohnert argues. Although he sees the dire economic situation as one of the root causes of migration, he does not expect development aid to reduce migration. At least the kind of economic growth promoted by EU and WTO will not reduce migration. The foreign trade policy of the EU is criticized as “selfish”, especially its fisheries and agricultural policies.

Elimination of cotton subsidies from the EU would, for example, considerably boost incomes in several West African countries, he claims. Kohnert discusses the ambiguous EU migration policy, which on the one hand includes initiatives to create detention centres in Sub-Saharan and Northern African countries, but also supports job recruitment centres that are organized by the EU to satisfy its demand for cheap labour (see also de Haas 2008; Cross 2013).

Although Hatton (2010), and Hatton and Williamson (2009) support the migration transition as a general pattern, Hatton and Williamson (2003) focus on population pressure on resources, rapid growth of young cohorts, slow economic growth, and wage differences as explanations of emigration from Africa to Europe. However, their study is not so much concerned with analysing actual emigration, but rather establishes predictions of future emigration based on assumptions gained from their work on historical emigration from Europe to the Americas. Furthermore, they investigate emigration potentials over the next two decades (from 2003 onwards), but not beyond. Thus, Hatton and Williamson (2009) emphasize that a decrease in emigration pressure from “Third World countries” is to be expected in the mid-run. For Africa, they argue, the decrease in emigration would be postponed by high economic growth rates, but not forestalled. Clemens (2014a; b) has noted that Hatton and Williamson (2009) do not test the level of the purported negative relationship between income growth and emigration for their sample of African countries.

Economic opportunities and pressures

In general, statistical cross-country comparisons cannot elucidate the concrete conditions of migration by themselves. This requires case studies gathering original qualitative data. Correspondingly, case studies focused on empirical and context-specific particularities might employ a range of global theories of migration, as has been illustrated by Romankiewicz et al. (2016) working in Senegal. The weight given to large-scale statistical analyses in relation to context-specific (but not necessarily small-scale) anthropological or sociological studies thus appears to depend on the choice of research objects and categories as related to political discourses or policy demands. However, anthropological or sociological studies might be combined with a grand theory, as in the case of Cross (2013), who understands migration from West Africa towards the North (but not necessarily to Europe) as an effect of underdevelopment within capitalism and concomitant processes of dispossession. Her material was generated by ethnographic life history interviews as well as multi-local observations on migration routes in Senegal, Mauritania, Spain, Burkina Faso, and Mali, although in her paper published in 2013, Cross focuses on two coastal villages in Senegal. A particular background is the loss of 162 youths attempting to reach the Canary Islands from one of these two villages, which triggered resistance to clandestine emigration by local women.

Acknowledging the importance of processes and local meanings of capitalist globalization to understand migration, Cross (2013) nevertheless posits the continuing demand of Northern capital for unfree labour as an indispensable condition for cross-border migration from West Africa towards the North (cf. de Haas 2008). Although rejecting a single existing theory of migration as well as deterministic thinking, Cross emphasizes the concepts of economic dispossession and unfree labour as the most comprehensive framework of analysis of the “apparent chaos of migration” (Cross 2013: 203). Due to the shifting nature of migration aspirations and destinations, the attempt to assess the number of migrants heading towards Europe is put in a critical light (cf. Schapendonk 2012; Wissink et al. 2013; de Clerck 2015).

Cross (2013) argues that the conceptual distinction between rural and urban areas is irrelevant to understand

post-structural adjustment migration in Africa. The crisis of fisheries brought about by European fishing companies after contracts with the Senegalese state, together with sharp food price increases are seen as the prime reason for clandestine migration in her case study area. Contrary to other explanations of Senegalese migration as rite of passage, Cross notes that married fathers take part in more recent attempts to reach the Canary Islands. In one of the two case study villages, families often sold possessions to finance a sons’ clandestine migration to Europe, mostly after decisions led by mothers. In the other one, secret departures for clandestine migration were more prevalent. At the same time, legal emigration to Europe was important in the case study sites investigated by Cross.

Cross (2013) analyses patterns of migration routes and experiences as an activation of the inequality between Spain’s economic and social conditions in relation with origin countries. Movement is enabled by a “chain of work”, reaching from transit towns in West Africa to Spain’s agricultural and industrial centres, and constituting an encompassing unfree labour regime, according to her multi-local analysis. Cross compares this regime of the production of goods and services by migrants on the move to commodity chains and the “hopping” of capital. The high pressure put on Spain by international organizations and the EU, especially after 2008, to increase labour productivity while reducing wage costs, is suggested to explain the considerable demand for unfree labour in Spain. According to Cross (2013), the main centres of Spanish growth before 2008 coincide with the importance of tourism and construction, which depend to a certain extent on unfree migrant labour. The costs of maintaining this labour are shouldered by origin communities in Africa, allowing for a further wage reduction. Similar to de Haas (2008), Cross (2013) emphasizes that destination countries such as Spain follow hidden agendas officially combating “illegal migration”, while actually encouraging it (also see Hansen and Jonsson 2011).

Wouterse and van den Berg (2011) analyse the determinants of continental and inter-continental migration in Burkina Faso.

The authors find that rather asset-poor households embark on continental migration, whereas inter-continental migration to Europe takes place in wealthier households in response to opportunities for accumulation of wealth. The authors conceive of continental migration as determined by push factors, while they interpret inter-continental migration as the result of pull factors. Membership in religious networks were found to facilitate inter-continental migration. Konseiga (2006) has also investigated the determinants of migration from north-eastern Burkina Faso, which is prone to drought, to Ivory Coast. Migration is significantly and positively correlated with the availability of labour force in a household, educational degree, and population density in the originating village. A significant negative correlation appears with the average age within the household and rainfall. As long as migration does not take place during the cultivating season, it increases household income. Pastoralist groups are more reluctant to migrate abroad, according to the findings of Konseiga (2006; cf. Hampshire 2002 on Fulani migration in Burkina Faso).

Economic, social, and educational factors dominate the statistical analysis of Senegalese migration to Europe by Kveder (2012), who draws on data generated within the MAFE project. The sample probed in Senegal was from the region of Dakar (complementary data were generated in destination countries, i.e., France, Italy, Spain). An increase of women attempting migration was noted, although the scale remains limited (see also Mondain and Diagne 2013). Men were, however, not found more likely to complete attempts than women. The better educated were overrepresented both among attempters as well as among those who successfully migrated. They might not find adequate jobs in Senegal, but might accept less-skilled jobs in Europe, Kveder (2012) suggests (see Castagnone et al. 2014 for a detailed analysis of the educational-occupational mismatch in Europe). A relatively large share of those attempting migration to Europe is employed, but those actually migrating are to a higher degree without an income-generating job. This however might be due to the fact that attempters disengage from the labour market. Social capital, especially in destination countries, proves to be highly important for migrants. Individuals between

25 and 35 are most likely to attempt migration, and are also most likely to succeed. Furthermore, those who assess household finances to be sufficient or just sufficient are more likely to migrate than those who are better off. The latter are more likely to successfully migrate than poorer individuals. Kveder also notes, that those who attempt migration for economic reasons are less likely to succeed than those who attempt to migrate for other reasons, such as studies or family reunification, possibly because of firmer migration plans. A widening economic gap between origin and destination increases the likelihood of migration, but not of attempts. Immigration policies succeed to impede migration among those who attempt, but have no effect on the likelihood of attempts to migrate (Kveder 2012).

MAFE data were also used by the statistical analysis of Senegalese migration to Europe by Baizan and González-Ferrer (2014), who confirm the results of the somewhat different method applied by Kveder (2012), adding complementary information. Baizan and González-Ferrer (2014) highlight the paradox – with regard to the overall U-inverted curve of migration as related to socio-economic position – that agricultural workers show a much higher likelihood of migration than skilled manual workers. The authors explain this trend by profound agricultural crises. This phenomenon however puts the assertion that poverty largely restricts international migration into question, Baizan and González-Ferrer note. Interestingly, owning property increases the likelihood to migrate. The authors' results indicate that migration is primarily determined by labour opportunities in Europe in interplay with economic crises in Senegal – a finding which is in line with segmented labour-market theory – with a mediating role of social capital enhanced by educational status, which might point towards the role of aspirations as well as skills (Baizan and González-Ferrer 2014).

De Haan et al. (2002) analysed migration patterns in two villages in the southern part of Mali. In both sites, migrants were predominantly young men. Migration corresponded to household management and demographic cycles. In one of the villages, migration resembled a rite of passage, with heads of extended households deciding about migration strategies. An increasing independent migration of women was observed. Migration patterns were strongly determined by ethnicity. Migration by Fulani and Maure, for example, only involved animal-related activities and herding. In one of the villages, poorer households had fewer migrants, probably because of labour needs.

Geopolitical conditions

Geopolitical factors are clearly important to understand contemporary migration patterns and dynamics in the Sahel, although the concrete impact on migration and its causal pathways are largely unknown. Reitano (2015) emphasizes that since 2013, emigration rates from Africa have been rapidly growing, mainly due to migration from Syria and Eritrea. While the case of Syrian migrants can easily be explained by civil war and the rather high level of income in the country, the author claims, conditions in the home country cannot explain the rapid rise in migration from Eritrea (and Somalia). While Frontex, according to Reitano (2015), states that most Eritreans had lived in Libya and only turn to Europe after the fall of the regime and increasing opportunities to cross the sea, surveys indicate that the prime destination was Europe from the beginning (see however Bob-Milliar and Bob-Milliar 2013 arguing that at least for Ghanaians, Libya was the primary destination country).

Further factors add to the picture: Increasingly, large groups leave Eritrea, while it were formerly mostly individuals and small groups. The wall erected by Israel blocks migration routes and thus further strengthens the route via Libya, which has become inhospitable for Eritreans. Increasingly professional smuggling networks incite migration within vulnerable populations, the author suggests. Detaining migrants in Libya has

become a profitable business for militias. Conflicts between Tebu and Tuareg have become a significant threat and potentially destabilize the region. While Reitano (2015) points to a possible paradox concerning Eritrean migrants, his report does not present any field research or reliable data with regard to his explanation. The emergence and operation of both smuggling networks and armed groups in the Sahel region clearly merit closer investigation as being one of the conditions for contemporary migration, which, however, includes several other social, economic, political, and environmental motivations, that IMI (2012) has described as mixed migration at the Horn of Africa, ranging from forced to voluntary migration, according to IMI (2012).

One of the most important structural geopolitical changes in the Sahel region was the fall of the Libyan Quaddafi government in 2011, which had operated a security regime spanning Niger, Mali, Burkina Faso at its core, and Southern Algeria, Sudan, and Somalia at its periphery (Bob-Milliar and Bob-Milliar 2013; Attir and Larémont 2016; Snorek 2016). Quaddafi used members of the ethnic group of the Tuareg as a leverage against neighbouring countries, and included them in his auxiliary forces. He also trained military forces in Niger, Mali and Chad (Zoubir 2012). Although Clandestine migration had some relevance during Quaddafi's regime, it significantly increased after its fall. Libya was no transit country until the mid-1990s, when it became the most important one on the central Mediterranean route to Europe. This can be attributed to Quaddafi wanting to pressurize Europe, and to treaties to control migration, which the EU had concluded with other countries.

The central Mediterranean route first became relevant because of labour demands in Sicily (Zoubir 2012; see also de Haas 2008). After migration increased, the Italian government repressed migration on the route, which led to an increasing role of informal and criminal networks. The fall of Quaddafi also boosted criminal networks operated by Tuareg and Tubu in Southern Libya. Tuareg trafficking networks are often connected with West Africa, using the route through the Sahara, which the Tuareg networks control.

They engaged in armed movements to support their political and economic claims, which resulted inter alia in the overthrowing of the governments in Mali and Burkina Faso (Zoubir 2012; McKune and Silva 2013; Attir and Larémont 2016). Large regions in the Sahel are now controlled by Tuareg networks, destabilizing the region further. Israel and Saudi-Arabia blocking their borders also contributed to migrants again increasingly traveling to Libya and Tunisia. The composition of migrants is thereby changing, comprising an increasing number of migrants from Palestine and other new groups such as from Bangladesh. Emigration costs are high, which leads many into debt peonage and sex trade (see Hall 2016 for recent assessments of the human rights situation in Libya and its effects on migration in Niger). Human trafficking networks have also connected with Islamist groups (Attir and Larémont 2016).

Connected to the fall of the Quaddafi regime, Hüsken and Klute (2015) have drawn attention to the possibility of an emerging political order in the region, focusing on Northern Mali and Libya. They propose the concepts of heterarchy, connectivity, and locality to grapple with ongoing political dynamics without restoring to the tropes of “failed states”, “criminality”, “disorder” and “disintegration”. Thereby Hüsken and Klute embed the aspect of violence, often framed as terrorism, within the broader picture of a renegotiation of a postcolonial political order, which in itself produces a great deal of “order” (see with a similar account Bøås 2015).

Zoubir (2012) sees the rise in armed struggles, i.e. “terrorism”, as being conditioned by the expulsion of the Salafi Group for Preaching and Combat by the Algerian security forces, renamed in 2007 into al-Qaeda in the Land of the Islamic Maghreb (AQIM). The influence of Saudi Arabia in financing Islamic preachers and infrastructures is also seen as a crucial precondition. They distort the balance that traditional Islamic brotherhoods had provided in the Sahel, Zoubir argues. After 9/11, financing had become more difficult, which Zoubir (2012) sees as explaining the subsequent rise in arms trafficking, clandestine migration, kidnapping of Westerners, and drug smuggling. The latter activity

has been boosted by the success of the US to cut the Caribbean smuggling route to Europe.

As a further possible geopolitical factor affecting migration policies and dynamics, Zoubir (2012) is drawing attention to the wealth of Sahelian countries in mineral and hydrocarbon resources (see also OECD/SWAC 2014). Resource incomes are distributed among the clans in power, which fosters conflict due to frustrations of marginalized groups. In connection with this wealth, Zoubir (2012) claims that the struggle against terrorism is a pretence for external powers to intervene in the region in the name of security. Although terrorism poses significant threats in the region, Zoubir assesses its relevance to be exaggerated for strategic reasons. Wing (2016) provides further arguments for the strategic use of the terrorism frame, for example when French armed forces intervened in Mali and were subsequently criticized for neo-colonialism. Harmon (2015) discusses France’s military engagement in the region as a way of securing access to resource extraction, which, in fact, has a long history, as analysed by Martin with respect to Uranium (Martin 1989). Currently, the French AREVA buys about 50% of Niger’s Uranium, which is expected to become the second largest producer in the future.

Zoubir (2012) argues, that while the US sees the Sahara-Sahel region mainly in terms of security (cf. e.g. Werz and Conley 2012), the EU has established a discursive link between “underdevelopment”, “state fragility”, and insecurity, which in combination provide a safe haven to armed movements. Although the EU links security and development issues, Zoubir (2012) suggests its prime motivation for intervention to be access to minerals, and to safeguard the Sahara for the Desertec project and a gas pipeline connecting Nigeria to Europe via the Sahel. Likewise, Larsen and Mamosso (2014) emphasize the role of Uranium in understanding both the political economy of Niger as well as development discourses on food insecurity and desertification, which, in their view, might serve to divert attention.

The role of imaginaries and aspirations

A number of studies has highlighted or mentioned the role of imaginaries in understanding West African migration (see also Smith 2006, on middle-class Nigerians in the UK, and Salazar 2011, analysing migration discourses in Tanzania mentioned above). In this context, Akyeampong (2010) emphasizes the role of new communication technologies and the increase of TV use with regard to the distribution of attractive images of “the West” in West Africa, drawing on the example of Ghana. Akyeampong integrates contemporary mobility in a discussion of various ways of being mobile or immobile, taking West African history into account. He equally analyses the mobilities of non-Africans, emigrating to the region, as well as of West Africans going abroad, illustrated by Lebanese living in Ghana and Ghanaians pursuing international or transnational careers. Imaginaries of migration do not operate in isolation from everyday practices and locally rooted ethos, however, as the studies on Senegalese migration by Willems (2014) illustrates (see below).

The investigation of the relation between the agrarian ethos of the Soninke in the Upper Gambia River valley and their migratory behaviour supports an acknowledgement of localized practices that are not necessarily captured or even misconceived by state policies attempting to target so-called causes of migration (Gaibazzi 2013). Although the Soninke are described as practicing a paradigmatic “culture of migration” (see also Jónsson 2008; cf. Traore 1994), socialization of their members is guided by the extent of agriculture they practice. This view is strongly supported by material generated from research among local Soninke by Gaibazzi (2013), emphasizing the importance of agricultural activity not despite but because of the importance of migration: The imaginary provided by farming and the agrarian lifestyle, combined with the virtues that are at its centre, and the technologies that are applied to produce agrarian subjects, simultaneously prepare the individual for migration. Rather than being lured into migration by the image of an attractive utopia, going abroad (mostly to Europe), is understood as a synonym of going into the bush (the same metaphor, as a term, has been reported by Alpes 2014 in Cameroon). The hardships of migration are constructed as representing

the hardships of agrarian life; farming is meant to educate the subjects to endure (Gaibazzi 2013).

Furthermore, Gaibazzi (2013) argues that the rural ethos in the Upper Gambia River valley is not a mere tradition, but is also the product of the influence of migration, and is in particular shaped by the structure of demand for African labour in Europe, especially in Spain. While Gaibazzi mentions declining returns from agriculture in a context of droughts, structural adjustment, and population growth as one dimension of the local culture of migration, its importance and reproduction could hardly be understood, he argues, without considering the agrarian ethos upheld and modified in the rural area. In practical terms, this interpretation casts doubts on recurring attempts to reduce emigration in Senegal and Gambia by strengthening agriculture, at least for as long as proper conditions for agricultural success are missing. The study also illustrates the relation between immobility and mobility (Gaibazzi 2013), embodying a specific regime of mobility (Glick Schiller and Salazar 2013).

Based on a large-scale survey in Senegal, Carling et al. (2013) argue that the majority of young adults in the country wish to emigrate within the next five years. This result is similar to survey findings reported for Senegal in Schoorl et al. (2000: 127; cf. van Dalen et al. 2004). The vast majority in each of the four sampling areas of Carling et al. (2013) indicated Europe as their preferred destination, and even individuals who do not have concrete emigration plans state to be ready to leave if the opportunity appeared, according to the survey. However, several European countries are indicated as desired destinations, and also North America is named significantly often. The results of the survey indicate, that men have only slightly stronger migration aspirations than women, although actual migration is dominated by male individuals. Differences between sampling regions are much more prevalent concerning migration preparations than regarding aspirations. On average, the perception of Europe is not more positive than of Senegal among respondents, and a more positive perception of Europe does not explain migration aspirations statistically.

The results reported by Carling et al. (2013) concerning the importance of the topic of migration are in accordance with more qualitative approaches that emphasize the discursive prevalence of the issue of migration in Senegal (e.g. Willems 2014).

Carling et al. (2013) do not add very much to the understanding of migration aspirations, except that an imaginary of Europe as being exceptionally attractive is insignificant for migration decisions, according to the findings of this study (contradicting the report of Salazar 2011 on Tanzanian migration discourses; but in accordance with information reported by WFP 2017). However, the particular meaning of questionnaire answers, such as those reported in Carling et al. (2013), and their conditions remain unclear unless they are combined with context-specific, historically informed, and multidimensional ethnographic research – just as the significance, meaning and conditions of actual emigration (see also Carling 2014). The anthropological studies of Willems (2014) and Gaibazzi (2013) on Senegalese contexts illustrate the intricacies and heterogeneity of local meanings, practices, and functions of emigration. Heterogeneity in migration discourses and aspirations as well as practices are also emphasized in the study by Pelican (2013) on two regions in Cameroon, who aims at deconstructing broad generalizations concerning mobility and stasis on the level of Africa, its regions or countries.

In a study of a small Wolof town in north-western Senegal, Mondain and Diagne (2013; cf. Mondain et al. 2013) report that emigration, from this town as elsewhere in the region, can no longer be explained as a response to absolute need. While emigration to Europe started in the 1980s in the context of economic and agricultural crises, they argue, emigration now serves to gain prestige, associated with consumer goods for families at home. Migration is shaped by obligations of solidarity that are framed by patriarchal family relations, and the organizational functions of Muslim brotherhoods. However, solidarity obligations reproduced by religious brotherhoods are argued as still sometimes, yet increasingly masking motives of individual wealth seeking. Although Mondain and Diagne (2013) highlight

the importance of competition for prestige to understand a pervasive attractiveness of migration, they see a continuing social and economic crisis as being also responsible for considerable pressure on young men to leave. Furthermore, the study reports, marrying a migrant is seen favourably by many women in Senegal. According to Mondain and Diagne (2013), migration has taken on a self-sustaining character, being decoupled from the more crisis-induced motives of the initial generations that migrated to Europe. The strive for migration has often replaced efforts to gain educational degrees or learn a trade. They note growing aspirations among women to also engage in migration, independently from men. Mondain and Diagne (2013) maintain that migration should be analysed through life history approaches rather than through the dichotomy of migrant and non-migrant.

In a case study of Senegal, Willems (2014) outlines that migration is aspired in order to harmonize solidarity practices and the social prestige, which is connected to migration, with the wish to escape certain aspects of solidarity ties that are perceived as suffocating. In a related but somewhat different manner, Jónsson (2008), in his local study of migration from a Soninke village in Mali, interprets the widespread (but seldom actualized) aspiration to migrate as the result of a long-standing fundamental structure in Soninke society, where migration plays an important role in easing norms of the local gift economy in favour of making profit, which traditionally was the goal of a liminal phase of migrant labour. In this context, migration also serves to harmonize contradictory social demands and wishes. In still another interpretation of the phenomenon in Niger, which serves as a hub for many West African migrants, migration has replaced traditional rites of passage into adulthood, resulting in a culture in which it has become necessary to migrate in order to be a fully recognized person (Loprete 2016).

Likewise, Jónsson (2008), Charrière and Frésia (2008), and Mondain and Diagne (2013) also emphasize the importance of migration for becoming a “man”, although Cross (2013) highlights that recent emigration patterns from her coastal case study area in Senegal do not consistently fit a pattern of rites of passage. In a related, however different approach to the rite of passage-hypothesis, Bredeloup (2013) analyses African migration experiences and motivations in terms of the social figure of the adventurer (see also Charrière and Frésia 2008, Marfaing 2010). Structural adjustment, she argues, “has deeply shattered the usual representations of adventure”, but “African adventure started far before European colonization” (Bredeloup 2013: 180).

Bredeloup likens the migration adventure to a moral experience connected with intensity of life, shaping the self, and being motivated by personal ambition. She thus counters the image of African migration to be determined just by misery and danger. Furthermore, she states that women increasingly claim a status as adventurers by migration. Though not relating their findings to the notion of adventure, Ungruhe (2010) and Sauvain-Dugerdil (2013) describe to some extent similar aspirations in rural youth, while Hall (2016) reports aspirations to migrate as a project in itself.

The function of migration as a process of making or re-making the self – as it is addressed in the rites of passage-interpretation – might also take on the form of self-fulfilment in a wider sense, as Carling and Åkesson (2009) describe for Cabo Verde. They also argue that imaginaries of self, home, and foreign countries are connected in complementary ways. In Cabo Verde, poverty is thus understood as place-bound and symbolized by the barren landscape (in contrast to TV images of fulsome landscapes abroad) against the backdrop of a history characterized by drought and devastating famine. A transition from “poverty to plenty” is hence conceived as a physical transition to a foreign country, argue Carling and Åkesson. The role of the imaginary in this conception is supported, for instance, by the pervasive character of the notion that the infertile land is limiting opportunities of people – even if they are working in an increasingly urbanizing, service-ori-

ented economy, and despite the rapid growth of visible wealth in Cabo Verde in recent years. In contrast to the home country, the world abroad is seen as sort of a paradise, further supported by conspicuous consumption (Salazar 2011) of migrants that return and lavish gifts they make. At the same time, migrants are driven by a hard-work ethic, which is understood as a prerequisite for success for both men and women. Ideal migration is directed by a strong ethos of homecoming after accumulating wealth. As reported by other studies, failure to gain material benefit from migration leads to severe personal crises. Due to emigration restrictions, internal development and an emerging position as immigration and transit country, the Cabo Verdian migration ideology has entered a path of transformation (Carling and Åkesson 2009).

Contrary to findings that emphasize the importance of migration as a transition to adulthood (e.g. Jónsson 2008; Charrière and Frésia 2008; Mondain and Diagne 2013), a study by Ungruhe (2010) among young males in rural northern Ghana, who migrate to Ghanaian cities in the South, maintains that migration rather serves to enjoy youth and to gain social recognition among peers. This recognition is linked to gender relations, for young males without migration experience appear to be less sexually attractive. But migration that allows to return with money, “modern” goods, and stories to tell, does not secure unlimited social recognition, implying a tendency to renew the experience. Ungruhe (2010) argues that young males’ migration is quite the opposite of a rite of passage to adulthood, since these migrants pay for increased independence in urban settings with an increase of dependence at their (rural) homes. Rather, migration is required to transit into “modern rural youth”. Although the concrete symbols of a successful transit have changed, Ungruhe (2010) maintains that migration of young people as a means of enjoying their youth has been a pattern for generations. An important shift in this regard concerns the relevance of rapidly changing clothing styles, and mobile phones instead of durable consumer goods such as bicycles, which have been symbols of success in previous times.

Tanon and Sow (2013) investigate youth migration in Mauritania, involving adolescents and young men, which has become a dominant phenomenon only recently (since about 2003 and 2004). Relying on extensive, but non-randomly sampled data in three cities (in order to better understand the largely illegal migration trajectories), the authors report a certain participation of educated migrants, who were previously employed as civil servants and craftsmen. Although the large majority had no vocational qualifications and were illiterate, the notable proportion of the better off (with nearly one out of four having a regular job) runs counter to the popular image of young migrants. Nationalities encountered in the sample were diverse, with Mauritians making up approximately half. The latter mainly originated from the city of Kaedi, where fishing is the prevalent occupation. The main motive indicated by respondents was a gain in social prestige, while being able to finance a lavish wedding ranked second. The pressure related to prestige is significant, according to Tanon and Sow (2013), since young men are tied to honour codes and a sense of shame prevalent in local societies. The majority of migrants from the Kaedi region, the authors maintain, are selected by family decisions involving rituals and other religious practices. Usually the youngest son is sent away, corresponding to gerontocratic patriarchal family structures. Destinations are mainly chosen according to family ties, relatives, and friends present. Migration is generally financed by incurring debts.

Tanon and Sow (2013) report that almost all respondents refused to recognize the risks involved in migration to Europe, a circumstance they explain by cultural taboos and the need to boost self-confidence. Evasive responses are part of a much deeper engrained subjectivity, revolving around shame and honour, which define identity. Young men without emigration experience are considered inferior, except for the eldest son of a family. “A man’s value is measured in the face of adversity, which is illustrated by the violence of the sea. So, to be ‘swallowed by the sea’ is now interpreted in the same way, dying on the battlefield, as a warrior ‘beaten by the sword’ once was” (Tanon and Sow 2013: 198). Migrants thus are compared to modern warriors, whose deaths

washes away the shame from a family’s name. Correspondingly, migrants are imbued by an almost messianic feeling. In this context, return is only possible with “hands full” of gifts and money. In case of failure, shame prohibits return and constitutes a strong motivation to reiterate migration attempts. This cultural pattern is further strengthened by conspicuous consumption of those that return for vacation, which is usually financed by debt.

Tanon and Sow (2013) thus diagnose young males being “caught in a pervading, self-perpetuating, collective lie” (Tanon and Sow 2013: 198). Resembling the perspective put forward by cumulative causation approaches (see e.g. Mondain and Diagne 2013), migration changes aspirations as well as societal structures in origin regions in a self-reinforcing way. Migration to Europe thus erodes gerontocratic as well as patriarchal patterns. Although Tanon and Sow (2013) trend towards a negative assessment of these changes, their information points, inter alia, at a partial loosening of male domination over women, similar to the findings reported by Mondain and Diagne (2013; cf. Ungruhe 2010). This process remains ambiguous, however. On the one hand, women and families increasingly consider migrants as more attractive potential husbands than students or simple craftsmen (cf. Mondain and Diagne 2013), while, on the other hand, women who tend to reject men not suiting their expectations reportedly experience discrimination if they do not marry before the age of 20 – for unmarried women over 20 are a new category in Mauritanian society. Further effects of a surge in migration are that more and more children are born out of wedlock due to migrating husbands, which also leads to discrimination; that the considerable number of widows of migrants has resulted in a recent increase of polygamous marriages following *levirat* rules; and that caste distinctions are now sometimes overcome by migrants who acquired wealth and want to marry women above their traditional status position (Tanon and Sow 2013).

In yet another publication on youth migration in the West African Sahel, taking four Dogon villages as study sites, Sauvain-Dugerdil (2013) interprets recently increasing and historically new migration of young people, including girls, as expressing shifting inter-generational relations. Due to decreasing natural resource endowments (e.g. game) and agricultural yields, as well as outside influences, livelihoods have been diversified among the Dogon, including individual temporary mobility to gain money since the 1990s. This migration is different from long-term national or international mobility, which remains very rare and is usually concentrated within a few families. It also differs from temporary family migration due to drought.

Since very recently, youth are engaging frequently in short-distance mobility. While the motivation for girls appears to be primarily the discovery of the outside world, economic motives are more prevalent among boys. These forms of mobility are notably the result of the agency of youth, not of their parents or of families. Linked with the newly acquired migratory patterns, young people enter more powerful positions in relation to their parents, families become more individualized, and gender relations are shifting. Pre-chosen spouses are increasingly questioned, especially by girls, and young females' migration has become a way to reject planned marriages in some instances. These new practices are perceived as a threat to early child-bearing, for which slight indications exist. Though (very) young people's migration is an individual decision, and economic benefits are meagre, they nevertheless significantly contribute to the livelihood of families in the context of economic destitution. Furthermore, economic motives seem to gain weight in girls' migration, with some of them engaging in commercial sex. Sauvain-Dugerdil (2013) interprets migration in this context as offering a new opportunity "to cope with economic uncertainties and to negotiate the transition to modernity" (Sauvain-Dugerdil 2013: 172), with uncertain outcomes.

According to a case study by Alpes (2014), conducted in a university town in Anglophone Cameroon, imaginaries and their importance in underpinning or moti-

vating migration aspirations as well as actual migration clearly transcend economic incentives or even rational considerations. Thus, widespread information about the difficulties of emigration and frequent failures, such as deportation, do not decrease aspirations, but rather increase the attractiveness of emigration. Furthermore, Alpes (2014) interprets emigration as "a political project to establish claims to global belonging" (Alpes 2014: 261). Neither successful emigration by others, nor established migratory networks are thus seen as decisive for understanding migration dynamics in the case investigated by Alpes (2014). Although economic motivations against the backdrop of crisis unleashed by structural adjustment are seen as important, the meaning of emigration and migration practices goes beyond rational decision-making (cf. Bal and Willems 2014; Mescoli 2014; Schultz 2014).



Photo: Jesse Ribot

Similar to Alpes (2014), Hall's research on migration in Agadez (Hall 2016; a study commissioned by the International Organization for Migration, IOM) is strongly critical of a rational choice or more broadly economic understanding of the phenomenon. Although 81% of respondents indicated "economic reasons, i.e., to find employment" for their migration (and only 9% natural disasters), the responses must be contextualized to grasp their meaning.



Photo: Papa Faye

First, Hall (2016) points out a specific understanding of poverty (regardless of relative wealth in comparison with other migrants) as being place-bound (referring to Carling and Åkesson 2009); second, migration is often aspired in itself, connected with enthusiasm (although Hall 2016 reports that 77% of respondents would actually prefer living and working at their place of origin); third, numerous respondents are clearly aware of the threats and difficulties they will face during their journey as well as in Europe; fourth, it is usually not the poorest who engage in migration; fifth, taking into consideration the risk of not reaching the destination country or even losing one's life, and calculating the huge expenses to finance migration, which often involves selling assets that are hence permanently lost (and increase the risk of unsuccessful migration attempts), it is hard to conceive of migration as a purely rational economic choice, according to the study; this is supported by the circumstance, that a strong minority of respondents, who unsuccessfully returned from migration to Agadez, still

adhered to their aspirations (though fear of returning home might play a role, as the report concedes).

Considering the lack of success of awareness raising campaigns on the dangers of migration by the local IOM, and reflecting that African migration is increasing despite a sizeable increase in development projects, Hall (2016) argues that neither awareness raising nor development will reduce migration towards Europe. Not least because the IOM has to compete with the powerful effects of social media. Social media also makes the trip easier to organize to some extent, decreasing transportation prices – a trend that appears to continue as a result of economies of scale – and limited government capacities in the light of growing numbers of migrants contribute to yet another dimension of migration: The more people take on the journey, the harder they can be controlled, creating a positive feedback loop, which EU funding cannot break either, Hall (2016) argues.

The environment-migration nexus

Environmental factors I: Case studies

The Sahel displays a high degree of natural and socio-cultural diversity (Raynaut 2001; Richards 2015). This makes generalized statements about interrelations between causes of emigration and environmental dimensions difficult. Local particularities are further part of a wide web of social relations, spanning the region of West Africa and beyond, and involving migration (Raynaut 2001; Konseiga 2005). Additionally, several theoretical, conceptual, and empirical complications impede the formulation of a general approach towards a possible environment-migration nexus (an approach, which is able to transcend impressionistic accounts that are more suggestive than backed by evidence as in the case of Grote and Warner 2010).

Within this setting, two extensive reviews of studies on the causes of emigration from the West African Sahel have been published recently; one with a broader thematic perspective (Neumann and Hermanns 2017); and one that focuses on the possible role of environmental factors to explain migration (Jónsson 2010). While Jónsson (2010) primarily discusses the methodological weaknesses of the studies surveyed – which impedes their use as a foundation for cumulative research –, Neumann and Hermanns (2017) present some positive findings of their study sample, although they are equally critical of its methodological soundness and coherence.

Neumann and Hermanns (2017) report a lack of consensus about what is driving migration (in the Sahel), but point out the long historical record of – often circular – migration as a common strategy for securing livelihoods and increasing social resilience, which are influenced by a range of factors on various temporal and spatial scales, in a region that is characterized by considerable heterogeneity. Correspondingly, a certain country is in many cases at the same time destination, source and transit hub for migration. Overall, an empirically derived picture of causal factors of migration in the Sahel is missing. The single driver most frequently mentioned in the literature surveyed by Neumann and Hermanns (2017) is the search for employment. Marriage-related migration was the second most frequent single driver identified, and mainly attributed to women. Likewise, the attempt to escape family-related relationship

problems accounted for a substantial portion of drivers. The authors state that it is not possible to define one distinct and complete list of migration drivers because of frequent interactions between drivers, and because of regional particularities within the Sahel.

‘Natural’, i.e., environmental, factors were frequently mentioned, with drought being more important than land degradation and desertification. Temporally, no substantial changes were visible in the literature, except for environmentally related drivers, which first appear in the 1990s in the studies compared by Neumann and Hermanns (2017). In another review, analysing the literature on migration and the environment in wider Sub-Saharan Africa, Morrissey (2014) suggests that there is substantial evidence of the links between human migration and environmental change or stress. However, the author emphasizes that migration is more than an outcome of poverty or intolerable vulnerability, and that the literature mostly sees circular inter-African or internal migration as outcome, rather than inter-continental migration or conflict-induced displacement. De Haas (2008; 2011a) sees no empirical evidence for the claim that climate-affected environmental change explains the increase of migration from Sub-Saharan countries to Europe. This is supported by Findlay (2011), who additionally argues that “[r]ootedness and immobility are dominant features even where adverse environmental circumstances prevail” (Findlay 2011: 57), and formulates the political problem in terms of “forced immobility” of vulnerable populations instead of “mass migration”. Movements in relation to environmental change mainly occur short distance, Findlay states, with a strong influence of existing social networks. The most likely destinations thus are cities of the Global South.

Focusing on climate and migration in a number of Sub-Saharan African countries, Gray and Wise (2016; see also discussion above and in Hochleithner and Exner 2018b) conclude that temperature variability is more important for internal than international mobility, and that precipitation variability has inconsistent effects on migration. Furthermore, temperature might be correlated in the opposite direction as commonly expected.

Thus, internal migration increases with cooler temperatures in Kenya. Increasing temperatures reduce migration in Kenya and Burkina Faso. For Senegal, no climate effects on migration could be detected, suggesting that urban populations (dominating the Senegalese sample) are hardly affected by climate-related shocks. Against the backdrop of these findings, which demonstrate strong country-specific effects of climate on migration, Gray and Wise (2016) problematize generalizing narratives.

Heinrigs (2010), in a report issued by OECD's Sahel and West Africa Club Secretariat (SWAC), "highlights the absence of a generaliseable and direct impact of climate change on security" (Heinrigs 2010: 6). Applying a broad notion of security – in the sense of human security, including food crises, low-scale localized tensions as well as violent conflict and state security –, "no deterministic relation between environment and security dynamics" (Heinrigs 2010) was detected. "Environmental variables are of secondary importance at best compared to political, historical and economic variables", Heinrigs (2010: 6) concludes. Heinrigs conclusion is partly based on another report issued by SWAC on the influence of rainfall variability on security in the Sahel, also using a broad definition of human security, including food access and health crises (Hissler 2010). Hissler (2010) reports statistical evidence of the role of climate variability in triggering conflict, mainly through its effect on GDP growth mediated by agricultural production. Hissler however states that this evidence is statistically weak and emphasizes the high importance of socio-economic conditions in comparison to climate.

In a similar manner, a report by UNEP (2011) on the situation in the Sahel also suggests that no direct causal links between climate change, conflict, and migration exist. Apart from climate, many non-climate factors contribute to livelihood vulnerability, and governance plays a key role, according to UNEP (2011). Traditional migration patterns, it is argued, are increasingly being replaced by a more permanent southward shift. Climate change plus population growth, weak governance and land tenure challenges have led to increased competition over fertile land and water. This has resulted

in conflicts and tensions between livelihood groups, especially farmers and herders. Agropastoralism is a widespread practice of adaptation, the report states, which "has decreased the interdependency between farmers and herders, but increased the competition for suitable land" (UNEP 2011: 39).

A report issued by USAID with case studies on climate change and conflict in Niger and Burkina Faso (Snorek et al. 2014a) draws a similar picture. For Niger, "few indications of strong linkages between climate change and large-scale violent conflict in Niger" (Snorek et al. 2014a: viii) are reported. Against the backdrop of a "rebellious history and unresolved grievances of the Tuareg population" (Snorek et al. 2014a: viii), a low probability that climate change might lead to more serious violence in Northern Niger is indicated. Although the root causes of recent political turmoil in Burkina Faso are seen in political and economic factors, negative climate change is attributed with more considerable current and potential future effects on conflict in the country.

While deterministic neo-Malthusian views claim a causal chain from population growth and climate change to land degradation, conflict, and finally to outmigration (e.g. as in Werz and Conley 2012; Potts et al. 2013), each of these concepts and their empirical investigation in much of the neo-Malthusian literature might be questioned. Demographics show a wide range of variation and produce considerable heterogeneity in the Sahel region (Raynaut 2001). Moreover, considering the possible effects of population growth and climate change, research must also consider technological change and shifts in environmental management, Moritz et al. (2009) and Moritz (2012) argue, highlighting recent technological innovations in West African pastoralism as reaction to population growth and other changing conditions. These innovations, the authors suggest, have considerably raised animal productivity and often act as effective safeguards against environmentally induced crises of subsistence. Likewise, Gautier et al. (2014) analyse the social construction of markets by pastoralists in Mali to adapt to multiple changes.

Cour (2001), Mortimore and Adams (2001), Tiffen and Mortimore (2002), Mortimore and Turner (2005), Reij et al. (2005), Aune and Bationo (2008), Mortimore (2010), Sietz and Van Dijk (2015), and Gautier et al. (2016) analyse a range of strategies that allow farmer adaptation in the Sahel, while Giannini et al. (2017) investigate the partially successful adaptation of farmers in the Sahelian centre of Mali through livelihood diversification.

Tougiani et al. (2009) as well as Haglund et al. (2011) describe successful adaptation measures in form of farmer managed reforestation efforts at the landscape level in Niger, and Weston et al. (2015) analyse similarly successful measures in semi-arid Ghana (cf. Binam et al. 2015 for a more general discussion of farmer managed natural regeneration in the Sahel). Romankiewicz et al. (2016), in their case study of a village in Senegal, highlight adaptation to environmental challenges as a by-product of wider and long-standing societal changes on both national and local levels (see also e.g. Gautier et al. 2016). On the scale of the West African Sahel, Mertz et al. (2010) report that farmers' adaptation strategies (see also Mertz et al. 2009; 2012) are only partly shaped by perceptions of climate change, with varying degrees depending on the climatic zone. According to Epule et al. (2017), the two most commonly mentioned climate change adaptation measures in Anglophone, peer-reviewed literature on the Sahel between 1975 and 2015 are income diversification and water harnessing, with soil conservation ranking third and migration fourth. Adaptation measures are attributed nearly equally to climatic and non-climatic factors in the literature (Epule et al. 2017).

Many studies on a possible connection between climate and migration fail to distinguish between climate variability, climatic events, and climate change (Jónsson 2010). One might add that climate itself might not be the decisive dimension of environmental conditions or change, but rather of weather. The measurement of climate or weather decisively determines the validity of such data for conclusions regarding agricultural yields (West et al. 2008; Grolle 2015; Salack et al. 2016) or any societally mediated influence on migration that might be identified. The identification of effects of either climate

change or population growth – or both – on land degradation appears to be hampered by similar weaknesses in concepts, data collection or availability, and data analysis (for various aspects of related issues see Mazzucato and Niemeijer 2001; Niemeijer and Mazzucato 2002; Tiffen and Mortimore 2002; Mortimore and Turner 2005; Herrmann and Hutchinson 2005). Moreover, possible causal links between land degradation or climate change or their interplay, and migration, are only weakly understood. This is even more the case for emigration from the Sahel to Europe in general, and possible effects of environmental change or conditions in particular. In a case study on Northern Nigeria, Grolle (2015) finds no support for land degradation and environmentally induced migration. Furthermore, he did not observe migration to Europe – for lack of financial means. He reports that land degradation in neighbouring Niger is nuanced, and that sometimes improvements of the quality of land have been documented in this country (Grolle 2015).

Gautier et al. (2016) present a review of studies on the effects of drought on rural populations in West Africa. An increasing trend in rainfall has been documented for Burkina Faso, but not for Niger. The sparse meteorological network makes rainfall trend assessments difficult. Shorter term rainfall variation during the agricultural season is, however, most important for people on the ground. Intra-seasonal rainfall variability sometimes affects agriculture more negatively than annual low rainfall amounts (see also Grolle 2015; Salack et al. 2016).

The harm of climate factors, however, depends on other factors, Gautier et al. (2016) emphasize. They thus understand famine, for example, as a social construct, where power inequalities modify the impact of drought on people. Droughts influence ecosystems, but partly, the authors state, the connection with human pressure is unclear. Droughts appear to increase communal conflict, especially as driven by poor or marginalized groups for lack of possibility of political articulation. However, the link between climate and conflict is debated controversially. Droughts might trigger famines, but their root causes are political and socio-economic, Gautier et al. (2016) maintain.

Most agricultural strategies to cope with drought have been developed by farmers themselves, according to the authors, partly with help by NGOs and extension services. Most so called adaptation, they argue, is in fact driven by non-climatic factors, such as population growth (cf. Mertz et al. 2010; Romankiewicz et al. 2016). The most important adaptation strategy is mixed farming (agriculture plus herding). The distinction between herders and farmers thus becomes blurred, or sometimes even ceases to exist. Migration is identified as another common adaptation, but might reduce coping with drought (due to loss of labour). Droughts were stated by only 4% of migrants as direct cause for migration in a study on migration in West Africa, the authors explain. Poorer households might migrate only as a last resort (Gautier et al. 2016).

Social solidarity is hardly investigated in the literature despite its relevance. Studies document that sometimes farmers (especially women) organize in associations to combat soil degradation and also to provide food during famines. While forests are partly degraded as result of cash generating charcoal production, regreening is mostly dependent on state aid and NGOs, according to the literature analysed by Gautier et al. (2016), yet partly unsuccessful when organizations leave. Purchasing and storing practices in the face of drought are hardly investigated. Colonialism and structural adjustment have in general affected agriculture negatively, the authors summarize. The impact of droughts in Cameroon on yields when state subsidies were distributed, for instance, was lower than after structural adjustment.

The role of markets in adaptation is debated controversially in the literature, Gautier et al. (2016) resume. In the periphery of major cities, indigenous land grabbing can be important, as studies point out. Political reforms, the authors argue, have had rather detrimental effects. Thus, decentralization reforms often increased the marginalization of women and herders. No full transfer of authority to local institutions has occurred, state Gautier et al. (2016). They argue that multiple institutions have created confusion and enhanced free-riding, whereas customary rules remain a guarantee to

access land in this context. Likewise, Gautier et al. (2016) assess the impact of adaptation programs critically, since these can even reduce adaptive capacities, as they argue. In general, they see the literature to be biased towards droughts as risk, whereas other factors are insufficiently considered. Gautier et al. (2016) criticize that the role of power relations on different scales is neglected in the overall literature. Collective approaches to adaptation are under-studied, such as solidarity relations and tenure systems. Also, the internal complexity of households needs much closer investigation. The authors emphasize the importance of cultural factors, while most studies, they argue, tend to focus on correlations between responses and variables. This, it is claimed, has produced only few results.

Romankiewicz et al. (2016) critically investigate the common notions of intentional migration decisions either due to push factors or adaptation. Challenging simplified notions of causality, they highlight the role of history in contemporary migration. Until the early 1970s, Senegal was an attractive immigration destination due to groundnut production and political stability. Following droughts in the 1970s and 1980s, as well as economic deterioration, Senegal however became a net emigrating country since then. After West Africa, France turned out to be the main destination of out-migrants, followed by a shift after immigration restrictions towards Italy and Spain, which continues up to date despite the crisis that started 2008. Interior migration in Senegal shows a negative balance towards the coast. Coastal cities are however part of considerable internal circular migration, too. Migration has been well-established for a long period, and is thus an ordinary phenomenon that should first be investigated not as outcome of overcharged intentional decisions, Romankiewicz et al. (2016) argue.

To date, no separate theory on the environment-migration nexus exists, Romankiewicz et al. (2016) state (see also the discussion of respective literature above and in Hochleithner and Exner 2018b).

They see the debate as being polarized between a simplistic push-pull approach, similar to neoclassical rational choice theorizing on the one hand (maximalist view), and a (minimalist) view that understands the environment as a contextual factor and emphasizes multidimensionality and complexity, together with multicausality, on the other hand. Although studies on the environmental dimension of migration hardly ever fall into the maximalist view any longer, according to Romankiewicz et al. (2016), most are still concerned with environment-migration causality. Without considering the full context of migration, investigating environmental causes solely becomes useless.

Romankiewicz et al. (2016) problematize the search for root causes and put forward a view on what shapes, perpetuates, and reinforces migration, using several different existing migration theories in their case study. The authors do not distinguish between migration and mobility, since the view on migration as used by the state is not scientifically fruitful (i.e., people crossing borders, implying a change of residence for a particular period of time). In the village on which the study focused, every household had at least one member abroad. Despite droughts, the area of rainfed crop production had expanded, but groundnut had decreased due to meagre precipitation. Family ties, intermarriage, and a Sufi brotherhood constituted a high level of solidarity and cohesion. Endogamy was widely practiced and caused a certain isolation of the village. The commitment to Islam was strong, which supported the high value put on education, with positive effects on employment. The local Sufi brotherhood was also important in enabling entry into Europe. Besides the marabouts, handicraft has been encouraging or even necessitating migration for a long period of time. Emigration to Europe and North America had become important since the 1980s, and the Sahel drought of 1972/1973 motivated many to migrate permanently, first to Dakar and other urban centres. Emigrants made enormous investments over the years. Their attachment to the village was centred around the local narrative of prosperity and the marabout, and religious tradition. The diaspora was well-organized and was meeting regularly abroad. In a way, the village had become a passage or

residence point, depending on the life cycle, for migrants, some of which return permanently due to the conditions enabled by the investments based on remittances. Cultivated land decreased enormously due to the rise in importance of migrants' income. However, there was enough production to achieve food self-sufficiency. Fulani herders cared for animals owned by the villagers, the animals mostly being purchased with remittances. This changed vegetation to thornier species, and trampling could be observed. Irrigated vegetable gardens had been constructed.

All of these strategies of the villagers combined, Romankiewicz et al. (2016) maintain, cannot be explained as adaptation to drought. Migration is in their view thus not a response to particular stimuli, but a social process that contributes to the formation of delocalized social phenomena. This stands in contrast to the sedentary bias in research about climate and migration, they emphasize. Migration must not always be regarded as an adaptation strategy. The shift of focus away from rational decision-making and conscious intentions in the analysis of migration in this study corresponds to works that have highlighted migration as a new or long-standing cultural norm (Mondain and Diagne 2013; Mondain et al. 2013), constituting a specific ideology, in which migration is understood as "natural", necessary, and unquestionable (Carling and Åkesson 2009), as being rooted in social practices (Gaibazzi 2013), and as resulting in a "culture of migration" (Massey et al. 1993).

In another case study from Senegal, with material generated in particular from the Peanut Basin and the Senegal River Valley, Bleibaum (2010) sets environmentally induced migration – which he reports as having started during the drought of the 1970s towards urban areas in the country – in a context of wider economic and political problems. He sets special emphasis on the consequences of structural adjustment, which led the state to retreat from supporting agriculture, as well as the detrimental effects of European agricultural policies. The Peanut Basin is affected by declining rainfall, poor soil fertility and salinization.

Poverty, Bleibaum (2010) states, often leads to overuse of natural resources, creating a vicious circle. Compounded economic and environmental problems might finally lead to outmigration. In contrast to the Peanut Basin, the Senegal River Valley farmers suffer from high costs of irrigated agriculture and inputs, as well as of unfair distribution of land. Bleibaum (2010) also reports rural-rural migration of families in search of more arable land, sometimes also of city dwellers to fertile agricultural areas. Most young people, however, orient themselves towards migration to Europe.

Like Willems (2014), Bleibaum (2010) documents that migrants perceive international movement to alleviate them from the social pressure to provide for extended families. People with insufficient resources engage in step-wise migration from rural areas to towns, followed by larger cities, and then if possible abroad (see also Gonzales 1994). Increasingly, members of urban elites engage in migration, too. Muslim brotherhoods are reported to be important for migration. Farmers interviewed in the Peanut Basin transmitted the wish to stay on their land, but added that they were meeting increasing difficulties, leading people to migration towards Europe in one of the case study villages, and to seasonal migration in the second case. The Senegal River Valley has a longer history of emigration, with shifting patterns corresponding to colonial policies and droughts. About two thirds of all respondents left because of combined environmental and infrastructural problems, according to Bleibaum (2010).

Doevenspeck (2011) interrogates the common assumption of environmentally-driven migration in rural areas of Benin. His findings indicate that spatial differences in the availability of non-degraded or productive land cannot explain internal migration. Chain migration and a concomitant self-strengthening of migration are important conditions shaping these movements. Furthermore, migration changes social and ecological conditions, and brings about new migration as a consequence. Thus, he concludes, even if land degradation would be stopped, migration might continue. Conceptually, Doevenspeck (2011) calls for an integration of micro-level and macro-structural conditions.

Grolle (2015) starts from the criticism that EU projects on climate change and migration did not investigate famines and their possible role in migration, but focused on slow changes in rainfall and vegetation cover. Other accounts, Grolle states, do not consider the difficulties in defining and detecting desertification (Mortimore and Turner 2005; Bettini and Andersson 2014), or land degradation (Mazzucato and Niemeijer 2001; Niemeijer and Mazzucato 2002). Grolle (2015) highlights that the unfavourable timing of rainfall during farming seasons is most relevant, not drought itself (see also e.g. Salack et al. 2016). To investigate the climate-migration nexus, Grolle (2015) studied two localities in northwest Nigeria, focusing on family migration as the typical last desperate measure when confronted with famine. Famine, Grolle states, is not easy to define, arguing for a perspective on asset destruction, not merely deaths. Grolle claims that this “African definition” of famine emphasizes asset preservation as well as the hypothesis of strategic withdrawal of groups, such as the Tuareg, into savanna agricultural communities from the Sahel. The latter hypothesis contradicts the entitlement theory of Sen (1981) and continuum theories of step-wise loss of access to food. Grolle (2015) states that, despite massive population growth in Nigeria between 1991 to 2006, no clear evidence of land degradation has been recorded via satellite. Likewise, degradation of land in Niger with similar population growth is nuanced and sometimes improvements are documented. While labour migration and agricultural intensification were claimed to have prevented famines in Niger, there are indications that these mechanisms have become less effective, and that remittances from migrants in Nigeria and Libya are more important for livelihoods today, he reports. Additionally, Grolle argues that famine has become a chronic state in Niger. His cases, Grolle maintains, contradict entitlement and continuum theories and highlight the possibility of avoidance of famines. The closing of the savanna as a “safety valve” might lead to a higher relevance of these theories, however. No incidence of migration to Europe was found by Grolle (2015), since such moves are expensive, as he suggests.

Afifi (2011) studied the relation between internal and international migration and the environment in Niger. This publication has been criticized by Neumann and Hermanns (2017) for the short field stay it is based upon and for an overly strong reliance on expert interviews. Adding to this criticism, the survey method might put the results of this study in a doubtful light. However, Afifi (2011) delivers a critical discussion of a wide range of speculations about the number of alleged environmental migrants, and points out the lack of empirical research as well as too simplistic conceptions of types and causes of migration. Afifi highlights the difficulty to distinguish “purely environmental factors” from economic and social ones, except in situations of disaster (and even then, the distinction might be elusive, as Wrathall and Suckall [2016] argue). The typology of Renaud et al. (2011) is reviewed more positively, as it distinguishes between environmental emergency migrants, environmental forced migrants, and environmentally motivated migrants (Afifi 2011). Afifi states that land degradation is widespread due to human activities in Sub-Saharan Africa (but see the critical discussion of such assertions above), and that forest loss is highest in a worldwide comparison of regions.

The drought between 1972 and 1984 was the most severe in West Africa. In 2004 and 2005, another drought hit the Sahel, decreasing yields and access to water, which led to an intensification of water conflicts and conflicts over grazing lands in the region. Afifi (2011) states that land is continuously degraded in the context of ongoing population growth, an increase of localized droughts as well as large-scale droughts that have long-term consequences. Soil erosion is stated to be an endemic and large-scale problem in the country. Lake Chad, which was highly productive in terms of fisheries, decreased because of increasing droughts and, to a less important extent, due to irrigation in more recent times. Fisheries in the river Niger are affected by industrial pollution, water hyacinth expansion, and sand siltation. Deforestation reduces access to famine wild food and other vegetation resources, and is attributed by the author to abusive use of fire, as well as to sand intrusion affecting agriculture and infrastructure. Afifi concluded, that – in his view – it is obvious that climate change

largely contributes to environmental degradation in Niger (but see the largely critical discussion of such assertions in Hochleithner and Exner 2018a and 2018b), suggesting that these dynamics lead to a vicious circle of overexploitation of resources.

Rural-urban migration has accelerated in the view of Afifi (2011), citing an UN report, and is attributed to growing poverty and food insecurity. In the mid 1970s, thousands of Tuareg had emigrated due to droughts, Afifi maintains. According to one study, 80% of working males are migrating from Southern Sahara interior areas to coastal towns seasonally. Citing a World Bank report from 1996, remittances are indicated to be a major source for livelihoods of poor households. Land degradation is seen as having started already with the colonial era. Together with forced labour and monetization to pay taxes, leading to cash crop production, Afifi states that a Nigerien “famine cycle” started. Coastal states in West Africa were main regions for migration because of increasing pressures, but target regions shifted due to political problems. Libya became the main destination in the mid 1990s, especially after the international embargo. After the embargo had been lifted, Nigerien workers were no longer as welcome as before. Usually, young men are migrating, by trend one way.

Links between this migration trends and environmental factors are hard to be established, Afifi (2011) concedes. Increasing farmer-herder conflicts are reported due to enlargement of agricultural land to the North (caused by population growth, Afifi claims) and expansion of agriculture in former retreat areas for herders from the North, in a context of a lack of documented land rights. Overall, migration to Europe is marginal, Afifi states, and assumes this is due to emotional attachment to the land, in combination with family ties (but see the theorem of the mobility transition in Hochleithner and Exner 2018b, which might explain this pattern at least just as well). Environmental restoration, Afifi argues, is hampered by lack of male labour force. Although most interviewees in this study indicated problems related to employment and poverty as migration causes, Afifi (2011) traces these back to environmental roots in almost all cases.

80% of interviewees indicated to be willing to return if environmental conditions should improve. Afifi classifies the migration patterns he describes as “environmentally induced economic migration”, emphasizing that migrating to Europe is not a typical “Nigerien dream”. Besides attachment to land and other occupations, moving to Europe is also mostly impossible for lack of resources. Pull factors of the capital are smaller than push factors in the rural areas, Afifi (2011) adds.

Based on interviews with migrants and non-migrants in towns and cities in Niger, Snorek (2016) argues that motives to gain access to schools, employment, and government facilities are relevant only to migrants in the capital, while migrants in smaller towns moved in order to evade drought or subsequent losses. Respondents suggested plant species loss and overexploitation of woods and pastures by commercial uses. Lack of institutional regulations appeared to cause exasperation (Snorek 2016) in course of a general dynamic of divergent adaptation (Snorek et al. 2014b), during which agriculturalists increase their adaptive capacities by reducing options for pastoralists. Snorek sets the emigration of many pastoralists from the Sahel to Libya during Quaddafi’s rule into a context of drought effect evasion (see also Afifi 2011) – a livelihood option that is no longer accessible.

McKune and Silva (2013) use a Double Exposure framework to understand the interaction between economic and ecologic change in Tuareg pastoralists in Niger, based on data from 2005 and 2010. Following the Tragedy Of The Commons-hypothesis, and continuing colonial sedenterisation policies, pastoralism has been weakened in many cases. Sedentarisation in general failed to improve the social-ecological well-being of pastoralists, the authors argue. Mobility is rather understood as a key strategy of livelihoods that have traditionally been resilient in non-crop producing regions characterized by high unpredictability. Local extinctions of famine food due to climate change poses an additional threat. Herd have been decimated in Niger during the 1970s. Increasing dependence on grain markets implies further risks, exacerbated by lack of transport, mobility (which makes labour market par-

ticipation more difficult), encroachment of pastoralists’ lands for cash crop production, and loss of non-monetary exchange mechanisms due to monetization in the overall context of neoliberalisation, the authors state.



Photo: Jesse Ribot

Over the past 30 years, McKune and Silva (2013) report, households have become increasingly less food self-sufficient. Food aid is ever more prevalent and it is suggested that monocropping hampers nutrition. Uranium production is affecting pastoralists’ access to land and water. Although very limited engagement with the global markets exists, its progress or decline affects most communities (see Lambin et al. 2001 for a general perspective on such effects). Wide cell phone access has increased remittances and market information. During the 1970s, herds were decimated and many Tuareg fled to Libya and Algeria. After the fall of Quaddafi 2011, thousands of Tuareg returned (after a first wave of return in the 1980s) (see also Zoubir 2012). In 2007, the Niger Movement for Justice was formed, with fears that the Mali situation – in alliance with Al-Quaeda – might replicate in Niger. Herd loss is particularly devastating to traditional coping mechanisms and contributes to shifts to sedentary life and agriculture, the benefits of which are mixed, since they are also connected to higher fertility and higher risk of disease-outbreaks. Nowadays, remittances play an important role, with migration of men to Nigeria and Libya being most common. However, this practice entails costs in terms of loss of solidarity and marriage divorce. In recent years, political instability appears to have limited migration and thus reduces remittances. Herder-farmer conflicts increase, as well as conflicts due to increasing agriculture by former pastoralists (McKune and Silva 2013)

The project MICLE⁵ conducted an interdisciplinary investigation of the socio-ecological conditions of migration, the role of environmental change in general, and of climate change in particular, focusing on two rural, semi-arid case study regions in Senegal (Linguère) and Mali (Bandiagara). Both sites featured indications of land degradation, strong population dynamics, and considerable migration both internal and international. The project results indicate, that environmental change does play a role in explaining migration, but that the phenomenon is still multi-causal and complex. Not surprisingly, the significance of climate and environment for migration decisions turned out to be highest for groups depending on agriculture. In both study regions, migration was deeply anchored in culture and did not serve a single purpose. Moreover, motives interfered with each other and changed over time. Overall, the project outcomes indicate, that socio-economic development increases migration in general, and that socio-economic migration motives are more important than environmental factors. Only 4% of the Senegalese respondents crossed national borders, but the majority of those who did went to Europe. In the Mali area, about 25% of all respondents had experienced international migration, but mainly to Ivory Coast. Overall, migration to Europe was marginal. The search for income and employment was mentioned most frequently as motive, but these results are highly gendered. The background of these motives, according to the project, is the agricultural crisis that Mali and Senegal suffered from in the 1970s and 1980s, and which is compounded by government disengagement from rural areas (MICLE 2014, Hummel and Liehr 2015, Hummel 2016, Liehr et al. 2016; for Senegal, see also Bleibaum 2010). In a modelling approach developed within the MICLE project by Drees and Liehr (2015) – applying Bayesian belief networks within a multi-level socio-ecological systems framework – socio-economic conditions showed to be more important for migration decisions than environmental conditions. Uncertainty in the main income sources was correlated with increasing short-term migration.

A study by Henry et al. (2004) on determinants of migration in rural Burkina Faso, based on extensive

survey data complemented by additional interviews, demonstrates that both men and women in areas with scarce rainfall are much more likely to engage in rural-rural migration than those living in areas with higher rainfall. This discrepancy relies to a large extent on the differential tendency to engage in short-term moves, which were interpreted as a means for income diversification. However, overall short-term migration was not increased by severe rainfall deficits, and international temporary migration were less common among males under such conditions. This latter result is interpreted as the effect of investment limitations exerted by rainfall deficits and bad harvests, which constrain long-distance migration. Long-term migration, however, appeared to be less related to environmental conditions than short-term migration (Henry et al. 2004).

In a large-scale survey-based study on migration in Mali, Findley (1994) finds that migration did not rise during drought, although migration of women and children dramatically increased. Moreover, a shift to short-cycle migration could be observed, while moves to France were drastically reduced. Interestingly, very few of the respondents indicated drought or famine as motives for migration in the time frame under consideration, during which the respondents were affected by severe drought (1983-1985). Instead, nearly one half of drought migration was attributed to family and marriage. Circular migrants' families were poorer than those of permanent migrants. However, the former were more food self-sufficient. Pedersen (1995) also presents some data on migration in northern Mali, focusing on population growth. He documents long-distance labour migration of single men, which was mainly directed to neighbouring countries, and a lower level of internal migration of whole families, due to drought. Moreover, reduced rainfall led to a southward shift of herders. In a psychological case study attempting to elucidate human resilience as connected to environmental conditions in Mali and Burkina Faso – covering farmers and herders –, Van Haaften and Van de Vijver (2003) find marginalization and land degradation driving migration, but do not report information on its characteristics.

5. Migration, climate & environment; <http://www.micle-project.net>

Faulkingham and Thorbahn (1975) analysed population dynamics and drought in a village in the sedentary south-central Niger between 1968 and 1974. They find negligible permanent migration during the whole 5-year study period, and no effect of drought on mortality and fertility. In fact, mortality was decreasing during the drought years, which was tentatively explained by the establishment of health facilities in the vicinity, but a definite assessment of the mortality effects of drought would have required follow-up data gathering. Lack of permanent out-migration of families was explained by statistical endogamy within the village – in contrast to neighbouring villages with considerable migration of one half to three quarters of residents to relatives in Nigeria during drought, which was considered to be permanent by village headmen. However, seasonal labour migration by single men to West African destinations was frequently observed in the case study village, accelerating a behaviour that existed independently of drought. The function of this pattern, according to Faulkingham and Thorbahn (1975) was less to remit money, but to lower food demands in the origin households.

Rademacher-Schultz et al. (2014) investigated seasonal migration patterns in northern Ghana in four communities. Farmers perceived an unfavourable change in rainfall patterns consistent with agro-meteorological research, and a concomitant decline in yields. Together with poor economic prospects and rising food prices, this trend increased food insecurity in the region. Seasonal migration was the main reaction to food shortages and practiced by 73% of survey respondents. Migration thereby fulfils important functions in terms of food-saving, which sometimes is more important than income-generation (see also Faulkingham and Thorbahn 1975). Migration, however, has become more difficult, Rademacher-Schultz et al. (2014) state, due to mechanization of farm labour and exploitive labour relations in destination regions, combined with rising living costs and lesser accommodation opportunities. Rural-rural migration dominated in the study region and seasonal migration was perceived to be more beneficial than permanent relocation. Rademacher-Schultz et al. (2014) report an in this respect exceptional pattern, with a majority of migration happening during the

rainy season, and mainly being undertaken by households with lower wealth, leading to an erosive character of coping migration (cf. Warner and Affi 2014).

Van der Geest et al. (2010) argued that vegetation dynamics can partly explain migration in Ghana, which influence vegetation dynamics in turn. Correlations between net migration and average vegetation cover are significant but weak on a national level. Disaggregating data into three migration systems allows for a better interpretation, Van der Geest et al. (2010) argue. Van der Geest (2011) more specifically analysed migration from the North to the South in Ghana, and the role of environmental factors thereby. His findings indicate that the pull of favourable environmental conditions was at least as important as what he calls environmental push. Scarcity of fertile land appeared to be much more important than climate change or variability in rainfall, and sudden-onset environmental stress was virtually irrelevant. A certain, yet minor share of interviewees indicated food insecurity and hunger as migration motivations. Although out-migration was higher in districts with poor environmental resources, it decreased during droughts in the late 1970s and early 1980s due to adverse conditions in the South, Van der Geest (2011) suggests. Interestingly, the vegetation cover of Northern Ghana has recovered in the past two decades, despite population growth alongside with increasing out-migration. Inter-continental migration by Ghanaians from the North is rare, a circumstance which Van der Geest (2011) explains by lack of means, an observation that is in line with the mobility transition theorem (see Hochleithner and Exner 2018b).

EXCURSUS | Environmental factors II: Epistemological and methodological questions on climate data

Claims that environmental change affects migration require robust information about such change in environmental conditions. This is even more so for projections of possible effects of, for instance, climate change on migration. Regardless of the multiple and complex societal mediations of environmental conditions, of the complex interaction between societal nature relations and migration, and of the characteristics of such migration (including destination countries), the chain of arguments of an environment-migration nexus crucially depends on the issue of environmental change. Besides the validity of environmental data provided by studies on the environment-migration nexus (see reviews of respective studies above and in Hochleithner and Exner 2018b), it thus is important to consider the state of environmental “knowledge” in the Sahel in general. The following section presents an outline of the degree of reliability of such knowledge as related to environmental change in the Sahel, leaving aside the further intricate issue of which environmental conditions in particular might be decisive for socially mediated responses in form of migration (for instance, rainfall variability during the crop season might be more important for harvest than annual precipitation, to name just one example).

Actual and historical environmental change in the Sahel is not very well understood, and thus are potential future developments (Reenberg et al. 2012). This appears to be partly due to lack of data. Zhang et al. (2017), for example, point out that the rain gauge station network has significantly decreased in recent years in the Sahel, hampering studies of rainfall regime changes. Spatial rainfall heterogeneity in the Sahel, the authors continue, is not well captured by current data collection. In general, historical meteorological data is scarce, which impedes assessments of past climate change as well as climate modelling. Out-dated data collections and transmission technologies add to this problem (Salack et al. 2016). Extensive meteorological data gathering in Africa only started in the 1950s and 1960s. Most precipitation statistics, according to Wildemeersch et al. (2015), do not allow to conclude that rainfall is decreasing. The droughts of the 1970s and 1980s led many to believe

that rainfall had decreased, but this remains speculative, Wildemeersch et al. suggest, probably overstressing their argument. Others (e.g. AGRHYMET s.d.), in contrast, argue that an average reduction in rainfall since the 1950s is one of the certain long-term patterns in the Sahel. Corresponding with this view, UNEP (2011) reports that over the last 40 years, temperatures have risen in the Sahel, that droughts were recurring and severe, and that floodings were increasing and also have become more severe. Rainfall, UNEP (2011) states, has increased in some parts since the early 1970s, but is still below the average of precipitation between 1900 and 2009.

Giannini et al. (2013) present similar findings on long-term precipitation trends in the Sahel (cf. also Mohamed 2011; Sarr 2012): The drought years between 1968 and 1984 were characterized by an exceptionally low frequency of rainy days, which also were disproportionately less intensive than before this period; since then, precipitation has partly recovered, but with a pattern quite different from the time before the droughts. Rainy days are fewer (resembling persistent drought), without becoming visible in seasonal totals due to an increase in the median intensity of daily rainfall. Sarr (2012) highlights, that late onset, early cessation dates of rainfall, and reduction of length of growing periods are negatively affecting agriculture in certain regions of the Sahel. By elucidating the mechanism of the long-term variability of rainfall in the Sahel, Giannini et al. (2013) are able to conclude that the future near-term rainfall will probably resemble the current distribution, i.e., rather few rainy days with high intensity. This is also what has been found on the ground, the authors note with reference to West et al. (2008) and Mbow et al. (2008).

These findings are corroborated by Salack et al. (2016) confirming the trend in rising temperatures noted by previous studies. Recognizing that common meteorological indicators are unsuitable to detect drought conditions in the Sahel, Salack et al. (2016) introduce a new agroclimatic drought (and flooding) metrics and elaborate the concept of hybrid rainy seasons as a new rainfall regime since the 1990s, following up on Giannini et al.

(2013). Salack et al. (2016) emphasize that hybrid rainy seasons pose a new threat to food security (as far as local food production is relevant in this regard), despite the slight recovery of rainfall totals.

West et al. (2008) highlight the considerable heterogeneity of the Sahel and the importance of weather over climate. In their case study on the Central Plateau of Burkina Faso, they found local perceptions of climate change to converge with meteorological data in the long run, but to diverge for the recent years. While researchers detected a recovery of rainfall in the wider region, locals disagreed. Indeed, West et al. (2008) argue, it is less regional patterns of rainfall, but local likelihood of drought which is decisive. Not only past climate change and variability appear to be insufficiently understood to date, but also crop land changes, as van Vliet et al. (2013) argue, and land cover change in general (Tappan et al. 2004). This holds true especially in relation with the importance that such changes are attributed within scientific and policy discourses. General reviews of the causes of land-use and land-cover change have emphasized the complex determinants of such change, which go beyond simplistic assumptions regarding the impact of population growth or poverty. Rather than that, institutional mediations of peoples' responses to economic opportunities are of crucial importance, according to Lambin et al. (2001), and global forces become the main determinants, amplifying or attenuating local factors.

Despite considerable gaps in knowledge, recent studies (Dardel et al. 2014; Brandt et al. 2015; Hänke et al. 2016) appear to rather support the earlier hypothesis of a greening of the Sahel (Olsson et al. 2005), which West et al. (2008) had reviewed rather critically. While the greening hypothesis appears to have gained additional support since then, greening does not seem to be caused solely by an increase in rainfall (Hänke et al. 2016; see already Olsson et al. 2005). In a regional study of long-term vegetation change in Mali, Spiekermann et al. (2015) likewise point towards various drivers of change, which is not always ecologically negative and characterized by considerable spatial variation, with anthropogenic factors being of prime importance, even before climate. Similar results have been found by Brandt et al.

(2014) in a study on vegetation change in the Sahel of Mali and Senegal, using interdisciplinary methods. They confirm a greening trend since the 1980s, which has, however, not lead to pre-drought levels of the 1960s. A multiplicity of factors is seen to be responsible, with human drivers taking on a leading role, and climate having a significant effect (Brandt et al. 2014). The project that collected the data analysed by Brandt et al. (2014) also documented the co-existence of greening and land degradation, the latter being attributed to overgrazing, deforestation, and the expansion of agricultural areas (MICLE 2014; Liehr et al. 2016; Mehring et al. 2017).

Yet, methodological issues still hamper unambiguous conclusions concerning the differentiated role of climatic and anthropogenic factors in explaining greening trends, as well as the phenomenon itself, as a local case study in western Niger indicates: A negative NDVI (Normalized Difference Vegetation Index), which could not be explained by rainfall patterns, was found to be connected with an increase of cropped land (Tong et al. 2017). The study on local woody species knowledge by Sop and Oldeland (2011) in Burkina Faso casts doubt on the assumption that a possibly ongoing greening of the Sahel also reverses the degradation of woody species. This conclusion is supported by Brandt et al. (2015), who argue that the general increase in NDVI in the Sahel is paralleled by an increase in woody biomass, but does not reverse woody species loss. Local on the ground field testing of greening trends by Dardel et al. (2014) in Mali and Niger show, that the general trend might be contrasted by local phenomena of degradation.

Gonzalez et al. (2012) have put into question the greening trend by a series of case studies on tree density and diversity in the Western Sahel, emphasizing that NDVI data series can only show that herbaceous vegetation increased only after 1982. They report an overriding effect of climate on long-term woody species trends in relation to population. In contrast, Brandt et al. (2015) report that NDVI signals, which they interpret as indications of greening on the basis of on the ground assessments, are driven mainly by the development of trees. The divergence of Gonzalez et al. (2012) and Brandt et al.

(2015) might be explained by the different time spans that they investigate. While the former study compared data from the 1950s and 1960s with the years 2000 and 2002, the latter was limited to a comparison of time series between 1987 and 2013. This might point towards longer-term climate-induced declines in tree densities and tree species diversity, with a recovering of densities along the more recent, slight recovery of rainfall, as Gonzalez et al. (2012) suggest.

In any case, the relative lack of ground-truthing based on long-term vegetation monitoring makes definite conclusions on a larger scale difficult, since the interpretation of remote sensing and rainfall data is fraught with methodological problems (Hein et al. 2011). Maranz (2009) shows that the reduction in tree species diversity in the Sahel is not the effect of human overuse of a natural ecosystem, but rather the replacement of an anthropogenic parkland type of habitat by a more drought tolerant and less anthropogenically modified vegetation type. Anthropogenically distributed species thus are now effectively stranded beyond their rainfall tolerance limits due to the southern shift of isohyets. While amounting to a loss of livelihood for Sahelian people – since many of the affected species are comestible fruit-bearing – it is not caused by human use, but rather the “collapse of an anthropogenic system no longer adapted to current conditions” (Maranz 2009: 1183).

The study of land cover change in Senegal on a national level by Tappan et al. (2004) for the period between 1965 and 2000 shows only slight to moderate change, mainly due to agricultural expansion which is primarily encroaching upon savannas and forests. Change is uneven, with some eco-regions undergoing fundamental change, while others remain more or less stable: “These changes, while significant, are not entirely consistent with the presentations of doom and gloom that can be found in a long string of environmental-crisis reports on Senegal”, Tappan et al. (2004: 459) conclude. The recent land cover change assessment published by CILSS (2016) shows a moderate increase in sandy surfaces in West Africa. Although not a decisive trend in the region overall, it is however of particular relevance in Mauretania, Mali, and Niger, where drought and

overgrazing have led to the degradation of some parts of savannas and steppes. In these countries, sandy surfaces have increased by 47% between 1975 and 2013, according to CILSS (2016: 43; but see Mortimore and Turner 2005 for a more critical view on such assessments).

Assessing past changes in agricultural productivity is a complex task, and predictions of possible future trends are difficult not least because of the uncertainty of projections of climate change (West et al. 2008). Concerning drought, it is important to distinguish between meteorological and soil water drought, while their combined effect results in agricultural drought. The latter is defined as a shortage of available water for plant growth, which is not identical to rainfall deficits. Wildemeersch et al. (2015) state that there is little agreement over the likely development of rainfall in the Sahel due to climate change, but that temperatures will probably rise. It is unclear, they argue, whether agricultural drought in the Sahel is related to meteorological or soil factors. Common drought indices are not helpful to understand agricultural drought, according to Wildemeersch et al. (2015), because rainfall data relevant to crops concern intra-seasonal rainfall variation including the onset of rains, dry spells and season length (see also Grolle 2015; Salack et al. 2016). In the study region of Wildemeersch et al. (2015) in Niger, the annual amount of rainfall did not decrease, neither did the inter-annual variability of precipitation.

However, intra-seasonal variability appears to worsen. Especially the number of dry spells per growing season is increasing, the study found. Precipitation is highly differentiated over short distances (cf. e.g. West et al. 2008), for which reason farmers scatter fields in different locations. The study assumes degraded land to be important in accounting for soil-water drought due to cultivation of “marginal land” as well as overgrazing and shortening of fallow periods, but in fact did not investigate land degradation or possible shifts in production techniques. Wildemeersch et al. (2015) demonstrate, however, the potential to mitigate agricultural drought with specific production methods.

In a recent review, Rasmussen et al. (2016) highlight contradictory evidence on environmental change in the Sahel, which they largely explain by methodological and conceptual differences. In part, these differences might be rather seen as complementary than as mutually exclusive. However, to integrate contradictory views would require more research. In general, the development of dryland regions might have often been seen too pessimistic, Reynolds et al. (2007) argue. Accordingly, the scenarios of future land changes in the West African Sahel, developed by Lambin et al. (2014), in general assume a decrease of vulnerability to climate change, based on a trend towards a less climate-dependent economy. However, challenges related to economic globalization are assumed to become more prevalent, regardless of the concrete scenario. On a general level, the literature review on ecological changes in the Sahel by Walther (2016) suggests that rainfall, agricultural productivity, and human welfare increased again after the severe droughts of the late 20th century. However, the Sahel's biodiversity declined (Walther 2016).

Neumann et al. (2015) suggest that land degradation is an important factor of outmigration from drylands globally, and even more important than water availability. Mazzucato and Niemeijer (2001) and Niemeijer and Mazzucato (2002), however, question dominant views of land degradation in West Africa in general, while Tiffen and Mortimore (2002) and Mortimore and Turner (2005) reject the assumption of a desertification trend in dryland sub-Saharan Africa (see Herrmann and Hutchinson 2005 for a review of changing understandings of desertification in the Sahel, and their consequences; see also McKune and Silva 2013). Looking at the whole of Sub-Saharan Africa, Kiage (2013) supports a critical view on land degradation, while Tully et al. (2015) state a lack of data, but find regular land degradation across Sub-Saharan Africa. Indeed, conceptual and data problems concerning degradation appear to be substantial and global modelling approaches thus should be seen with caution.

Environmental factors III: Conflict⁶

Besides environmental change as such, conflict as a purported consequence is decisive in the neo-Malthusian

model of the environment-migration nexus (see Reuveny 2007 for a general view on this issue in the neo-Malthusian perspective). Although conflict is an important part of the neo-Malthusian approach to this nexus, Hendrix and Glaser (2007) draw attention to two different conceptions of conflict: While neo-Malthusianism rather focuses on long-term climate change in relation with the notion of carrying capacity, climate change might also affect conflict through short-term climate variability due to a decline of system predictability and stability.

In a case study on the inland delta of the Niger river in Mali, which is a hot spot of land-use conflicts, Benjaminsen et al. (2012) did not find evidence that these conflicts are induced by climate factors. In a study on the Tuareg rebellion in northern Mali, Benjaminsen (2008) questions the role of drought in the conflict. Nyong et al. (2006) report a correlation between droughts and conflict – mainly over resource access – in Northern Nigeria between 1965 and 2004. However, Nyong et al. argue, these conflicts rarely spread beyond the immediate participants. Extending the argument based on further data, Brown et al. (2007) argue that widespread violent intergroup conflict does not result from drought in Africa in general (and without the active facilitation of violence by outside powers) – a statement that is also supported by McLeman and Hunter (2010), who further claim that droughts in Africa do not necessarily lead to sudden increases in transnational migration. Recognizing data limitations, Hendrix and Glaser (2007) argue that based on their statistical analyses of determinants of conflict in Africa, including a series of environmental variables, “interannual variability in rainfall is a more significant determinant of conflict than our measures of climate, land degradation, and freshwater resources” (Hendrix and Glaser 2007: 710). Interestingly, they find an increase in the likelihood of conflict with growing availability of freshwater resources per capita – which they interpret as the effect of unequal access and ineffective distribution amidst poverty, contrary to a neo-Malthusian approach (see also Devlin and Hendrix 2014 for a global data set).

6. While global or Africa-specific models of the possible linkage between environmental change and conflict have been reviewed in Hochleithner and Exner 2018b, this section will shortly discuss available region-specific literature.

Conclusions and discussion of case studies and the global literature on migration

This section provides a summary of case study findings and discusses them against the backdrop of global literature on migration. Concluding from the literature discussed so far and in Hochleithner and Exner (2018b) regarding causes and characteristics of migration from West Africa, and in particular from the Sahel, the literature provides some answers, although tentatively in parts. Approaching to summarize key issues in this literature should start by recalling the very small share of West African migration that is headed towards Europe. While increasing, it still is a marginal phenomenon in quantitative terms, also when compared to total immigration numbers of the EU. Although beyond the scope of this working paper, it seems worthwhile to emphasize this gap, for “the degree to which African migration are made artificially visible through political and media discourses strengthens the marginalization of Africa and its populations” (Lessault and Beauchemin 2009: 187; own translation).

The biases that the critical migration literature identifies, and which have been mentioned further above – the policy bias, the Global North-bias, methodological nationalism, the sedentary bias, and the gender-based bias –, all include or are predicated on a problematic isolation of migration research from the investigation of broader social realities, changes, and transformations. In fact, to single out certain movements, which certain people undertake in certain ways at a certain time and place, as one particular social phenomenon already implies – if not a bias – a specific social construct, which reflects the fields of power and their boundaries which structure social reality at large. It does thus not come as a surprise, deplorable as it might be, that in the process of envisaging these certain beings undertaking certain movements, one grand narrative of our times has excelled in further carving out or refashioning “an ‘us versus them’ dichotomy”, that “has structured most of the frames” of environmental migrants, as Ransan-Cooper et al. (2015) claim. Namely, “the Southern victim cum Northern security threat, Southern victim cum Northern labour market participant, Southern victim cum Northern protectee, and so on. Prevalent socio-political orders and militaristic, techno-centric or paternalistic policies are thus reproduced

or advanced further, purposely or otherwise” (Ransan-Cooper et al. 2015: 113).

This is especially the case when migration as such is studied, as if it was a transparent phenomenon ready to be disclosed by questionnaires, easily dissolved in arrows traversing the desert, figures of those who drown and those who reach the shores of Europe at their apex, instead of as an “apparent chaos” (Cross 2013: 203), the structures of which are contingent upon categorizations, the magma of meaning (Castoriadis 1975) is escaping as relentlessly as it solidifies in their quantities – categorizations that do as much justice to the “data” that are gathered on their behalf as they do injustice to the fleeting nature of cultural meanings, aspirations, identities, agencies, and struggles. As if migration was a self-sufficient entity ready to be analysed in isolation of what then simultaneously tends to be reified as drivers, forces, contexts, push and pull, and not a one-sided fixation of a “relationship between mobility and immobility, which always define each other” (Glick Schiller and Salazar 2013: 13).

Thus, Glick Schiller and Salazar (2013) conclude further on, “[w]e need to interrogate the situations in which certain kinds of mobility, or certain types of mobile individuals, become the subjects of praise or condemnation, desire, suppression or fear” (Glick Schiller and Salazar 2013: 197), deconstructing the normalization of either mobility or stasis in favour of their understanding as one relational dimension of many, along which social stasis, change, and transformation – often unequal, often heterogeneous – exist and unfold. In studying migration, research is complicit with the gaze of the state – sometimes uneasy, often harmoniously – categorizing individuals, interrogating them under a specific perspective, the problematique of which is deeply embedded in a social reality transected by national boundaries, and subject to biopolitical projects attempting to regulate population for the sake of national development, progress, control. To evade this complicity is impossible, a critical recognition seems advisable. Compelled to live in a world with national borders, whether for good or bad, scholars are not forced to “think like a nation state” (Glick Schiller and Salazar 2013: 192).

Mobility studies in general, and the regimes of mobility-approach as proposed by Glick Schiller and Salazar (2013) in particular have probably been going quite beyond.

Defining a scientific problem already entails assumptions and in part tends to foreclose findings that critical research is attempting to disturb and unbalance by reflecting positionality, which “confers distinct sets of narratives that we use to make sense of the world” (McCorkel and Myers 2003: 226). Such master narratives, McCorkel and Myers (2003) remind us, “originate from dominant groups and operate to legitimize and naturalize the order of things. They become part of how we see the world and, by implication, our research subjects” (McCorkel and Myers 2003).

“[However,] the trouble with science is not necessarily that the origin of research springs from the location of the researcher, rather than from the location of the researched. Since we all occupy definite locations in the social landscape and our research motivations are rooted in the soil that surrounds us, this is unavoidable. The problem is that in the act of ‘discovering’ scientific truths, the skeletons we dig up are often our own. What passes as a scientific discovery about ‘the Other’ is often the very assumptions and narratives we used to construct our subjects and their ‘difference’ prior to entering the field” (McCorkel and Myers 2003: 220).

Asserting that “[e]thno-national divides belong to a discourse that is largely beyond our control”, but that “we can counteract essentialising tendencies by adopting a more nuanced approach to our own positionality”, Carling et al. (2014: 34) rightly denote the possibility to refrain from complicity with the powers that are at work in migration research, focusing on the insider-outsider problem in positionality and ways to evade re-essentialisation of such dichotomies. The challenge implicit in migration research, however, reaches beyond this problem. For it is not only an issue of getting access to data, which might be impeded by personal characteristics or those that are attributed to the researcher. Even more so, positionality – in a strong version of its reading – influences or shapes the questions of research as well as their objects in ways that might

often be out of the reach of mere intellectual self-reflection, but might be more accessible to ethnography as a substantially dialogical undertaking. In this context, Ifekwunigwe (2013) is calling – in reference to Global African Diaspora Studies – for comparative interrogations to be “interdisciplinary, historically grounded, ethnographically situated and mindful of institutional hierarchies and infrastructural deficits that contribute to the perpetuation of hegemonic discourses including those that ignore ‘the danger of a single story’” (Ifekwunigwe 2013: 230), which Chimamanda Adichie has described (Adichie 2009).

The danger of a single story indeed looms in migration studies, at least when their look turns upon West Africa, as the media narratives sketched in Hochleithner and Exner 2018a illustrate, which find their ample replicates in policy papers, institutional reports, and the ideologies of legislation. Single stories warrant scepticism for three reasons: first, the heterogeneity of West Africa and its migration precludes a single story when migration is attempted to be reconstructed from the point of view of migrants; second, and equally important, cultural meanings that substantiate, shape, regulate, and mediate any social process in the final instance (quite in reverse of the classical schema of Historical Materialism, see Castoriadis 1975), are fluid and polysemous – as far as science is concerned, the cultural meanings that science can access are the result of an interaction between a knower and the known, situated in a word; third, and beyond heterogeneity and situatedness, the grand narratives of macro-theories frame migration in their own ways. Hence, there is no single story of West African migration. Migration might be retold by way of many different stories, at times overlapping with each other, in mutual support or ignorance, or in blatant contradiction. These stories in part are fundamentally different when looking across the cases reviewed above. And might nevertheless be retold in shifting ways by means of regrouping and recontextualising the information and interpretations they provide in order to gain a broader narrative, cutting across its different chapters.

They range from the defence of honour in the young migrants' Mauretania, structured by caste and prestige as described by Tanon and Sow (2013); the shifting inter-generational relations in the context of modernization in the case of the Dogon in the account of Sauvain-Dugerdil (2013) in Mali; the constant struggle to gain and keep the recognition of peers examined by Ungruhe (2010) in Ghana for the sake of enjoying youth; the political voice raised through exit or a global belonging as in the appraisals from Senegal (Ifekwunigwe 2013) and Cameroon (Aplés 2014); the struggle for survival highlighted by Cross (2013), which is constrained and channelled by the effects of EU immigration politics through a "chain of work" in a transnational regime of unfree labour; the flexible handling of risk to secure livelihoods as Hampshire (2002) is writing about pastoralists in Burkina Faso; the farmers evading the harm effected by structural adjustment policies and the retreat of the state in Senegal (Bleibaum 2010); the optimistic Muslims serving the prosperity of their village in Senegal as well as they serve their own by following deeply engrained routines of migration as in the account of Romankiewicz et al. (2016); the hard-working inhabitants of Cabo Verde, carrying the imaginary of a dreadful past of drought and famine on their shoulders, which many only feel alleviated when leaving the place they love, but which cannot provide for their needs as in the story told by Carling and Åkesson (2009); to the arduously working Soninke agriculturalists in Mali, preparing their children for a laborious life abroad in the European "bush", by enrooting them firmly in their villages' soil, as in the account of Gaibazzi (2013); or the emancipation of the Senegalese as depicted by Willems (2014), whose migration make them escape solidarity ties while they excel in fulfilling their social obligations in an ingenious attempt to combine the best of two worlds, of tradition and modernity, in order to increase their freedom.

Some anthropological investigations succeed in making this heterogeneity of migration tangible in one and the same account which they provide, such as in the study conducted by Ejorh (2012) on African immigration in Ireland, who emphasizes multi-layered conditions and experiences that escape mono-causality, concluding that

"[t]here is also a tendency to ignore the personal desires (wholly unconnected with any political or economic causes) of the migrants to travel or live abroad, as the case of Jane illustrates; an indication that individuals may decide to emigrate just to change environment, experience other cultures or fulfil a life aspiration" (Ejorh 2012: 591).

Sometimes the multiple realities, the meandering stories of migration are showing through the accounts manufactured by the scholars reviewed above like wefts carried by warps in a larger weaving pattern. This is the case, for instance, with the struggles of girls and women, which are mentioned rather in passing in Ungruhe (2010), Tanon and Sow (2013), Cross (2013), and Hall (2016), put more into the spotlight in the accounts of Mondain and Diagne (2013), and Sauvain-Dugerdil (2013). In all these instances, girls and women appear to experience an increase in – albeit partly ambiguous – agency, even if only when selecting males who are successful migrants; but also when escaping planned marriages; when facilitating, motivating, shaping, or contesting the migration of their sons; when exploring the world and experiencing the taste of adventure; or when pursuing their dream of accumulating wealth. Or through the – sometimes pervasive – effect that migration, although small in numbers, exerts on societies that have developed the habit of migrating and thus geared their routines towards the formation of travelling subjects, able to cope with adversity or to follow their dreams of emigration. Women prefer migrants over students, young males chose to invest in emigration rather than in education.

Obviously, the perspective on a seemingly objective fact like migration is quite different, depending on whether its story is told, e.g. as one (maybe minor) element of moves towards women's emancipation, or whether such effects and conditions are noted in passing, as much of the literature on migration does.

Likewise, it makes a qualitative difference for theoretical, methodological, political, and ethical implications, depending on whether investigating risk and migration from the Sahel to Europe is framed as studying the determinants of irrational behaviour (such as in part of policy reports), analysing the formation and expression of adventurous subjectivities (Bredeloup 2013), political frustration (Ifekwunigwe 2013), or of “Europe’s unknown war” (Webber 2017). And evidently, it is kind of a 180-degree change in perspective, when these risks are told from the point of view of policy-makers or certain voters’ groups in the EU, or from those that migrate (cf. Marchand 2008). But one and the same story might also radically change meaning depending on context (Heller 2014). One might thus not be mistaken, Heller argues: “[T]he only solution to prevent the deaths of migrants at sea and the conditions of illegality, precariousness, exclusion and exploitation they face on European soil is to grant migrants visas so that they may migrate legally. This, however, is not on the EU’s or the IOM’s agendas” (Heller 2014: 214).

“After all”, de Haas (2011b) reflects, “people do not migrate ‘because of’ abstract concepts such as demographic transitions, declining fertility, ageing, population density, environmental degradation or factor productivity” (de Haas 2011b: 16). The substance and diversity of lived experience documented in the studies reviewed above testifies to his claim. But it is equally true to emphasize that people do not migrate because of their mere aspirations and their capability to do so; and not even necessarily because they think the decision to move on to a certain destination will enhance their lives (as Hall 2016 or Ransan-Cooper 2016 argue), contrary to the narrative de Haas (2011b) deploys.

The intriguing diversity of lived experiences stands in contrast to a remarkably homogenous demand for cheap labour in areas of destination, in Europe, North America, or North Africa (or the cities of the West African coast). The aspirations, capabilities, and mere routines of migration would not be able to be realized to their actual extent, and would possibly not even have developed without the structural opportunity to realize them. This is a key insight offered by segmented labour-

market theory, which, potentially joined with world-systems theory, works to explain how labour supply comes into existence, allowing to better understand how agency in supply fits into what appears as structural demand. Quite rightly, thus, de Haas (2008), Hooghe et al. (2008), Zoubir (2012), Cross (2013), Gaibazzi (2013), Seeberg (2013) and Baizan and González-Ferrer (2014) emphasize, that the migration system or regime of labour spanning the “chain of work” – reaching from the southern shores of the Sahara to the northern shores of the Mediterranean –, would not exist without demand for cheap labour – which is often unfree, in accordance with long-term tendencies of capitalist development, as Cross (2013) stresses.

Increasingly, also Maghrebian capital seems to have developed a thirst for cheap migrant labour, corresponding to the Maghreb possibly approaching their own emigration peak, according to the migration transition theorem. In that way, it might be hypothesized, the increasingly repressive migration policies of Maghrebian countries, pressurized by the EU, follow their own economic logic. De Haas (2011a) supports this scenario as the most plausible in his assessment of four possible future trajectories in the Mediterranean migration system:

“It is well possible that besides Turkey, also countries such as Tunisia, Lebanon and perhaps also Morocco – if they manage to combine rapid economic growth and social development with institutional reform and democratisation – will further evolve into immigration countries over the 2020s and 2030s. On the other hand, economic gaps between most North African and NMCs [north-Mediterranean] countries are currently so high, that consistently high growth rates are necessary to get them near to the level of Turkey, a level at which emigration apparently starts to stagnate and level off (...). This means that a realignment of migratory functions of countries is possible or even likely, in which some of the SMCs [south-Mediterranean countries] will be included in the ‘European core’ while other, poorer countries with a higher emigration potential, such as Egypt and sub-Saharan countries will increasingly transform into semi-peripheral ‘labour frontier’ [...] countries” (de Haas 2011a: 66).

The relation between homogeneous, structural demand for cheap labour – which is thus often unfree to varying degrees, ranging from the fixation in bad jobs, to discrimination within legal labour relations, to outright illegality and finally to slavery – by capital and heterogeneous, agentic supply also explains the observation that a tightening of migration policies, which does not conform to structural labour demand, leads to more irregular migration and new ways of immigration rather than to a reduction of cross-border movements (de Haas 2011a).

This relation between demand and supply should not be equated with a model of push and pull factors, for it is the aspirations, capabilities, or mere cultural routines of those migrating, which constitute supply, while demand is not a given level in a field of gravity relations, tending towards equilibrium, either. Demand is rather generated through a panoply of conditions in itself, from consumer demand for cheap food, services, and tourist facilities, to EU austerity policies (which have set southern European countries under exacerbated pressure to increase rates of profit and economic growth) and the vagaries of financial capitalism, which tends to fuel construction booms. These determinations of cheap labour demand are themselves over-determined by neoliberal policies affecting the domestic work force by suppressing trade unions and blocking wage increases, which are traded off by the cheapening of consumption goods produced domestically or abroad. And they are put into place by crucial contribution of politics, which might for its part be driven by fearful glances at racist voters in the EU, but are in any case involved in the creation of the problem they purportedly intend to solve. Because by tightening and geographically expanding border controls, embedded in an overall media discourse of migrants flooding Europe, in a context of pervasive racism – in itself a co-product of neoliberal policies affecting the livelihoods of the European working classes, one might argue – the Mediterranean migration system itself is co-created or constantly re-structured.

By decreasing livelihood options and deteriorating living conditions in Maghrebian countries, migrants from south of the Sahara increasingly find themselves on a trajectory towards the EU along a “chain of work” (Cross 2013) that is co-established by the very policies that are allegedly put into practice to curb migration – ranging from the implicit strengthening of racist relations in countries targeted by EU migration control initiatives, to the compulsion of migrants to increasingly use the services of an emerging migration industry that has to work under cover. The latter thereby possibly follows its own business logics to expand the trade, creating measures to combat this trade alongside their activities, and proliferates incentives for local governments to also engage in an industry created by the criminalization of migration. Current EU policies might thus indeed have further pervasive and paradoxical effects in deeply disturbing not only economic relations within the wider West African region by hampering mobility (Choplin and Lombard 2014), but also the already fragile social and political relations, too (Molenaar and El Kamouni-Janssen 2017). Moreover, both, the human smuggling engendered by EU border controls as well as the EU interventions serving to establish, perpetuate, and strengthen these, bear the danger of increasingly hollowing out state capacities (Molenaar and El Kamouni-Janssen 2017) that are already very much reduced due to structural adjustment and subsequent donor interventions in the form of so-called development aid (Larsen and Mamosso 2014). So far, EU interventions show only little care or even understanding in regard to local power structures and the often precarious role of the central state in countries such as Niger. By empowering the central state in the combat against migration, such interventions might well exacerbate political tensions (Molenaar and El Kamouni-Janssen 2017), providing further fertile ground for the development of unregulated migration industries. A similar dynamic has been identified by Wing (2016), analysing the French intervention in northern Mali: “It becomes a self-fulfilling prophecy in which the presence of the French is required to fight terrorism and that very terrorism is perpetuated by the French presence” (Wing 2016: 70).

Certainly, migration aspirations and capabilities are also over-determined by neoliberal policies, post-Fordist restructurings, and concomitant societal transformations. The literature on emigration from West Africa thus frequently points towards the background of structural adjustment. But in this context it is important to distinguish between short-term (and thus mostly internal) migration, and long-term and partly inter-continental migration. For the aspiration to emigrate to Europe is not merely – and obviously quite seldom, as literature indicates – conditioned upon rural neglect, pressure on agriculture or pastoralism, and the variability of climate. And certainly, the capability to migrate crucially depends on financial and social resources, which poorer population groups hardly possess. Current EU agricultural and fishery policies might indeed exacerbate obstacles to the development of West African economies, highlighted for instance by Kohnert (2007) and Cross (2013), but also frequently mentioned in other publications, like Gaibazzi (2013).

In a similar manner, Larsen and Mamosso (2014) emphasize the importance of mineral wealth and hydrocarbons in the Sahel to understand both the detrimental effect of foreign intervention in the form of so called development aid on domestic governance capabilities, and the complicity of this effect with the construction of countries such as Niger as being nailed to the barren bed of their lands. It seems it is not only the aspirations of many of those who migrate that are place-bound, as Carling and Åkesson (2009) have first described for Cabo Verde, where limits are naturalized to their self-fulfilment by metaphorisation through the landscape, imagined to act as a womb of famine. This seems just as true for development organizations and for political discourse more generally.

Though Niger has for decades been one of the largest uranium producers of the world, poverty has remained rampant (Larsen and Mamosso 2014; Goumandakoye 2016). And although the recent surge in oil extraction might allow hoping for only slightly better development effects of comparable revenues from uranium in the past (Goumandakoye 2016), economic modelling indicates that uranium and oil alone (not to mention

other minerals extracted in the country), have the potential to reduce poverty substantially if managed well (Go et al. 2016) – even without changing the unfavourable royalty structures prevalent at the moment. Although the reliability of General Equilibrium Models as applied by Go et al. (2016) might be doubted (Mitra-Kahn 2008), such exercises in calculated imaginaries nevertheless amount to an effect of de-naturalizing poverty.

From colonial times to post-colonial relations, Niger has been characterized by relations of dependency, further exacerbated by structural adjustment and so-called development aid (Larsen and Mamosso 2014), and with the immediate prospect of further loosing political autonomy through the very migration policies, which the EU purportedly sets in place to curb migration, i.e., not only to block migrant movements, but to foster economic development. However, attempting to block migrant movements not only to the EU, but further on within the sub- and trans-Saharan region itself, runs counter to historical experience and economic logic. While it might sound utopian at the moment to demand the support of trans-Saharan mobility through, for instance, building durable roads, as an anonymous NGO official in Agadez demands in a quotation presented by Hall (2016), it might well indicate a somewhat more viable trajectory for economic development, in the sense of providing viable options for local people to enlarge and support their livelihoods. That such a trajectory would reduce emigration to Europe from Niger – where the emigration rate in general is very low at the moment anyways – must be clearly doubted. According to the mobility transition theorem, Sub-Saharan African countries in general (and Niger in particular) still have a long way to go before reaching the peak in emigration rates.

However, the question how obstacles such as EU agricultural and fisheries policies, or asymmetrical relations in resource extraction are mediated with migration is yet another issue. So-called neoliberalism – a conspicuously vague term, if used in a too general meaning (Jessop 2013; Venugopal 2015) – , or post-Fordist restructuring more general, entail far more than repressive labour policies, deregulation, privatization, economic liberalization, and flexibilisation.

These changes come along with a transformation of subjectivities and related changes of information and communication technologies, with far reaching effects on mobility. Mobility studies, therefore, put some effort in attempting to transcend the dichotomies of tourist traveller and economic migrant (see Salazar 2011 for an example). The impact of changing subjectivities, which have complex motivations, on migration as mediated by aspirations, capabilities, and transport, as well as social infrastructures, is probably grave, maybe even as decisive as structural adjustment in its economic core for understanding contemporary emigration from West Africa (and possibly intra-regional migration, too). Under a perspective guided by the concept of regimes of mobility, moreover, it might be fruitful to ask whether there is indeed a substantial difference between what is described as a sometimes pervasive attraction of the topic (and, partly, of the practice) of emigration to Europe, and the perhaps not less pervasive attraction of the issue of social mobility without geographical relocation in European countries. Societies of the Global North, and perhaps even more so neoliberal societies, are inherently mobile, it seems. And for both African migration as well as for aspirations of social (upwards) mobility in Europe by native Europeans, one might speculate that many try and very few succeed, but that the topic of mobility (whether spatial or social) and its connected imaginaries have a sizeable or even decisive effect on how society is structured and social relations are constructed, established, and maintained. There is cumulative causation at work, it seems, not only in migration systems.

The homogenizing structural labour demand of capital located primarily in the EU, and increasingly in the Maghreb, thus combines with a multiplicity of sources of agentic labour supply – driven by a manifold of aspirations, and enabled by the effects of past development, in a ragged geopolitical landscape, which is characterized by technological revolutions in transport and communication, and insurgencies, deeply ingrained international dependencies, relocations, and the spread of globalizing imaginaries, which create wishes of belonging that cannot be satisfied by national citizenships (Alpes 2014).

How does this picture fit with an emphasis on environmental causes of emigration? Reviewing the literature on the environment-migration nexus allows some conclusions – despite the need of further research with more significant data, more sound methodologies, deeper and more critical self-reflection, and a wider range of cases to be compared. These conclusions, which are suggested by several publications on the topic, point at a highly mediated character of the environmental dimension in human migration in the region. That is to say, that contemporary effects of environmental change – whether or not connected to anthropogenic climate change – appear to be quite weak in comparison with social, cultural, political, institutional and economic dimensions. A diagnosis that has guided this summary so far already.

Finally, environmental causes appear to mainly influence and shape short-distance migration, not attempts to relocate to countries of the Global North. This holds true also for conflict-driven migration. The evidence of climate or environmental change on conflict remains inconclusive and is hypothetically weak. Even if migration is induced by the interplay of detrimental political, economic relations, deficient institutions, and even if changes of the climate might increase in the future – which is expected by parts of the scholarly literature – it is unlikely (according to the literature considering the effects of past climate change and modellings) that such migration will substantially contribute to an overall increase of emigration from West Africa.

A climate change-bias in research about migration thus adds to the biases identified above. Considering the presence and relevance of the topic in the media, in policy discourse, and scholarly literature, not only the amount of significant data on relevant factors is surprisingly low. Even more so, the results of more than ten years of focused scientific investigations appear to rather discourage this strand of argumentation – especially if further dimensions of social transformation in the Sahel are to be considered in the face of limited resources for research.

The climate change-bias is related to a rural bias regarding emigration from West Africa. Consequently, Parnell and Walawege (2011) resume that

“the focus of scholarly literature on GEC [Global Environmental Change] impacts on Africa has hitherto been on mobility and displacement, rather than urban growth. Migration and displacement will almost certainly escalate over the next decades in the light of predicted GEC, but these are not necessarily the most critical issues shaping Africa’s development. Understanding migration and displacement is not sufficient preparation for responding to predicted GEC impacts. In Africa, the burden of settlement change is likely to be in cities, which is not only growing rapidly because of endogenous growth but cities and towns are also potential (neglected) sites of GEC” (Parnell and Walawege 2011: 19).

The political disenfranchisement of many urban migrant dwellers in Africa, who are structurally disfavoured in relation to rural populations, to which they are imagined to belong, appears to be of particular relevance in this regard. This has already been argued by Mamdani (1996) in the context of the development of a theory of the African “bifurcated” state which – according to Mamdani – is reproducing colonial practices of dividing society into a tribal logic of Native Authorities and a democratic logic of urban civil society. A division, which Mamdani sees as the fundamental obstacle for development in Africa, and as the deeper reason for the pendulum between repressive and clientelistic politics that he sees as characteristic for African countries in general. A somewhat similar conclusion has recently been drawn by Raleigh (2014), who emphasizes that “[a]lthough a debate continues on which factors motivate rural– urban movements, there is little question that rural development agendas are favoured over needed urban programs and planning. These political and economic calculations have drastic effects on the lives of migrants, urban residents, and rural residents, whose livelihoods are closely tied to community members in urban locations” (Raleigh 2014: 258).

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