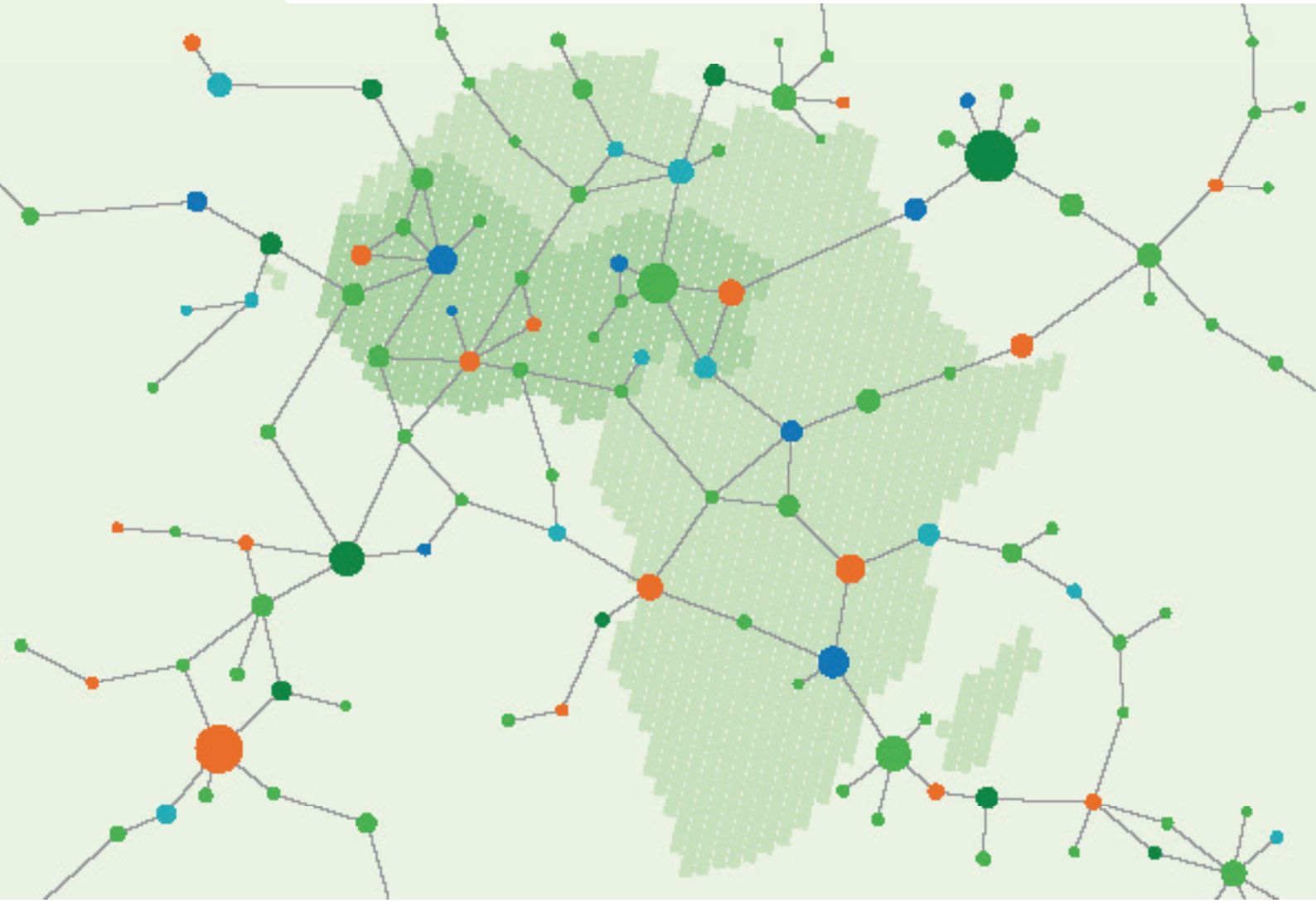
West African Studies

Cross-border Co-operation and Policy Networks in West Africa



OECD

SAHEL AND WEST AFRICA Club Secretariat

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Cross-border Co-operation and Policy Networks in West Africa

Under the direction of Marie Trémolières and Olivier J. Walther

OECD
BETTER POLICIES FOR BETTER LIVES

SAHEL AND WEST AFRICA Club Secretariat

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A number of stakeholders participate in SWAC platforms including governments of West African countries and OECD member countries, regional organisations, professional associations and civil society groups, bi and multi lateral development partners and research centres.

The SWAC Secretariat provides factual, innovative and forward looking analysis; facilitates political dialogue, information sharing and consensus building; and formulates policy recommendations. Its thematic work includes food and nutrition security, food systems, cross-border co-operation, climate change, urbanisation, gender and security.

Based at the OECD and an active member of the OECD Development Cluster, the Secretariat helps ensure West Africa's presence in global fora. It collaborates with other directorates and bodies of the OECD such as the Development Centre and the Trade and Agriculture Directorate (TAD).

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Preface

Cross-border co-operation in various forms has been actively pursued in West African border areas for many years. Often transcending regional legislations and administrative constraints, it is driven by a variety of actors ranging from nongovernmental organisations to government institutions, to regional and international organisations, including the SWAC Secretariat, one of the pioneers of implementing cross-border co-operation policy in West Africa. The impetus generated by cross-border clusters has helped deliver institutional developments such as the creation of joint committees, the inclusion of cross-border co-operation in the integration strategies of the West African Economic and Monetary Union (UEMOA) in 2004 followed by the Permanent Inter-State Committee for Drought Control in the Sahel (CILSS) in the Sahel, the creation of the Cross-border Initiatives Programme (CIP) – now the Cross-border Co-operation Programme (CBCP) – by the Economic Community of West African States (ECOWAS) in 2005, and the launch of the African Union's Border Programme (AUBP) in 2007. Indeed, this latter initiative was the outcome of one of the resolutions of the 8th Ordinary Session of the Assembly of Heads of State and Government of the African Union to focus efforts on the structural prevention of conflicts.

One of the key aims of the AUBP is to speed up the process of border delimitation and demarcation where such work has not yet been completed in accordance with the sovereign rights of states. This has led to the demarcation of over 2 500 km of borders between 12 countries from 2008 to 2015. In West Africa, 1 300 km of Mali's land border with Algeria have been demarcated, along with 1 303 km of its border with Burkina Faso. A delimitation and demarcation treaty has also been signed with Senegal, and delimiting operations are currently under way on Mali's borders with Guinea, Côte d'Ivoire, Mauritania and Niger.

Greater cross-border co-operation can be facilitated in countries where regional integration is actively pursued and where the positive implications for development are keenly understood. For example, Mali's Constitution of 25 February 1992, places particular emphasis on cross-border co-operation to support integration and even allows for the possible changes in national sovereignty to aid this goal. In 2000, the country pursued a particularly active national border policy which then took on an added security dimension after the 2012 crisis, in addition to the provision of incentives to promote the economy and free movement of goods and persons. Projects promoting regional integration also extend into the areas of healthcare, infrastructures, radio broadcasting, and the economy, and are being developed on the back of this legislative and administrative progress.

The AUBP is also involved in facilitating cross-border co-operation, as recently illustrated by the adoption of the Convention on

Cross-border Co-operation in Africa (Niamey Convention) at the 23rd Ordinary Session of the AU Assembly of Heads of State and Government, held in Malabo, Equatorial Guinea in 2014. This Convention provides the first continental legal framework for cross-border co-operation since the resolution on the principle of the intangibility of borders, adopted in July 1964 in Cairo by the Summit of Heads of State and Government of the Organization of African Unity (OAU). This new legal instrument reflects the determination of African leaders to accelerate the continental integration process and the peaceful resolution of cross-border disputes.

These institutional initiatives aimed at recognising and opening up borders come against the backdrop of a renewed surge in transnational terrorism. The cases of the Lake Chad basin, Mali and Nigeria, for example, have prompted the international community and African countries to place increasing importance on the security of borders. More than ever, the extent of border openness is vital to the stability of states and the prosperity of the West African region. As the International Organisation for Migration (IOM) recently noted in a report on border management in Mali, a new balance is needed "between control and free movement…" in order to strengthen "… the role of borders as a factor for integration and peace".

For this to succeed, however, greater insight is needed into the co-operation potential of border regions, and the functioning of policy networks which enable collaboration between cross-border actors. Numerous studies have examined border legislation and the feasibility of financing cross-border activities, but few have attempted to systematically map the regions where support for cross-border co-operation is strongest beyond research into the organisational structure of co-operation networks.

The analysis of cross-border policy networks in this publication is an encouraging development for all actors involved in cross-border co-operation in West Africa as it reveals for the first time, how cross-border governance networks are organised, how information circulates between partners of a very different nature, and which actors are considered to be the most central, thereby facilitating the understanding of dynamics that are for the most part informal. This relationshipbased approach, which is still rarely applied to development in general and to West Africa in particular, is complementary to traditional analyses aimed at understanding the economic and political processes at play in regional integration. The new data visualisation technique used in the report provides a means of anticipating changes and providing support for policies that are particularly suited to cross-border co-operation, which is by nature a relationship-based activity.

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Foreword and acknowledgements

This publication reflects the priorities of the regional organisations that are members of the Sahel and West Africa Club (SWAC), namely the Economic Community of West African States (ECOWAS), the West African Economic and Monetary Union (UEMOA) and the Permanent Inter-State Committee for Drought Control in the Sahel (CILSS), and thus also contributes to the objectives set out in the OECD Programme of Work and Budget.

The SWAC/OECD Secretariat has long played an active role in local development and cross-border co-operation, particularly in applying innovative, rigorous methodological techniques to the region's challenges. The analytical and methodological approaches followed in this report were carried out during SWAC's 2015–16 thematic cycle, building upon the outcomes of the Secretariat's ECOLOC Programme (Reviving Local Economies in West Africa) and the WALTPS study (Preparing for the Future – A Vision of West Africa in the Year 2020). Multi-scale spatial analysis from the local to regional levels lies at the heart of this study, as does the concept of the "cross-border area", defined as "a geographic area that straddles two or more countries, where people are linked by socio economic and cultural ties" by former President of Mali, Alpha Oumar Konaré. In 2002, the SWAC Secretariat supported this vision by promoting a shift from strictly bilateral approaches to the recognition of regional areas in which different levels of formal and informal governance operate. This led to the creation of the West African Borders and Integration (WABI) Initiative, which drew on the complementary nature of its founding members – the SWAC Secretariat, Enda Diapol and Mali's National Borders Directorate. The network is an informal structure, based on the pooling of knowledge and information sharing, and has since been joined by partners such as the Municipal Development Partnership (PDM) and the Group for Rural Development Research and Projects (GRDR). Its strengths also lie in the political lobbying carried out by national governments and regional organisations such as ECOWAS, UEMOA, CILSS and the African Union; the facilitation of dialogue between local actors and political institutions, the sharing of experiences between countries from the "global south" and "global north", and its engagement with local populations.

The SWAC Secretariat has progressively adopted a more systematic approach to its analytical work. This has been evident in its work on food systems and the use of social network analysis (SNA) to examine cross-border co-operation in this report. In applying innovative analytical methodologies such as SNA and data visualisation to the region's development and transformation challenges, the SWAC/OECD can act as a bridge between leading research institutions globally and policy makers to improve comprehension of issues and

offer well informed policy advice that anticipate major trends, such as climate change and urbanisation. These forms of analysis are pertinent in helping to develop an understanding of global network structures that can range from public policy makers to local agents and business traders to groups involved in illegal activities, and therefore also improve co-ordination between various partners, including donors, regional organisations, private actors, state actors and local municipalities. SNA also has the advantage of providing an intricate and nuanced depiction of interactions and hierarchies within networks, portraying the varying degrees of sophistication of systems, along with their interactions and transformations, comparable over space and time. This recent and ground-breaking methodology in the field of development, which has rarely been applied to West Africa, can pave the way for new and complementary studies that can improve the effectiveness of regional policies.

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The Centre for Border Region Studies (CBRS) is an international research centre dedicated to borders and borderlands around the world. Founded in 1976, the Centre is today part of the Department of Political Science and Public Management at the University of Southern Denmark in Sønderborg. The Centre brings together academics from the fields of history, political science, anthropology and geography. It promotes a relational approach to border regions, in which borderlands and states are intimately interconnected through a variety of cultural, economic and governance networks. The Centre focusses on four main areas of research: the changing role and function of borders, conflicts and co-operation in border regions, border regions and the European Union, and minorities in border regions. In recent years, the Centre has participated in projects funded by the European Union, the European Science Foundation, the Social Sciences and Humanities Research Council of Canada, and the SWAC/OECD.

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Abbreviations and acronyms

ABAKIR	Lake Kivu and Rusizi River Basin Authority
ABORNE	African Borderlands Research Network
ACBF	African Capacity Building Foundation
ACLED	Armed Conflict Location & Event Data Project
ACMAD	African Centre of Meteorological Application for Development
ACP	African, Caribbean and Pacific group of States
ADF	African Development Fund
AEBR	Association of European Border Regions
AEC	African Economic Community
AFD	French Agency for Development (Agence française de développement)
AfDB	African Development Bank
AFL	Acting for Life
AGRHYMET	Regional Agrometeorological and Hydrological Centre
ALG	Integrated Development Authority of the Liptako-Gourma Region
AMU	Arab Maghreb Union
ANBO	African Network of Basin Organizations
AOF	French West Africa
APEC	Asia-Pacific Economic Cooperation
APESS	Association for the Promotion of Livestock in the Sahel and Savannah
APSA	African Peace and Security Architecture
AQIM	Al-Qaeda in the Islamic Maghreb
AREN	Association for the Revitalisation of Livestock in Niger
ASEAN	Association of South Eastern Nations
ASF	African Standby Force
AU	African Union
AUBP	African Union Border Programme
AWF	African Water Facility
BADEA	Arab Bank for Economic Development in Africa
BDEAC	Development Bank of the States of Central Africa
BLSN	Botswana, Lesotho, Swaziland, and Namibia
BOAD	West African Development Bank
BRACED	Building Resilience and Adaptation to Climate Extremes and Disasters
BTC	Belgian Technical Co-operation
C3SAHEL	Cross-Border Co-operation Unit of Sahel Local Authorities
CBDA	Chad Basin Development Authority
CBRS	Centre for Border Region Studies
CACG	Compagnie d'aménagement des coteaux de Gascogne
CCFD	French Catholic Committee against Hunger and for Development
CCT	The Council of Local Governments
CDC	Defense and Security Commission
CEMAC	Economic and Monetary Community of Central Africa
CEMOC	Joint Operational Army Staffs Committee
CEN-SAD	Community of Sahel-Saharan States
CEPGL	Economic Community of Great Lake Countries
CET	Common External Tariff
CFA	Communauté Financière Africaine
CHADWET	Chad Wetlands Initiative
CICOS	International Commission of the Congo-Oubangui-Sangha Basin
CIDA	Canadian International Development Agency
CILSS	Permanent Inter-State Committee for Drought Control in the Sahel
CIP	Cross-Border Initiatives Programme
CIRAD	French Agricultural Research Centre for International Development (Centre de coopération internationale en recherche agronomique pour le développement)
CIWA	Co-operation in International Waters in Africa
CNMC	Cameroon Nigeria Mixed Commission
COMESA	Common Market for Eastern and Southern Africa
COPAX	Council for Peace and Security in Central Africa

CSE	Ecological Monitoring Centre (Centre de suivi écologique)
CUSA	Canada-United States Agreement
DANIDA	Danish International Development Agency
DBSA	Development Bank of Southern Africa
DDG	Danish Demining Group
DFID	UK Department for International Development
DG DEVCO	European Union Directorate-General for International Co-operation and Development
DG REGIO	Directorate-General for Regional and Urban Policy
EAC	East African Community
EARS	High-Tech Remote Sensing Company
EBID	ECOWAS Bank for Investment and Development
EC	European Commission
ECB	European Central Bank
ECCAS	Economic Community of Central African States
ECOMOG	ECOWAS Monitoring Group
ECOWAP	ECOWAS Regional Agricultural Policy
ECOWAS	Economic Community of West African States
EDF	European Development Fund
EESC	European Economic and Social Committee
EGTC	European Grouping of Territorial Co-operation
EMU	Economic and Monetary Union
ERGMs	Exponential Random Graph Models
ESA	European Space Agency
EU	European Union
FAO	Food & Agricultural Organization of the United Nations
FDI	Foreign Direct Investment
FEWS NET	Famine Early Warning Systems Network
FFEM	French Facility for Global Environment (Fonds français pour l'environnement mondial
FLM	Macina Liberation Front
FMWR	Federal Ministry of Water Resources
FOMAC	Central African Multilateral Force (Force multinationale de l'Afrique centrale)
FTA	Free Trade Area
FTAA	Free Trade Area of the Americas
FTAAP	Free Trade Area of the Asia-Pacific
GADM	Global Administrative Areas
GEF	Global Environment Facility
GIA	Armed Islamic Group (Groupe islamique armé)
GIABA	Group against Money Laundry and Terrorist Financing in West Africa
GIS	Geographic Information System
GIZ	German Ministry for International Development (Deutsche Gesellschaft für Internationale Zusammenarbeit)
GLF	Global Local Forum
GM	Global Mechanism (of the United Nations Convention to Combat Desertification)
GRDR	Group for Rural Development Research and Projects
gROADS	Global Roads Open Access Data Set
GSPC	Salafist Group for Preaching and Combat
GVC	Global Value Chain
GWP	Global Water Partnership
GWPO	Global Water Partnership Organisation
ICA	Infrastructure Consortium for Africa
ICRAF	World Agroforestry Centre
IDB	Islamic Development Bank
IFAD	International Fund for Agricultural Development
IGAD	Intergovernmental Authority for Development
IGO	Inter-governmental Organisations
IHE	Unknown
IIRSAHEL	Sahel Regional Integration Initiative
INBO	International Network of Basin Organisations
INSAH	Institut du Sahel
IOF	International Organisation of La Francophonie
IOM	International Organization for Migrations

IPSS	Institute for Peace and Security Studies
IRC	International Red Cross
IRTGI	Improved Road Transport Governance Initiative
ITRSP	Informal Trade Regulation Support Programme
IUCN	International Union for Conservation of Nature
JBS	Journal of Borderland Studies
JICA	Japanese International Co-operation Agency
K2M	Kano-Katsina-Maradi triangle
KFAED	Kuwait Fund for Arab Economic Development
KOBWA	Komati Basin Water Authority
LCBC	Lake Chad Basin Commission
LOBI	Local Cross-Border Initiative Programme
LUX-DEV	Luxembourg Development Co-operation
MARAC	Central African Early Warning Mechanism
MEDWET	Mediterranean Wetlands
MFDC	Movement of Democratic Forces of Casamance
MFN	Most Favoured Nation
MNJTF	Multinational Joint Task Force
MNLA	National Movement for the Liberation of Azawad
MOJWA	Movement for Oneness and Jihad in West Africa
MOT	Transfrontier Operational Mission (Mission opérationnelle transfrontalière)
MRU	Mano River Union
MSC	Mediation and Security Council
NAFTA	North American Free Trade Agreement
NBA	Niger Basin Authority
NBC	National Boundary Commission
NBJC	Nigeria Benin Joint Commission
NBJTCD	Nigeria Benin Joint Technical Committee on Delimitation
NCF	Nigerian Conservation Foundation
NEPAD	New Partnership for Africa's Development
NGO	Non-governmental organisation
NIP	National Indicative Programme
NNCC	Nigeria Niger Chamber of Commerce
NNJC	Nigeria-Niger Joint Commission for Cooperation
OAU	Organization of African Unity
OCDN	Organisation Commune Dahomey Niger
OCHA	The United Nations Office for the Coordination of Human Affairs
OECD	Organisation for Economic Co-operation and Development
OFID	OPEC Fund for International Development
OIC	Organisation of Islamic Co-operation
OMAC	Central African Media Organisation
OMVG	Gambia River Basin Development Organisation
OMVS	Senegal River Basin Development Organisation
ORASECOM	Orange-Senqu River Commission
OSM	Open Street Map
OSS	Sahara and Sahel Observatory
PAGGW	Panafrican Agency of the Great Green Wall
PATC/UEMOA	Community Regional Planning Act
PCTL	Programme for Local Cross-border Co-operation
PDES	Economic and Social Development Plan
PDM	Partnership for Municipal Development
PGIRE	Integrated Water Resources Management and Multiple Uses Development Programme
PRODEBALT	Lake Chad Basin Sustainable Development Programme
PRSP	Poverty Reduction Strategy Paper
RAMSAR	Bureau of the Convention on Wetlands
RBM	Billital Maroobe Network
REC	Regional Economic Community
REP	Regional Economic Programme
REPAC	Network of Parliamentarians of Central Africa
RII	Regional Integration Index

RIP	Regional Indicative Programme
ROPPA	Network of Farmers' Organisations and Agricultural Producers of West Africa
RPCA	Food Crisis Prevention Network
RTA	Regional Trade Agreement
RUF	Revolutionary United Front
SACU	Southern African Customs Union
SADC	Southern African Development Community
SAED	National Society for the Development and Exploitation of Senegal's River Delta Lands, River Valley and the Falémé River
SDC	Swiss Agency for Development and Co-operation
SEM	Single European Market
SFD	Saudi Fund for Development
SITWA	Strengthening the Institutions for Transboundary Water Resources Management in Africa
SKBo	Sikasso, Korhogo, Bobo Dioulasso Triangle
SNA	Social Network Analysis
SRTM	Shuttle Radar Topography Mission
SWAC	Sahel & West Africa Club
TFP	Technical & Financial Partners
TPP	Trans-Pacific Partnership
TRLC	Trans-Saharan Road Liaison Committee
UEMOA	West African Economic and Monetary Union
UN	United Nations
UNCCD	United Nations Convention to Combat Desertification
UNCDF	United Nations Capital Development Fund
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund
UNISS	United Nations Integrated Strategy for the Sahel
UNOWAS	United Nations Office for West Africa and the Sahel
UNOY	United Network of Young Peacebuilders
UNU/WIDER	United Nations University's World Institute for Development Economics Research
USAID	United States Agency for International Development
VBA	Volta Basin Authority
WABI	West African Borders and Integration
WAHO	West African Health Organisation
WALTPS	West Africa Long-Term Perspective Study
WAMA	West African Monetary Agency
WAMI	West African Monetary Institute
WAMIS-NET	Network Information Systems Markets of West Africa
WAMZ	West African Monetary Zone
WFP	World Food Programme
WMO	World Meteorological Organization
WRCC	Water Resource Co-ordination Centre
WRCU	Water Resources Co-ordination Unit
WTO	World Trade Organization
WWF	World Wild Fund
XAF	Central African CFA franc
XOF	West African CFA franc

Summary

West Africa's population continues to grow at one of the fastest rates of any region worldwide, having been forecast to expand from 367 million in 2015 to 538 million by 2030. This growth in population will inevitably increase population density in the region, naturally raising the number of cross-border interactions. These interactions become increasingly imperative if the region is to take advantage of the economic opportunities presented by its growing markets and demographic dividend, but are equally critical in countering the challenges including those posed by armed groups, climate change and illegal trade. Indeed, the Ebola epidemic of 2013–15 illustrated the crucial role of cross-border co operation when faced with challenges that know no boundary constructs.

Cross-border co-operation stands at the crossroads between regional integration and local development; it can be expressed at different levels and it is determined by a multitude of physical, political and social factors. It is therefore affected by a large number of public policies. So how can policies be improved and implemented faster when this responsibility lies with national governments and regional organisations? How can processes at grassroots level be reconciled with the practices of large institutions to inform and shape public policy? How could public policy be adapted to cross border dynamics to create a more conducive environment to regional integration? For the first time, this report provides the analytical foundations to answer these questions.

The report analyses cross-border co-operation in terms of its potential, the current situation in the region and priorities for its development. It then examines how these three elements intersect and illustrates the most effective public policies for enhancing cross-border co-operation. The potential for co-operation is mapped out using an innovative analysis of seven regional indicators that identifies the extent to which social, economic and political disparities are either a source of synergies or act as obstacles for cross-border co-operation. In doing so, policy makers can visualise the overall potential of cross-border co-operation in West Africa for the first time. Both macro and field-level approaches are taken to examine the diversity of organisations and individual actors currently involved in regional integration in West Africa, before further mapping ascertains the regions that would benefit most from greater cross-border co-operation efforts and the organisations best placed to aid these activities.

The field-level case studies examined 137 regional actors involved in cross-border co-operation, and those operating in three micro-regions: the Senegal River valley, Liptako-Gourma, and the Lake Chad basin. These studies used a social network analysis

methodology, which, through several rounds of face-to-face interviews with actors involved in cross-border co-operation both within and outside the region, was able to establish and visually conceptualise the nature of relationships between actors.

Key findings

- The findings bolster the policy argument for cross-border co-operation by showing, through innovative social network analyses, that the concrete potential for co-operation is significant, particularly in the Sahel.
- The report also highlights local specificities, which are often clearly perceived by those in the field, but which are difficult to measure and often not accounted for in policy making.
- This analysis of social networks complements existing approaches to analysing cross-border co-operation, as it represents both the complexity of the social connections that tie policies together and the spatialisation of political networks. It illustrates the nature of the links, the prominence of actors and the architecture of networks, all of which have a direct impact on network behaviours.
- The analysis of power relations within cross-border policy networks shows that regions display significantly different characteristics. West African-wide networks are built around a limited number of actors from diverse backgrounds, who maintain strategic relations with other well-connected actors. In the Senegal River valley and the Lake Chad basin, the balance of power is weighted in favour of government bodies and ad-hoc organisations. This is in sharp contrast to the Liptako-Gourma co-operation network, which is characterised by a more even balance of power relations and a diverse range of government and non-governmental actors. This demonstrates the varying extents to which policy networks are affected by borders.
- The Lagos-Cotonou conurbation, the Dendi, the Hausa country, the border between Togo and Burkina Faso, and the Sikasso-Korhogo-Bobo Dioulasso (SKBo) triangle, are perceived as priority areas for expanding cross-border co-operation by regional policy makers.

Key recommendations

- Social network analysis could contribute to the improvement of regional and national cross border co-operation policies, in particular through the spatialisation of market dynamics and relationships, enabling policy formulation that is adapted to local conditions.

- These "place-based policies" could target the following areas:
  1. Leveraging untapped co-operation potential in areas which have potentially favourable conditions for co-operation but where local actors are not well integrated into networks. This is the case for regional organisations working around the Lake Chad area, the Gambia River and the Mano River basin across the whole of Liberia, Sierra Leone, Côte d'Ivoire and southern Guinea.
  2. Improving co-ordination within networks in regions highlighted as priority zones for cross-border co-operation, but which have poorly developed local and regional networks. Greater co-ordination and sharing of information is needed across national boundaries and between diverse partners. This is particularly true in the Hausa region of northern Nigeria, home to approximately 50 million inhabitants.
  3. Reconcile political and regional investment priorities with the development of regions that have potentially favourable conditions for cross-border co-operation. Such measures would be particularly beneficial in southern Guinea, the border between Liberia and Sierra Leone, and western Côte d'Ivoire where the resources of local authorities are less than the regional average.
- The findings of the report illustrate the value added of cross-border co-operation. Already included in the activities of UEMOA's Council of Local Governments, the ECOWAS Cross Border Co-operation Programme and the African Union Border Programme, cross border co-operation should be integrated within other sectoral policies.
- Special efforts should be made to integrate the directives of the Niamey Convention on cross border co-operation into national law and to dedicate funds to cross-border co-operation specifically.
- The transfer of greater resources and skills to decentralised organisations and a greater role for civil society in cross-border co-operation activities would help improve co-ordination between national and local governments.

Part I Towards a new approach to cross-border co-operation

Chapter 1
Cross-border co-operation in West Africa: Bridging the gap between research and policy 27

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A relational approach to cross-border co-operation in West Africa 37

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Chapter 1

Cross-border co-operation in West Africa: Bridging the gap between research and policy

The inevitable densification of regional and border settlement 28
Trend-based scenarios and policies 29
Reconciling the grass roots with the corridors of power 34

Chapter 1 starts by looking at West Africa's future, where rapid population growth is expected to continue over the next two generations. Settlement basins will continue to densify and expand, reaching across borders, and there will be more and larger cities. As a result, cross-border interaction will increase naturally regardless of the level of support from national and regional policy. The chapter will then look briefly at the cross-border dynamics developed by local actors which share a number of common factors, namely: bypassing institutional initiatives and dealing with the abuse of power, absence or shortcomings of those in charge of applying regulatory controls. It lastly addresses the potential of the paper's research and the advantage of actively narrowing the gap between bottom-up regionalisation dynamics and top-down regionalism, while considering the time-lags frequently experienced in improving public policy.

Key messages

- The need for cross-border co-operation will increase substantially as the strong forecast population growth for West Africa will encourage densification of regional and border settlements.
- Cross-border co-operation is subject to a multitude of physical, political and social factors from local to national levels and is therefore influenced by public policies relating to both regional integration and local development.
- Convergence of macroeconomic policies between West African nations could help to reduce the impact of external shocks and reduce contraband trade that benefits from customs and legislative differentials.

THE INEVITABLE DENSIFICATION OF REGIONAL AND BORDER SETTLEMENT

In 1998, the *West Africa Long-Term Perspective Study,* also known as WALTPS (Cour and Snrech, 1998), highlighted the links between demographic growth, urban growth and market economics. The "market attractiveness" indicator it used revealed the rapid expansion of spaces connected to urban markets, fuelled by population growth between 1960 and 2020 (Map 1.1). Based on the weight of and distance between the different markets, the costs linked to covering these distances and local farming conditions, the indicator used in the study confirmed the region's economic integration. Over time, disjointed market spaces connect to one another to form a cross-border continuum fed by and feeding into the growth of regional trade and social and economic networks. According to WALTPS, by 2020 half of agrifood trade will consist of regional produce. More recent research supports this view, showing that the agglomerations that drive cross-border socio-economic spaces are more numerous and populous (OECD/SWAC, 2013).

The West African population living in the countries of the Economic Community of West African States (ECOWAS [Cabo Verde, Benin, Burkina Faso, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali,

Niger, Nigeria, Senegal, Sierra Leone, Togo]), Cameroon, Mauritania and Chad will continue to see strong growth. The population is forecast to rise from 367 million in 2015 to 538 million in 2030; i.e. 170 million more people in 15 years. It is therefore more than likely that regional population distribution will continue to densify, including near borders. The aggregate population of Gaya (Niger) and Malanville (Benin), separated by 7 km, could grow from 95 000 to 130 000 between 2015 and 2030, for example. Katsina (Nigeria) could see its population grow from 330 000 to 530 000, while less than 100 km away on the other side of the border, the town of Maradi (Niger) could grow from 200 000 to 300 000 (Moriconi-Ebrard, Harre and Heinrigs, 2016). In the coming decades, an ever greater number of communities will inhabit borderlands that are ever more connected to the rest of the regional space by an ever denser settlement continuum.

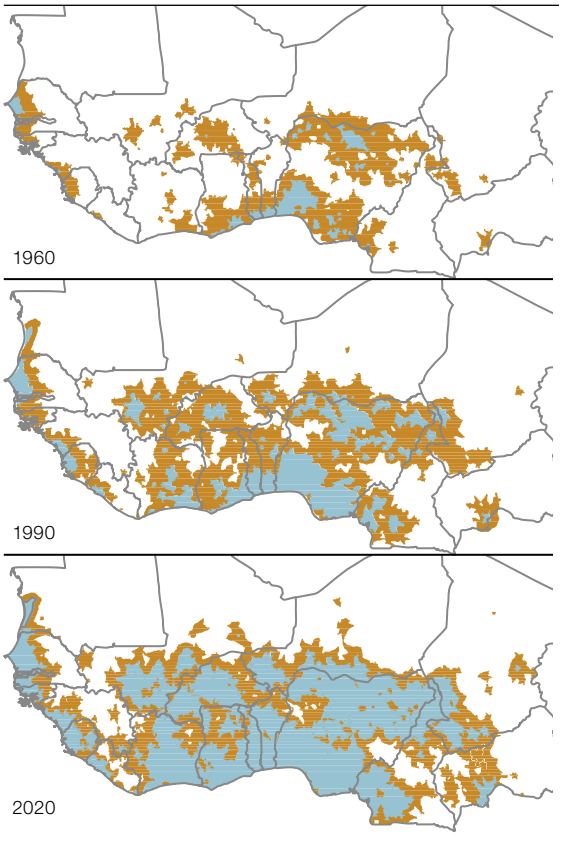
TREND-BASED SCENARIOS AND POLICIES

The importance of cross-border dynamics which are largely focused on, but not limited to, trade and the movement of people, should increase. Without changes in the political landscape, these dynamics will fall into three categories: "edge effects" of the border linked to contraband, re-export flows and transit (Chapter 3); potential cross-border complementarities (Chapter 5); and the local cross-border initiatives that manage to gain traction despite the lack of suitable legal frameworks (Chapter 6). These three kinds of dynamic are not mutually exclusive. In particular, the first two generally arise in tandem; the latter usually includes activities or investments relating to trade growth.

The first scenario is the one that has received the most attention. It is not specific to Africa and even used to predominate in Europe. Before the inception and escalation of the European integration process, the economies of many border locations depended, and still depend, on the tax differentials for certain products created by national borders, on currency arbitrage or on contraband. In West Africa, it is highly probable that, even if the convergence of macroeconomic policies in different countries makes great strides in the next decades, trade in contraband will persist and will continue to sustain cross-border dynamics. However, this raises the question of how far these activities can constitute a vector for lasting integration. It is tempting to see the development of functional West African regions as a kind of informal, bottom-up integration that would offset the shortcomings of the top-down integration practised by states and intergovernmental organisations. Most transnational flows are extremely elastic in time and space, however, so their contribution to local development is very uncertain.

One example of this is the impact on Benin's economy of the economic and financial crisis

Map 1.1
Evolution of market attractiveness, 1960–2020



Note: The blue areas are closely connected to the markets, the yellow areas moderately connected and the white areas very poorly connected.

Source: Cour and Snrech 1998

that hit Nigeria in late 2015, and the sharp fall in global oil prices. The naïra's fall against the CFA franc encouraged the Beninese to buy more from Nigeria and reduced Nigerians' purchasing power in Benin. As a result, the oil companies based in Benin could not sell petrol, as they could not compete with the prices of their larger neighbour. The Cotonou market lost a large number of customers, as did re-export businesses (especially those selling automobiles) whose major buyers were Nigerians. Overall, economic activity declined, as did the state's tax revenues, to say nothing of inflation. On the Cotonou markets, prices for some foodstuffs doubled, as traders attempted to make up for declining volumes by raising prices.

If monetary and commercial divergences, especially between Nigeria and its neighbours, endure or worsen in the years and decades to come, these dynamics will continue and will increase in volume without losing their volatility. Conversely, if policy convergence increases, the relative share of contraband flows in cross-border trade could fall. For now, two factors make continuance of the status quo more likely:

- The convergence of budgetary and fiscal policy is making only very slow progress. In other words, the road to a single currency for ECOWAS remains long. As for the convergence of trade policy, it would be worth assessing the implementation of the common external tariff (since January 2015). The free-trade area (FTA) agreed in 1979 remains far from realisation (Box 1.2)
- Some countries through which regional flows transit, as well as a large number of powerful economic operators, have a vested interest in the maintenance of tax and regulatory disparities (Chapter 3).

The second scenario is based on the complementarities in the regional market, between production and consumption basins. Growth in population, especially in cities, and in the share of the population not producing foodstuffs automatically increases the size of the market, including transnational trade in local produce. This includes considerable volumes of maize produced in the Sudan-Sahel region and largely consumed in coastal conurbations, palm oil traded between the forests of Guinea and the rest of the region, onions exported from Niger to Abidjan, fish from the Niger River delta sold all the way to the Gulf of Guinea, and livestock from the Sahel supplying towns and cities along the coast.

These regional flows rely on and stimulate vibrant cross-border economies, such as Ouangolodougou, in northern Côte d'Ivoire, which had a population of 23 800 in 2010 according to *Africapolis* (Moriconi-Ebrard,

Box 1.1
The regional integration index (RII) for ECOWAS countries, Mauritania, Chad and Cameroon

This index was introduced in 2016 by the African Union (AU), African Development Bank (AfDB) and the United Nations Economic Commission for Africa (UNECA). It is based on the existence of shared laws and not on an evaluation of their application, which can be problematic in some fields, such as the free movement of people within ECOWAS which may be guaranteed, but in practice generates a range of constraints. This indicator can therefore be considered to be overvalued in the light of the situation on the ground. It does reveal, however, that inside ECOWAS, free movement is further advanced in law than in ECCAS. At the other end of the scale, the "trade integration" indicator, which is based on official intra-regional trade figures, is without any doubt underestimated because of the magnitude of unrecorded trade flows. The same is true of "productive integration", an indicator mainly based on the measurement of intra-community trade in intermediary goods. As for indicators concerning financial and macroeconomic integration and inclusion in regional infrastructure, the RII scores can be considered realistic since they are based on such tangible factors as currency convertibility, inflation rates and the existence of communication networks. Furthermore, the RII is currently the only tool for measuring trends and benchmarking integration in the region, though its results are best supported with qualitative observations.

Harre and Heinrigs, 2016). Linked to the markets of Sikasso in Mali and Niagoloko in Burkina Faso, it is a centre for trade in local produce and products imported from the global market. Similar situations are seen in the border markets dotted along some particularly dynamic stretches of West African borders (OECD/SWAC, 2014), such as Diaobé in Senegal, Sinkansé in Burkina Faso and Malanville in Benin.

The problem is not so much that policies prevent trade growth. Quite the reverse: the countries of West Africa have officially abolished customs duties and barriers to trade in produce from fishing, farming of land and livestock, and handicrafts. ECOWAS is in fact exemplary in this field (Box 1.1). The problem lies in the failure to apply policies for the free movement of goods and people. To quote the United

Table 1.1
Regional integration index by country

High performing country [a]
Average performing country [b]
Poor performing country [c]

	Overall index	Trade integration	Regional infrastructure	Productive integration	Free movement of people	Financial and macroeconomic integration
Economic Community of West African States (ECOWAS)						
Côte d'Ivoire	0.675	0.986	0.370	0.280	0.800	0.941
Togo	0.671	0.466	0.646	0.494	0.800	0.947
Senegal	0.628	0.648	0.338	0.383	0.800	0.968
Benin	0.548	0.358	0.383	0.279	0.800	0.920
Niger	0.556	0.447	0.352	0.182	0.800	1.000
Ghana	0.546	0.604	0.603	0.470	0.800	0.253
Burkina Faso	0.537	0.425	0.404	0.083	0.800	0.971
Mali	0.525	0.485	0.271	0.119	0.800	0.950
Nigeria	0.501	1.000	0.385	0.168	0.800	0.153
Guinea-Bissau	0.500	0.413	0.339	0.000	0.800	0.950
Gambia	0.447	0.005	0.550	0.517	0.800	0.362
Sierra Leone	0.404	0.519	0.315	0.353	0.800	0.033
Liberia	0.357	0.000	0.331	0.376	0.800	0.277
Guinea	0.301	0.110	0.430	0.167	0.800	0.000
Economic Community of Central African States (ECCAS)						
Cameroon	0.664	0.980	0.482	0.439	0.450	0.966
Chad	0.512	0.747	0.196	0.190	0.450	0.978
Arab Maghreb Union (AMU)						
Mauritania	0.310	0.000	0.434	0.312	0.667	0.138

The maximum score is 1.000.
a) The score is higher than the average for Regional Economic Communities (REC) countries; b) The score is within the average for REC countries;
c) The score is lower than the average for REC countries

Source: African Union/African Development Bank Group/United Nations 2016

Nations and UNECA (United Nations/UNECA/ECOWAS, 2015):

> Certain countries require certificates of origin for agricultural products, which is inconsistent with ECOWAS texts. Beninese exporters have to request a special authorisation from Abuja, as Nigeria is uncertain about products imported from Benin.
>
> […]
>
> Groundnuts produced in Senegal are not accepted in Guinea and bananas from Guinea do not officially enter Senegal.

These difficulties, which are particularly evident when two countries do not belong to the same monetary zone, explain why a major proportion of regional trade in products that are legally exempt from tax and point-of-origin inspections in fact amounts to a form of contraband. The solution is not getting around current policy, but adapting as well as possible to the abusive practices of government representatives or the latters' failure to abide by their community commitments.

Will these practices last? In order to obtain a negative answer, all states concerned would have to be persuaded that they had more to gain, including financially, by eliminating customs barriers, than they stand to lose. But the facts testify to certain scepticism, especially since the compensation mechanism set up in the FTA has not worked well (Box 1.2). Whatever the case, they act as a barrier to the development of formal cross-border co-operation. Well-equipped markets and border storage facilities are certainly useful investments that are appreciated by market actors; they are also the sites of the controls, levies and predation that these same actors are keen to avoid.

The third scenario concerns initiatives for structured cross-border co-operation – which remain far too few – that involve local authorities or associations on either side of a border. Recent examples include the Civic Governance Programme for territories in the Senegal River basin, which has been rolled out in five regions across three countries (Mauritania, Mali and Senegal). The programme is sponsored by the Group for Rural Development Research and Projects (GRDR) and addresses local governance challenges in each of the three border zones; local economic development and genuine cross-border issues, including conflict prevention, cross-border markets and the management of shared resources. The Initiative for the Integration of Regional Infrastructure in the Sahel (IIRSAHEL) within the framework of the Local Cross-Border Initiative Programme (LOBI) of the West African Economic and Monetary Union (UEMOA) is another example. It involves nine local border authorities in Burkina Faso, Niger and Mali. With support from UEMOA, Luxembourg's development co-operation, and the UN's Capital Development Fund, this cross-border zone is building shared infrastructure such as abattoirs, livestock trails and vaccination centres.

Box 1.2
ECOWAS free-trade area

The creation of the FTA within ECOWAS began in 1979 with the adoption of the principle of the complete removal of tariffs on local products, traditional artworks and finished goods. At the same time as the FTA, a mechanism was created to compensate member states for revenues lost as a result of the elimination of tariffs on intra-community trade. The term of the compensatory financial arrangements was set at four years, beginning on 1 January 2004. The amounts to be compensated depended on the customs revenues lost by the member state on imported industrial products of approved origin. They are calculated as follows: 100% of losses incurred in 2004; 80% of losses incurred in 2005; 60% of losses incurred in 2006; 30% of losses incurred in 2007; and 0% of depreciation as of 1 January 2008. The mechanism did not operate flawlessly; however, since the budget that was to fund the compensation depended on payment of member states' contributions.

Source: United Nations/UNECA/ECOWAS 2015

These initiatives mobilise a wide range of people, including civil servants co-operating in the common interest. The problem lies in the shortcomings of the legal frameworks: how to create a cross-border entity to manage a shared project; how to manage that shared project under three different jurisdictions; and how to promote co-operation between local authorities from different countries. One of the most frequent responses is to base a border initiative on one side of the border only. This is often the case for projects to build or renovate livestock markets, designed with a local border authority in order to attract more livestock. It is a solution that can be applied in several fields, including education, where border schools are likely to attract pupils from the other side of the border.

These initiatives generally arise out of assessments of cross-border potential and, often, out of informal discussions with actors from a neighbouring country. Some are sponsored by regional organisations (UEMOA, Permanent Inter-State Committee for Drought Control in the Sahel [CILSS]) looking for effective ways to boost regional co-operation at grassroots level while bypassing the complexities of an institutional cross-border set-up. There are several examples of successful "cross-border agreements" which can be seen as pilot projects that could inspire similar schemes. The province of Kossi in Burkina Faso, for example, and the district of Tomina in Mali have signed an agreement concerning the local management of natural resources, with the approval of their respective governments. This kind of innovative experimentation should become more widespread, as cross-border co-operation is gaining traction in political discourse.

The groundwork for this to happen exists in the form of the African Union Convention on Cross-Border Co-operation, known as the Niamey Convention, adopted in June 2014. By mid-2016, it had been signed by nine countries, seven of which are covered in this study (Benin, Chad, Guinea-Bissau, Mauritania, Niger, Sierra Leone, Togo); Niger alone has ratified it. It will come into force after ratification by 15 countries, paving the way for the introduction of a range of operational instruments.

However, once a positive legal and regulatory environment has been created there must be sufficient decentralisation to allow people to design and deploy local cross-border co-operation initiatives. In fact, the role of local government in regional construction is being given increasing prominence. In West Africa, the most striking example of this recognition was the creation in 2011 of the Council of Local Governments (*Conseil des Collectivités Territoriales* [CCT]) by an Additional Act to the UEMOA treaty. The decision proceeded from two observations: first, out of a little over 2 000 local authorities in UEMOA countries, almost half govern border regions. Second, all countries in the Union are, to varying degrees, involved in some form of decentralisation process (Chapter 8). This is also true of the other ECOWAS countries, Mauritania, Cameroon and Chad. From this point of view, the situation is very mixed.

While most countries now have constitutional and legislative frameworks that are, on the whole, favourable to decentralisation, and local democracy seems to be relatively well established in a large number of these countries, there remain two structural weaknesses to overcome: the low level of financial resources, and the weak institutional capacity of local authorities. It is worth mentioning two specific examples. First, that of the Federal Republic of Nigeria, whose 36 states seem to be far better provided for in terms of financial resources than the local authorities in other countries of the region. It might, indeed, be appropriate not to use Nigeria's federal states as an example, but their constituent Local Government Areas instead, which have more characteristics in common with the local authorities of other countries. The second example concerns Guinea-Bissau, Guinea, Liberia and Togo, where the transfer of state resources from central government to local authorities, direct resources and the performance of municipalities are particularly low by the standards of the region. The first three countries also score very low on the regional integration index (Box 1.1), which gives them a double handicap in terms of cross-border co-operation.

RECONCILING THE GRASS ROOTS WITH THE CORRIDORS OF POWER

Cross-border co-operation stands at the crossroads between regional integration and local development; it can be expressed at different levels and it is determined by a multitude of physical, political and social factors. It is therefore affected by a large number of public policies (Chapter 2). The socio-economic integration dynamics discussed above share the same lack of congruence with some of these policies, whether that takes the form of circumventing them, accommodating the parties responsible for applying them, or making up for their absence or shortcomings. Invariably, bottom-up dynamics adapt and will continue to adapt to the changing conditions in the international environment and to the different policies implemented from the top down.

There is the issue, however, of improving these policies and implementing them faster, and this responsibility lies with national governments and regional organisations. There is much to be done and processes are time-consuming in a field in which transnational and cross-border dynamics are rapidly gaining in intensity, buoyed by fast population growth. How, under these circumstances, can processes at grassroots level be reconciled with the institutional practices decreed from the top in order to inform and shape public policy? How could public policy adapt in turn to these dynamics in order to establish an environment more conducive to cross-border co-operation that builds a lasting platform for regional integration? The research findings presented here could provide the beginnings of answers to these questions.

First, the findings bolster the policy argument for cross-border co-operation by showing, through innovative arguments, that the concrete potential for co-operation is significant, but varies widely between regions (Chapter 5). The first condition necessary for the viability of a policy lies in the unanimous conviction that it will bring added value to a majority of stakeholders. This does not yet seem to be the case with regard to regional integration, although it is right to recognise and applaud the progress made in that field. More time should therefore be invested at this stage to demonstrate the usefulness and positive impacts of cross-border co-operation.

It is worth discussing the potential for cross-border co-operation as summarised in Map 5.19 with the sole representative body of local politicians in the regional integration process, namely the UEMOA Council of Local Governments. It would also be worth comparing it with projects supported by the CCT/UEMOA, the ECOWAS Cross-Border Co-operation Programme (CBCP) and the African Union Border Programme. These debates could generate additional policy stimulus for the promotion of borders in West and Central Africa.

Second, this report will help to spotlight local specificities, which are often clearly perceived by those in the field, but which are hard to measure and therefore tend not to be taken into account by policy makers. Practitioners could use the analysis of social networks (Chapter 4) to refine the design, implementation and assessment of cross-border and border initiatives, as well as the "population potential" of border markets (Chapter 5). These tools could also make a useful contribution to refining regional and national policies for the promotion of cross-border co-operation.

By examining social actors through their connections, the relational approach adopted in the report shines a realistic light on flows of capital, information and resources, which transcend social categories and groups such as communities, villages, political parties and social classes. Although the fundamental concepts developed by the analysis of social networks such as centrality, embeddedness and brokerage are increasingly used to describe and model economic, political and social structures, they remain rare in the field of development.

The analysis of social networks is a useful adjunct to other approaches, helping to represent both the complexity of the social connections that tie policies together and the spatialisation of political networks, particularly beyond national borders. It illustrates the nature of the links, the prominence of some actors and the architecture of a network, which has a direct impact on individual behaviour. Decentralised structures, for example, are particularly well placed to deal with the uncertainties which policies are exposed to on a daily basis.

Beyond the academic field, network analysis also acts as a driver of empowerment for local communities and non-governmental organisations (NGOs), as well as an operationalisation tool for international organisations and governments. One of the most visible applications of this approach to cross-border co-operation is that it allows the structural position of policies and organisations to be identified, mapped and analysed with considerable precision. The ability to capture both the components and the links in a social group helps to reveal actors that are particularly well connected, and those that are not. Those that are well connected are thoroughly incorporated into their groups and enjoy diverse external contacts. Conversely, those that are relatively unincorporated, with homogenous external contacts and only very little social capital of any potential benefit, can find themselves marginalised within cross-border political networks.

The results of the work confirm that social network analysis provides a promising methodology for understanding the complexity of social ties that bring together actors working on regional integration, complementing more qualitative forms of analysis. Finally, it also reminds readers that border regions can contribute substantially to the process of regional integration, provided that regional policies are adapted to encourage investment in the most pertinent issues for those areas.

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Chapter 2

A relational approach to cross-border co-operation in West Africa

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Chapter 2 – a relational approach to cross-border co-operation in West Africa – demonstrates the importance of cross-border co-operation and public policy for regional integration in West Africa and the different forms each of the afore-mentioned concepts can take. It examines equally the three dimensions of cross-border co-operation and public policy, identifying current developments, potential areas for increased activity and political visions for its future progression. Gaps are then identified between these dimensions, suggesting the need for more relational approaches to cross-border co-operation that offer more tailored policies. The chapter then concludes with a brief description of institutional models that have shown to be effective in aiding closer regional integration.

Key messages

- The strong spatial heterogeneity of the North and West African border regions impacts their ability to develop cross-border initiatives, with some regions potentially more favourable to cross-border co-operation than others.
- While there are no significant differences in the characteristics of regional cross-border co-operation networks, there are significant differences in power relations between micro-regions due to power networks being built around a limited number of actors with varied backgrounds who maintain strategic relations with other well connected actors.
- Cross-border co-operation should build on the great diversity of regions in West Africa and projects and institutional structures should provide public goods adapted to the specific socio economic challenges of each region.
- Whether African countries should prioritise an integration model based on the reinforcement of institutions or a model focussing on interactions between socio-economic actors is still debated.

CO-OPERATION AND PUBLIC POLICIES

West Africa is subdivided by 32000 kilometres of land borders which, if placed end to end, would constitute four-fifths of the 40000 km circumference of the Earth. For a long time the existence of these territorial divisions, most of which are the legacy of colonisation, has been considered an obstacle to regional integration. West African borders are often criticised for the costs and time-delays related to border-crossing, as well as for obstructing the movement of traders and individuals, and encouraging corruption. In many areas of West Africa, borders are perceived as artificial barriers between local communities, whose informal dynamics could be said to demonstrate a desire to do away with the legacy of colonial partitioning.

This report adopts a different approach to West African borders. It uses a ground-breaking study of the co-operation potential of West African regions, the structure of cross-border policy networks, and the spatial vision of political actors to analyse the contribution of border areas to the regional integration process. The geographic and relational approach of the report is different from the more commonplace analyses of West Africa in that, where many studies describe the legislative and institutional principles of co-operation, the geographic dimension of the spaces and actors involved

in cross-border co-operation still remain unknown for the most part. In fact, cross-border co-operation has a threefold impact on the regional integration process.

First, the geography of border areas is a key aspect of place-based policies, which explicitly take into account the spatial dimension of development (AfDB/OECD/UNDP, 2015). Unlike policies which promote an economic sector or a certain category of the population, the rationale underlying place-based policies is that the cornerstone for socio-economic development is the indigenous potential of local actors and institutions. Consequently, these policies encourage investments which are adapted to the challenges facing each region (OECD/SWAC, 2009; Pike et al., 2010). The policies for urbanised and industrialised border areas such as the Gulf of Guinea, for example, should differ from the policies for a rural area, such as Liptako-Gourma where the local economy centres on rearing livestock.

Second, the spatial approach to cross-border co-operation developed here represents a continuation of the initiatives designed to encourage grassroots regional integration in West Africa. Indeed, for over a decade now, the still largely untapped potential and diversity of border areas has not gone unnoticed by states and by regional organisations. Since the government of Mali introduced the "border country" concept in 2002, there has been a marked increase in the number of initiatives designed to refocus the interest of cross-border co-operation on the populations that live along state peripheries. The West African Borders and Integration (WABI) Network, launched in 2003 by Mali's National Directorate for Borders, Enda Diapol and the SWAC/OECD Secretariat; the Economic Community of West African States' (ECOWAS) Cross-Border Initiatives Programme (CIP) started in 2004; and the African Union Border Programme (AUBP) that began in 2007, are part

Box 2.1
ECOWAS Cross-Border Co-operation Programme

Adopted in 2005, the purpose of the CBCP (formerly the CIP) is to accelerate regional integration by promoting locally-initiated cross-border projects. The Programme initially relied on four pilot operations co-ordinated by field operators with longstanding involvement in cross-border development: the Municipal Development Partnership for the SKBo zone, Enda Diapol for southern Senegambia, the Group for Rural Development Research and Projects (GRDR) for the Karakoro basin, the Famine Early Warning Systems Network (FEWS NET) for the Nigeria-Niger Joint Commission, and SWAC/OECD for the Kano-Katsina-Maradi area.

The strength of the WABI Network created from this programme lies in the complementarity of its members, political lobbying by states, dialogue between operators and institutions, feedback on experiences in the South and the north, and the strong involvement of populations. Burkina Faso, Gambia, Guinea-Bissau, Mali, Mauritania, Niger, Nigeria and Senegal officially support these pilot programmes. This momentum has received support from regional institutions, particularly ECOWAS, which considers that the free movement of persons is a basic right for its member state nationals who can travel across the Community without a visa, and live and work where they choose in accordance with national legislations.

Implementation of the ECOWAS Protocol on Free Movement of Persons, Residence, and Establishment, adopted in 1979, nonetheless remains difficult today. These difficulties are reflected in the delays in introducing the common Travel Certificate, ongoing protectionist measures by member states, the maintenance of border controls and police checks, and the deterioration of infrastructure. Furthermore, inappropriate legislation and insufficient funding continue to undermine the establishment of cross-border development projects. The principle of subsidiarity that would enable the implementation of border co-operation at the local level is still not yet sufficiently developed.

of a movement that encourages cross-border co-operation between countries, regions and communities while promoting the needs of border populations (Boxes 2.1 and 2.2). Their work in several pilot regions has revealed the diverse range of structures involved, the often diverging ways in which they operate and the need to incorporate several levels of governance into the co-ordination of cross-border projects (Enda Diapol, 2007; SWAC/OECD, 2007; AEBR, 2012). These initiatives also highlight the lack of national legislation to enable the development of common cross-border programmes, resulting primarily in funding problems for these programmes.

Finally, cross-border dynamics are a crucial element of strategies seeking to foster political stability in the West African region. Indeed, against the backdrop of increased trafficking and transnational terrorism, cross-border dynamics were incorporated into numerous organisations' security strategies, including those of the European Union (EU) in 2011, the United Nations (UN) in 2013, the African Union (AU) and ECOWAS in 2014, and the West African Economic and Monetary Union (UEMOA) in 2015, as well national and partner states. These strategies, which involve a mix of governance, security and development, attempt to counter the development of trafficking and terrorism, whose perpetrators take advantage of the great permeability of borders to smuggle weapons, drugs and migrants, and to carry out attacks on civilians and government forces in neighbouring countries. The only way to resolve these cross-border issues is through a regional institutional response based on closer co-operation between West African states, North African states and their international allies.

Box 2.2
African Union Border Programme

Created in 2007, the vision of the AUBP is for a united and integrated Africa with peaceful, open and prosperous borders, while protecting and promoting the rights and interests of border populations. The project, financed by the German Agency for International Co-operation (GIZ) between 2008 and 2015, facilitates border delimitation and demarcation operations for African partner countries. It also develops effective operational support for local, regional and institutional cross-border projects, including advancing human capacities and improving organisational design.

The adoption of the 2014 Niamey Convention on cross-border co-operation by the Assembly of Heads of State and Government of the AU, was an important step in recognising the need for appropriate legislation for the development of cross-border activities. At the more local level, the AUBP is setting up joint border commissions such as the South Sudan-Sudan Joint Border Commission, which was started in 2012. The African Borderlands Research Network (ABORNE) and AUBP have signed a memorandum of understanding covering the sharing of information and expertise on border delimitation in Africa.

Independence has led to numerous ongoing border disputes between African states. The principle of the respect of borders, which was enshrined at the Summit of Heads of State and Government of the Organization of African Unity (OAU) in Cairo in July 1964 as a means of political stabilisation, has not prevented territorial claims and protracted border disputes. Despite significant progress in border delimitation and demarcation, AUBP still faces the challenge of keeping the peace against a backdrop of increased trafficking and transnational terrorism. The transcription into national legislation of the directives of the Niamey Convention on cross-border co-operation is also a challenge for regional organisations and states.

THREE DIMENSIONS OF CROSS-BORDER CO-OPERATION

The geography of West African cross-border co-operation is approached through three key dimensions: the potential of cross-border co-operation between regions, the current structure of the network of cross-border public policies, and policy makers' vision of cross-border co-operation.

Potential: Where could cross-border co-operation be developed?

The report uses a mapping analysis of seven regional indicators to analyse the extent to which social, economic and political disparities are either a source of synergies for cross-border co-operation or an obstacle to institutional cross-border initiatives. The report reveals that the strong spatial heterogeneity of the regions divided by land borders in West and North Africa affects their ability to develop cross-border initiatives (Map 2.1). It also shows that some regions are potentially more favourable to cross-border co-operation than others.

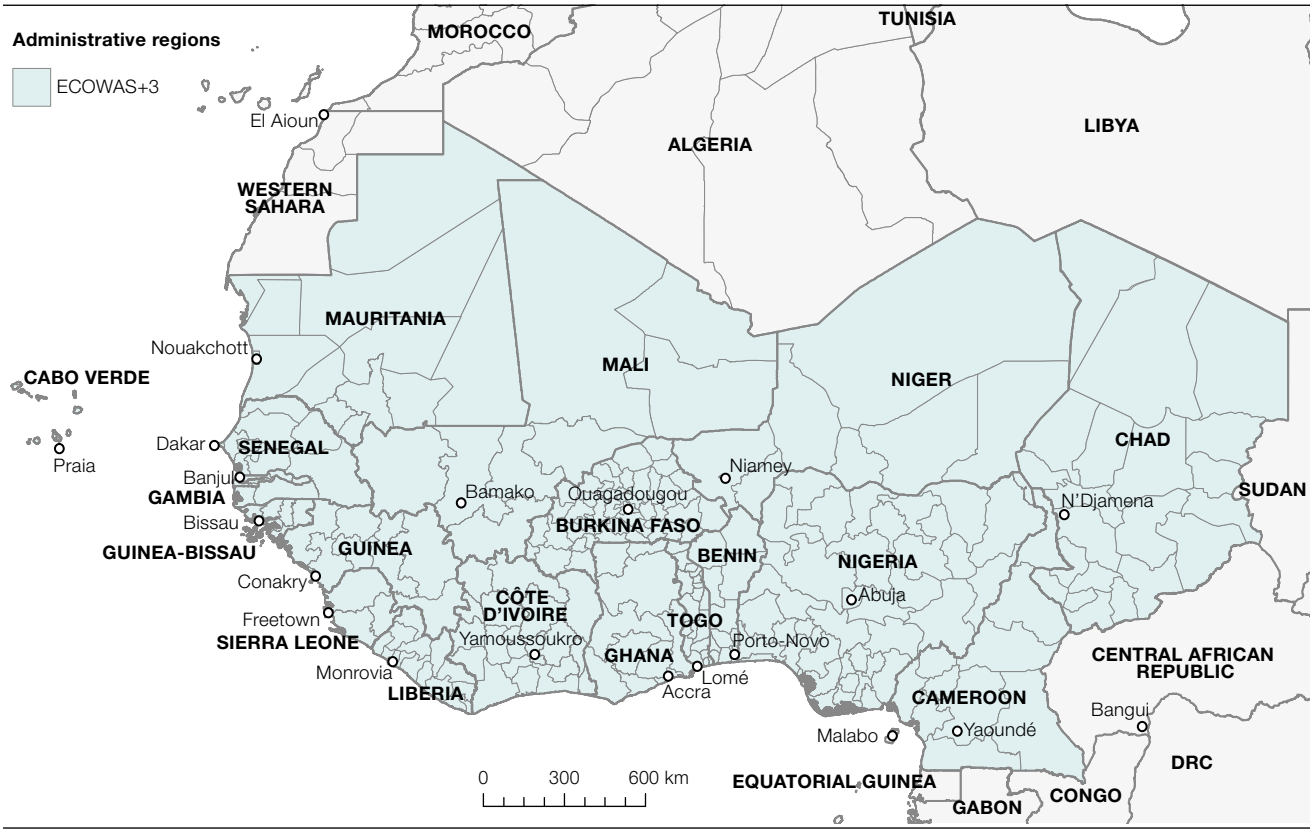
- Generally speaking, the Sahel-Saharan areas have the least co-operation potential, due mainly to low levels of settlement and agricultural resources, and to political instability, especially in Mali since the early 2000s following the arrival of religious extremists and claims for independence.
- On the whole, the Sahel is characterised by high co-operation potential, as may be seen in southern Senegambia, on the borders of Burkina Faso, and between Niger and Nigeria. These regions, with their numerous border markets, have high population potential, and share water, agricultural and pastoral resources which encourage the creation of cross-border production and trade networks. In addition, there is little language fragmentation, they are relatively unaffected by political instability and the poverty gaps are within the average. From an institutional viewpoint, the presence of borders that are recognised by states and which are demarcated on the ground, facilitate cross-border co-operation in the area.
- The border regions in the Gulf of Guinea are more heterogeneous. Whereas many border segments in Sierra Leone, Guinea and Liberia seem to discourage cross-border co-operation due to the low density of border markets, the uncertain status of their borders and the relative lack of shared resources, some regions have very high values such as the area between Ghana, Togo and Benin. From this point of view, the Accra-Lagos conurbation seems to be particularly conducive to cross-border co-operation.

Existing situation: Where is cross-border co-operation being developed?

The report uses a case study of organisations involved in cross-border co-operation and a pioneering analysis of the social networks connecting policy makers to examine how cross-border co-operation really operates. This analysis of the structure of policy networks helps to identify the actors involved in cross-border co-operation, to map their formal and informal relationships, and to assess the impact of national borders on exchanges of information and authority. Case studies were carried out on 137 actors involved in cross-border co-operation at the level of West Africa as a whole, and in three micro-regions[1]: the Senegal River valley, Liptako-Gourma, and the Lake Chad basin (Map 2.2). These studies used a specific methodology, called social network analysis (SNA), which focuses on the links maintained between actors in a specific area of activity. Several rounds of face-to-face interviews with actors involved in cross-border co-operation helped create an original map of cross-border networks.

Analysis reveals that there is no significant difference in the characteristics of policy networks focused on cross-border co-operation at the different levels in question. Variations may be observed at the local level, especially in the Lake Chad basin, but on the whole, the way information is exchanged at the regional level resembles that used by the local actors in the three micro-regions studied. The low-density and relatively decentralised structure of the networks seems suited to the circulation of information between partners of very varied

Map 2.1
Administrative regions



status and responsibility. The networks contain many brokers who are responsible for connecting subgroups which have very little direct contact, such as the representatives of livestock farmers and the representatives of government and intergovernmental agencies in Liptako-Gourma, for example.

The analysis of the power relations within cross-border policy networks, however, shows significant differences between regions. At the level of West Africa, the network seems to be built around a limited number of actors, from very varied backgrounds, who maintain strategic relations with other well-connected actors. In the Senegal River valley and the Lake Chad basin, the balance of power is clearly weighted in favour of government bodies and ad hoc organisations like the Senegal River Basin Development Organisation (OMVS) and the Lake Chad Basin Commission (LCBC), for whom most of the key actors work. This situation is in sharp contrast to the Liptako-Gourma co-operation network, which is characterised by a more even balance of power relations and by a large diversity of government and non-governmental organisations.

The analysis demonstrates that policy networks are affected to varying extents by borders. At the regional level, the networks still seem to be firmly established at a national basis, especially between actors located in Africa and Europe. This phenomenon is less visible in the three micro-regions considered in this report, where institutional initiatives designed to encourage the emergence of cross-border regions incite actors to communicate more with partners in other countries.

Political vision: Where should cross-border co-operation be developed?

Based on innovative analysis of the spatial perceptions of players involved in cross-border co-operation, the report identifies three crucial elements for cross-border governance in the

Map 2.2
Zones covered by the three case studies (micro-regions)



region: the presence of regions considered as a priority for cross-border co-operation, the existence of areas where strategic decision making takes place, and the identification of actors who could be more involved in cross-border co-operation.

Analysis of the mental maps drawn by the 137 participants shows that the Lagos-Cotonou conurbation, the Dendi, the Hausa country, the border between Togo and Burkina Faso, and the Sikasso-Korhogo-Bobo Dioulasso (SKBo) triangle, are perceived as priority areas for cross-border co-operation by regional policy makers. At the local level, the priority area for cross-border co-operation is significantly smaller than that which is recognised by sectoral organisations. In the Senegal valley, this space follows the river valley and the western border of Mali, while in Liptako-Gourma, it concerns the tripoint between Niger, Burkina Faso and Mali. In the Lake Chad basin, the priority area recognised by actors is the triangle between N'Djamena, Maiduguri and Diffa.

Though often located in the heart of border areas, small and medium-sized West African cities are not centres of strategic decision making, as the policies related to co-operation are decided upon in the regional capitals. Abuja, Ouagadougou and Dakar are seen as particularly important at the regional level, while the capitals of the states which are members of sectoral organisations (OMVS, the Integrated Development Authority of the Liptako-Gourma Region [ALG], LCBC) and, in particular Bamako, are frequently mentioned at the local level. Only Liptako-Gourma has a relatively dense network of small and medium-sized decision making centres, which could play a role in local cross-border governance provided that local and regional authorities are increasingly involved in cross-border co-operation.

The analysis shows that subnational authorities could play a greater role in cross-border dynamics, insofar as the current decentralisation movement is accompanied by a transfer of resources and skills. State investment in the

region is also perceived as inadequate both as regards the financing of regional organisations and the implementation of regional border policies. The private sector is another actor whose involvement in cross-border co-operation is still limited, despite its recognised contribution to food security strategies. Finally, civil society could play a leading role in regional policies, possibly through the "cross-border area" concept.

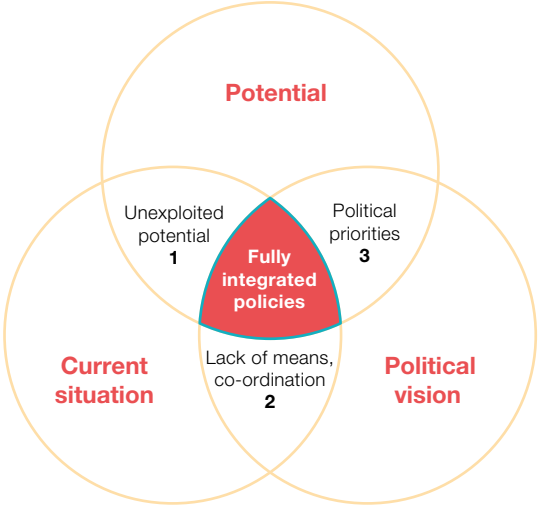
THREE TYPES OF PUBLIC POLICY

The report analyses cross-border co-operation in terms of its potential, the current situation in the region and priorities for its development before examining how they intersect (Figure 2.1) and illustrating different types of public policies. It reveals how cross-border co-operation policies can be considered to be fully integrated if they are based on a demonstrable potential for integration, an effective network of decision makers, and a shared vision of the scope of public policies.

It is very rare to find this ideal situation in West Africa given the significant political, institutional and financial constraints on the design and implementation of cross-border policies. Cross-analysis of the border co-operation dimensions mentioned above reveals three different types of public policy.

1. A significant gap between the potential and the current situation of cross-border co-operation is a sign of unexploited potential. Certain regions such as southern Senegambia or western Côte d'Ivoire and Liberia, have a high potential for integration without necessarily being strongly integrated in regional governance networks. The objective of place-based policies in this case would be to encourage the emergence of cross-border networks of actors in these border regions in order to make optimal use of regional development potential.
2. A significant gap between the current cross-border co-operation situation and the policy makers' vision is a sign of institutional shortcomings. While some regions, notably along the western and northern borders of Nigeria, are recognised as priority areas, their co-operation networks are still relatively underdeveloped. The objective of place-based policies in this case would be to facilitate co-ordination between actors in order to reduce institutional blockages.
3. A significant gap between the co-operation potential of border regions and the policy makers' vision is a sign of political trade-offs. While some regions, such as eastern Nigeria, the northern border between Togo and Benin, or southern Senegambia, could be in favour of co-operation, their development has not received any political recognition. This is the most unfavourable situation for the implementation of place-based policies, as they require some degree of acknowledgement of the importance of regions within the national system.

Figure 2.1
Combining the potential, the current situation and the vision of cross-border co-operation



THE FUTURE OF CROSS-BORDER CO-OPERATION

By taking into consideration the three dimensions of cross-border co-operation, it is possible to put forward some original views concerning the future of cross-border co-operation policies in West Africa, the methods used to understand the policy networks, and the integration models adopted in the region.

Potential of regions: The need for tailored cross-border policies

The first conclusion of the report is that cross-border co-operation should build on the great diversity of regions in West Africa and that projects and institutional structures should be developed and tailored to the potential of each region. Considering the variety of needs, and the unequal development patterns of West African regions, cross-border co-operation initiatives would work best if policies provide public goods adapted to the specific socio-economic challenges of each region. The heterogeneity of institutional systems also calls for policies based on the idea that local actors and institutions shape the development potential of cross-border co-operation and can be mobilised to foster economic development. Particular attention should be paid to the local circumstances within which regionalism occurs to help develop tailored cross-border co-operation initiatives. This is especially important given the diversity evident across the length of West Africa's 32 000 km of borders.

Most policies developed in the region to date promote certain sectors, such as industry and livestock, or certain categories of the population, such as the most vulnerable, without necessarily taking into account the spatial dimensions of regional development. As a result, regional disparities are largely neglected, despite the critical role they play at the expense of inclusive growth (ADB/OECD/UNDP, 2015). To the extent that development is an uneven process, more attention could be given to the differences in potential between border regions and to the local characteristics of cross-border players. Place-based strategies could thus be usefully developed in West Africa to strengthen the economic potential and competitive advantage of the regions, regardless of a country's development level (Barca et al., 2012).

Unlike policies that do not integrate spatial dimensions, these place-based strategies assume that actors and local institutions can be mobilised to support regional development (OECD/SWAC, 2009). In contrast to conventional regional policies that are based on top-down sectoral interventions and which rely on subsidies, territorial policies are designed to promote spatial integration by investing in infrastructure and public goods tailored to the context of each area. Densely populated border regions like the Niger-Nigeria area or the Lake Chad basin, for example, have different needs from those of sparsely populated areas. Coastal and industrial belts such as the Accra-Lagos conurbation require policies that are of little use to agricultural regions in northern Ghana. Place-based policies could therefore support co-operation between subnational authorities who have the same interests or the same constraints but who have been minimally involved in cross-border co-operation thus far.

Current situation: A relational approach to cross-border co-operation is required

The report shows that the analysis of the social networks which connect cross-border co-operation actors is an appropriate tool for understanding institutional mechanisms and blockages. By examining social actors through their effective relational contacts, social network analysis provides a realistic view of the flows that potentially cut across social groups or categories such as communities, villages, political parties and social classes. Over the last decades, the fundamental concepts developed by social network analysis, such as centrality, embeddedness and brokerage have been increasingly used to map, describe and model economic, political and social structures. It is only recently that the application of these concepts has reached the field of development and, as a result, social interactions in developing countries are poorly understood and are generally unmanaged. This is particularly true for policy networks, which remain relatively unstudied within

network analysis, despite their key importance for development in West Africa.

One of the objectives of this work is to discuss how social network analysis could contribute to a better understanding of the network positions and strategies of social actors involved in cross-border co-operation. Complementing other more qualitative approaches, social network analysis is adept at capturing both the complexity of social ties that bind policy makers and the spatiality of policy networks, i.e. how policy makers are spatially connected, notably across borders.

Social network analysis is an analysis tool for researchers in the social and economic sciences, an empowerment tool for local communities and non-governmental organisations (NGOs), and an intervention tool for international organisations and governments. One of its most obvious applications is that it allows the precise identification, mapping, and analysis of the structural position of policy makers and organisations. Because social network analysis is a relational approach, the identification of the actors and their importance is necessarily related to their mutual interactions. The ability to highlight both the components and the links of a social group can help to distinguish between policy makers who are particularly well connected and those who are not. Well-connected policy makers are often strongly embedded in their group and have developed diverse external contacts. At the opposite end, policy makers who are only marginally embedded in their own group and have developed homogeneous external contacts, have little social capital to draw upon, resulting in potential marginalisation within cross-border policy networks.

Political vision: Which integration model to adopt?

This report reveals that the political vision of cross-border co-operation that is conveyed in West Africa borrows from the two main regional integration models developed world wide, without actually creating a model suited to African specificities.

On the one hand, the historical experience – and the institutional and financial support – of the EU encourages West African states to adopt an integration model focused primarily on institutional structures. This model relies on the existence of formal cross-border co-operation structures which are tasked with promoting closer relations between border actors, and with encouraging socio-economic exchanges. The development of cross-border flows is perceived as an outcome of efforts undertaken by this institutional framework, and priority is given to political construction. This often results in bureaucratic bodies with a large number of actors, in particular members of the respective elites of the countries involved at the national level. To the extent that the main objective of cross-border co-operation is to create subregional groupings, there is a very large presence of territorial representatives (states, regions and local authorities), while non-territorial and private actors are often absent.

On the other hand, there has been an increase in recent years in the number of initiatives influenced more strongly by – and receiving more financial support from – an integration model which focuses on interactions between socio-economic actors and which is particularly prevalent in North America. This model is based on border territories complementing one another in functional areas through the creation of ad hoc co-operation structures responsible for addressing problems stemming from territorial discontinuities. The principle of transport corridors and adjacent border posts conforms to this model, which seeks to reduce blockages and any other flashpoints undermining regional integration. Under this model, the purpose of cross-border co-operation structures is to facilitate flows of goods and people. The result is smaller structures, which are sometimes privately owned, and which involve public authorities and relevant businesses in equal measure when dealing with a specific issue such as transport or the environment. These structures favour networking between the actors, regardless of their administrative level.

The current co-existence of these two integration models in West Africa allows for the diversification of cross-border co-operation structures and opens access to the funding provided by both models. In the long term, however, the success of cross-border co-operation will be based on the implementation of an integration model which takes into more rigorous consideration the region's socio-economic and political specificities.

NOTE \\

1 *In political science, the term micro-region is used to describe a wide variety of entities whose main characteristic is to be geographically located between the national and the local levels. In related literature, the term is applied to subareas or border areas. It does not distinguish between the nature of each region and has therefore been used to describe institutional areas, such as the Maputo Development Corridor in southern Africa, as well as functional ones, such as Parrot's Beak between Guinea, Sierra Leone and Liberia (Söderbaum and Taylor, 2008). Three border areas are designated as micro-regions in this report: the Senegal River valley, Liptako-Gourma and the Lake Chad region, whose geographical scale is inferior to the regional scale of West Africa.*

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Chapter 3

Regionalism, regional integration and regionalisation in West Africa

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Chapter 3 reviews the implications of the enlargement of ideas of regionalism since the 1990s and calls for more systematic monitoring of the diversity of region-building institutions and cross-border interactions in West Africa. It highlights that specific attention needs to be paid to the historical development of West Africa's regional institutions and their distinctive architectures and cultures. The dynamics of cross-border interactions that provide diverse contributions to integration are then analysed, along with the implications of "defragmentation" policies and processes that should enhance the regional and global integration of African economies. Against this backdrop, the conclusion draws attention to the importance of deepening understanding of the policy-networks that operate both within regional institutions and across borders.

Key Messages

- Regional integration in West Africa mirrors the diversity of interactions between formalised institutions (regionalism) and economic and social processes (regionalisation).
- The mitigated achievements of West Africa's regional groupings are often in stark contrast with the dynamism of cross-border interactions, which, paradoxically, often thrive due to the preservation of frontiers.
- The multiplicity of regional groupings has historically been as much of an asset as a hindrance and thus region-building efforts must take stock of the diversity of genealogies, institutional cultures and network-led regionalisation processes.

RESURGENCE OF REGIONALISM AS A GLOBAL PHENOMENON

The resurgence of regionalism in the late 1980s followed two decades of disillusion towards European construction and integration theory as a whole (Duffy and Feld, 1980; Haas, 1975). The reassessment of regionalism was originally prompted by the crystallisation of world trade and investment flows around North America, Europe and Northeast Asia.

In North America, the Regional Trade Agreement (RTA) signed with Israel in 1985, cleared the path for negotiations that resulted in the Canada-United States Agreement (CUSA) and, following its enlargement to Mexico, the conclusion of the North American Free Trade Agreement (NAFTA) in 1992 (Payne, 1996: 104–107). The agreement established a free trade area that straddled across the north-south divide and ambitioned to be the nucleus of a Free Trade Area of the Americas (FTAA).

In Europe, it was the Single European Act that, in 1986, set the basis for the revival of European construction. By the time the Single European Market (SEM) programme was completed in 1992, the dissolution of the communist bloc in East and Central Europe conferred a new geopolitical dimension to the process. Debates on federalism and the constitutionalisation of integration (Weiler, 1998) went along with the formalisation of the Copenhagen criteria (transition towards democracy and a market economy) that were required for aspiring new members. In Asia, regionalisation

was initially driven by the fear that the European Union (EU), already a powerful trade bloc, might turn into a "fortress". In 1992, the Association of South Eastern Nations (ASEAN) adopted its own programme for a free trade area. Across the world, the number of RTAs were expanding at a rapid pace (World Bank, 2005: 28–29), along with the endorsement of trade liberalisation as a universal norm (Mansfield and Milner, 1999: 589–627).

In Africa, as in Latin America and the Asia Pacific, this momentum prompted fresh interest in the design and patterns of region-building that had been previously ignored or were treated as irrelevant since they did not prioritise state-led integration through transfers of sovereignty. Policy makers and scholars alike became progressively aware that the "world of regions" (Katzenstein, 2005) was entangled with "a world of regionalisms" (Bach, 2016), shaped by distinctive policy goals, specific institutional cultures and the engagement of a plethora of non-state players.

SHIFTING DEFINITIONS OF REGION-BUILDING

Andrew Axline (1977: 83) famously complained in the late 1970s that even though regionalism kept expanding in developing countries, research in the field was dominated by theoretical language drawn from the European experience. The substitution of the distinction between regionalism/regionalisation to the previous focus on integration/co-operation has been path-breaking in this respect. It is today generally established that regionalism refers to state-led projects and organisations, while regionalisation focuses on processes that are not necessarily driven by state actors. This analytical distinction has only marginally evolved since it was drawn by Bjorn Hettne (1994: 1–11) in his introduction to the United Nations University's World Institute for Development Economics Research (UNU/WIDER) "new regionalism" project.

A world of regionalisms: The diversity of goals and processes

The revival of regionalism in the 1990s drew inspiration from the achievements of the EU, to which was added the achievements of such new players as the Asia-Pacific Economic Co-operation (APEC) Forum and ASEAN. Established in 1989, APEC developed its own brand of trade liberalisation, known as "open regionalism". This involved the extension of Most Favoured Nation (MFN) treatment to both members and non-members of APEC (Ravenhill, 2001: 2). By the early 1990s, APEC included key world economies and was celebrated as one of the world's most successful regional economic groupings and a model for Latin America (ECLAC, 1994: 11). The ASEAN experience simultaneously challenged the postulate that regionalism and region-building equate with loss of sovereignty, whether conceded voluntarily or through pressure, and pointed instead to a set of norms and practices that combined informality with non-intervention in the internal affairs of member states (Acharya, 2001). Sovereignty-enhancement and the consolidation of state power were the mortar of the so-called "ASEAN Way", contrasting with the EU's institutional culture of sovereignty pooling (Higgot, 1998: 52–53). The ASEAN path to region-building also challenged the widespread assumption that regional groupings could only prosper in "a quintessential liberal-democratic milieu featuring significant economic interdependence and political pluralism" (Acharya, 2001: 31; Aris, 2009: 452–3).

The region as a socially constructed reality

Regionalism, as commonly understood, refers to the implementation of a program and the definition of a strategy. It is often associated with institution-building and the conclusion of formal agreements. Regionalism also draws attention to socially constructed processes, mental maps and identities (Adler, 1997), and is a departure from past definitions of region that are based upon the interplay between territorial proximity, interdependencies and geography.

Regionalisation is a more encompassing notion than regionalism since it takes into

account processes and configurations in which states are frequently not the key players. Regionalisation is evocative of the contrast between *de jure* (institutionally driven) and *de facto* processes, a distinction originally associated with the work of Charles Oman (1996) and the hybrid processes at play in Northeast Asia during the 1990s. There the dynamism of diasporas, cross-border trade networks, individual entrepreneurs, companies and non-governmental organisations managed to circumvent institutional and bureaucratic constraints through the establishment of network-led and open-ended regionalisation processes (Mittelman, 1999; Breslin and Hook, 2002). Andrew Hurrell (1995b: 38) already observed at the time that, with the loosening of the classic emphasis on geographic and territorial criteria, the concept of "region" was in disarray (Box 3.1).

Within multilateral institutions, the agreements that fall under the category of RTAs, blur the traditional definitions of regions. RTAs are defined as arrangements that are apposite to multilateral agreements. Accordingly, RTAs include free trade or customs arrangements that range from bilateralism to quasi multilateralism, referred to as "multicountry" and "plurilateral" by the World Trade Organisation (WTO) (Sindzingre, 2014: 4; World Bank, 2005: 28). Similarly, current plans for the formation of "mega-regional" RTAs bond individual countries from across the world that may not necessarily share geographical borders. Negotiations of the US-led Trans-Pacific Partnership (TPP) and the Free Trade Area of the Asia-Pacific (FTAAP) grew out of the quest for a more familiar structure, at a time when the prospects of achieving global multilateralism had stalled. Such quasi-multilateral arrangements have also become mired in geopolitical tensions due to the nature of the players involved, and their ambition to become global norms makers (Draper and Ismail, 2014; Capling and Ravenhill, 2013: 553–575).

The regional focus of these agreements is misleading, however. In reality, the agreements share little more in common than the inclusion of countries that account for a major share of world trade and foreign direct investment (FDI), or which serve as hubs in so-called global value chains (GVCs) (Meléndez-Ortiz, 2014: 13) that are less about region-building than about the defragmentation of markets (Bach, 2016). Under the direction of multinational firms, the emergence of GVCs aspires to restructure and outsource activities including design, production, marketing and distribution. The outcome is the negotiation of a new generation of trade agreements, designed to promote "deep" integration through packages that go well beyond WTO obligations so as to cover services, competition policy, investment, technical barriers, regulatory compatibility and intellectual property protection. Not surprisingly, the classic definition of a region as "a limited number of states linked together by a geographical relationship and by a degree of mutual interdependence" (Nye, 1966: vii) is severely challenged by the association of regionalism to quasi-multilateral agreements.

The diversification of what regionalism stands for, from an institutional, ideational or material standpoint, was highlighted by the rise of the "new" regionalism literature in the 1990s and early 2000s. A diversity of scholarly agendas was regrouped under the new regionalism umbrella, stimulating the study of regionalism from a comparative standpoint. The shift away from a more restrictive notion of comparative regional integration challenged the prevailing readings of European integration on regionalism (and what it should stand for) in relation to the rest of the world (Söderbaum, 2005: 231; Acharya, 2012: 12). The new regionalism literature also called for greater attention to be paid to parallel economies, social networks and non-state agencies.

At the same time, the introduction of an "old" versus "new" regionalism dichotomy tended to side-track institutions and institutional cultures frequently labelled as outdated and dysfunctional. This was particularly the case whenever references were made to the EU. As the EU was losing its importance as the global prototype for region-building, the new regionalism literature was often prone to draw normative implications that were not empirically proven. The fresh inspiration that the revised treaties of most of the Regional Economic Communities (RECs) drew from the EU (Bach, 2016) was overlooked; the idea of an old versus new regionalism dichotomy also gained currency at the expense of historical contextualisation (Lorenz-Carl and

Box 3.1
Scales and nature of regional integration

The term "regional" deserves some clarification due to its distinctive usage by different disciplines.

"Regional" can refer to supranational organisations at the continental or subcontinental scale. Subcontinental regions constitute the privileged scale of regional blocs such as the Southern African Development Community (SADC), the Economic Community of Central African States (ECCAS), or the Economic Community of West African States (ECOWAS).

The term "regional" is also used to refer to administrative subdivisions between states and local authorities, or to functional areas in which social and economic interactions are particularly developed, possibly across borders. From Senegal to Chad for example, 19 such potential cross-border regions have recently been identified (OECD/SWAC, 2014) in which local traders attempt to take advantage of variations in price differentials, exchange rates between currencies, taxes between countries, and bans of imports and exports.

"Regional" can also be used to describe a social and historical construct characterised by a territorial and symbolic shape, a number of institutions, and an established identity anchored in social practices. The Dogon country in Mali is a good example of a region that encompasses a rather homogeneous ethnic group with a long history of resistance against enslaving states. Such regions approximate micro-regions, i.e. entities that "exist between the 'national' and the 'local' level" and can be subnational or cross-border (Söderbaum and Taylor, 2008: 13).

The nature of regional integration is also interpreted in very different ways, depending on whether the focus is on institutions or socio-economic actors. On the one hand, regionalism is a process of voluntary agreements between states and other public or private bodies that aim to address the negative consequences of national segmentation and promote political and economic integration between countries. In Africa, its overall objective, envisioned in the Treaty Establishing the African Economic Community, is to establish a continental common market by 2025. African states are all, to varying degrees, institutionally integrated in regional bodies such as the African Union (AU) or the Common Market for Eastern and Southern Africa (COMESA). This process is also known as formal integration (Söderbaum, 2011), institutional integration (Sohn et al., 2009) or policy-driven integration (Perkmann, 2007) because it mainly involves the state and the conduct of political and policy affairs.

On the other hand, regionalisation refers to the social and economic relationships that develop between individuals and firms across time and space and which lead to the emergence of functional regions. In Africa, some regions have achieved an exceptional level of integration, due to the intense interactions between traders. The rapid growth of border markets such as Katima Mulilo and Oshikango in Namibia or Malanville in Benin (Zeller, 2009; Dobler, 2016; Walther, 2015) illustrates how regional integration can also come from the activities of a skilled community of traders. Sometimes referred to as informal, functional or market-driven integration, regionalisation refers to what was already described in the 1990s as de facto processes and outcomes (Hettne, 1994; Oman, 1996). Regionalisation takes place through the build-up of interactions that are not necessarily related to an explicitly asserted or acknowledged regionalist project.

Mattheis, 2013: 5). Genealogies were ignored or discarded as irrelevant.

The related expectation that network-led processes would provide a substitute to the shortfalls of institutions, norms and designs did not materialise either. As the trajectory of regional groupings in Asia (Acharya and Johnston, 2007) and in Africa (Bach, 2016: 77–114)

confirms, regional institutions and their specific cultures still matter. It retrospectively appears that in Africa as in Latin America, the new regionalism literature was prone to discuss what regionalisation should look like rather than what it actually looked like. As a result of the lack of clarity in the goals and purposes assigned to new regionalisms, the dynamism of regionalisation as a structural force was overlooked (Phillips and Prieto, 2010: 118–119; Bach, 2016: 52–76).

REGIONALISM AT PLAY

In West Africa, the revival of regionalism did not signal the departure from the past that was expected by students of new regionalism who anticipated that the rise of cross-border network-led processes would downgrade the significance attached to regional institutions. Rather, emphasis on the need to diversify away from the traditional focus of region-building on inter-state co-operation and integration, went hand-in-hand with a re-assessment of the relevance of European construction since these were seen as ideally suited to contribute to the refoundation of pan-Africanism.

UEMOA and the CFA zone: The legacy of integration

The legacy of colonial policies and politics contributes to shaping the landscapes, topographies and mental maps associated with region-building in West Africa. Continuity with the past is illustrated by regional groupings and institutional arrangements where integration proceeds from the continuation (integration through "hysteresis") of institutional arrangements initiated during the colonial period. Two such examples are the Southern African Customs Union (SACU) and the CFA (*Communauté financière africaine*) currency zone in West and Central Africa (Bach, 2016: 21–30). Their integration did not result from transfers of sovereign competencies to supranational institutions, but from renunciation to sovereignty in specific areas at the time of independence. Most member states of the franc zone and the BLSN (Botswana, Lesotho, Swaziland, and Namibia) countries never exercised sovereignty in the sectors that are today subjected to sovereignty pooling. Regional integration ultimately progresses from the domination and stabilisation of these customs and monetary unions by the same "core" states (France in one case, South Africa in the other) as during the colonial period.

The CFA zone and the West African Economic and Monetary Union (UEMOA), bear testimony to the processes triggered by Britain and France's early and converging concern to rationalise the management and exploitation of their sub-Saharan empires. The stability of the CFA currency zone, the backbone of UEMOA, is still guaranteed by the French Treasury, although the governance of the currency zone is ultimately supervised and regulated by the European Council, acting on the advice of the European Central Bank (ECB) and the European Commission.

ECOWAS: Pan-African ideals and holistic agendas

Institutional continuity in West Africa also stems from the revival of pan-African ideals that, in the early 1990s, prompted a revision of the ECOWAS charter inspired by the experience of the EU. At a time when many regional groupings were consciously avoiding the institutional and bureaucratic model represented by the EU (Hurrell, 1995a: 332), West Africa's transformative agenda explicitly aspired to emulate the European experience which was perceived as neither outdated nor marginalised. The EU model was instead viewed as conducive to the reassertion of bold and broadened transformative regionalist agendas that coincided with a reinvention of the goals and ideals of pan-Africanism (Murithi, 2005). One of the most tangible outcomes of the rejuvenation of pan-African ideals was the ascription of ambitious holistic goals to the RECs and, finally in 2001, the adoption of the Constitutive Act that established the AU (Map 3.1).

The revised ECOWAS treaty signed in Cotonou in 1993 set the basis for the agenda.

The West African member states flagged their commitment to fast-track integration and the achievement of a single currency (the "ECO") along with an economic and monetary union based on the harmonisation of economic and fiscal policies. Europe's Economic and Monetary Union (EMU) naturally served as a template (Ekpo and Udoh, 2014: 72; Kufuor, 2006: 37). The new ECOWAS Treaty also sought to enhance the financial autonomy of the Community, by conferring to the Council of Ministers the authority to establish a levy on goods imported into the Community (ECOWAS, 1993: article 72). A new organ, the Community Court of Justice, was now entrusted with the implementation and interpretation of the provisions of the Treaty. European institutions such as the European Parliament or the European Economic and Social Committee (EESC) similarly served as a model for such new organs as the ECOWAS Parliament and the Economic and Social Council.

ECOWAS's holistic approach to region-building was not confined to economic integration. ECOWAS was the first among the RECs to develop a juridical capacity to operate in the full cycle of conflict management, spanning from prevention to post-war reconstruction (Tavares, 2010: 37). This would later serve as a model for the AU/African Peace and Security Architecture (APSA). ECOWAS had acquired valuable experience with preventive diplomacy, based on its engagement in West African conflicts in the 1990s. This experience was later formalised through organs designed to promote mediation and conciliation – along with an operational capacity to intervene in armed conflicts and violent domestic civil wars.

As a result of these evolutions, ECOWAS was the first African regional grouping to depart from the norm of strict non-intervention in the internal affairs of member states (Hulse, 2014: 555). The revised ECOWAS Treaty boldly endorsed this new culture of intervention. Peacekeeping forces, the creation of an observation system and the establishment of election monitoring missions were authorised (ECOWAS, 1993: article 58, § e, f and g.). The Treaty also committed member states to the establishment of mechanisms designed to prevent and resolve conflicts both within and among states. The consolidation of democratic governance within member states was asserted as an integral component of the promotion of peace, economic co-operation and development. Another institutional innovation introduced by ECOWAS stemmed from the subsequent adoption of the Protocol on the Permanent ECOWAS Mechanism for Conflict Prevention, Management, Resolution, Peacekeeping and Security (ECOWAS, 1999). The protocol took the right of intervention one step further, as it now applied to a much broader range of circumstances, both within and among states. Intervention without state consent was authorised in specific situations, an option interpreted as an invitation to reconceptualise interactions between sovereignty and intervention (Gandois, 2013: 46) (Box 3.2).

By the late 1990s, ECOWAS owed its international visibility and legitimacy to the establishment of a collective security system that was then unique in Africa. Since then, peace and security have become "the core business of ECOWAS, as member states [have] had a strong incentive to organise themselves to prevent the regionalisation of wars and conflicts and related damage" (Bossuyt, 2015).

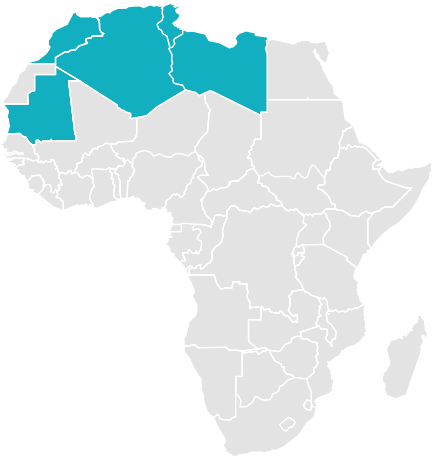
The other side of the coin is about pledges towards economic and monetary integration that are yet to secure a sustained and effective policy commitment on the part of all member states. In accordance with the trade liberalisation programme re-launched on 1 January 1990, the implementation of the ECOWAS Customs Union was meant to start within ten years. By mid-2016, implementation of the ECOWAS trade liberalisation scheme was still being awaited, while import restrictions were also adopted by West Africa's largest economy, Nigeria, as the newly elected administration struggled to preserve dwindling foreign exchange reserves as the price of oil underwent an unexpected and brutal fall (Dikko, 2015; Fick, 2015). The ECOWAS program to create a single monetary zone has similarly been delayed (Box 3.3).

Map 3.1
Regional organisations in Africa

Community of Sahel-Saharan States (CEN-SAD)



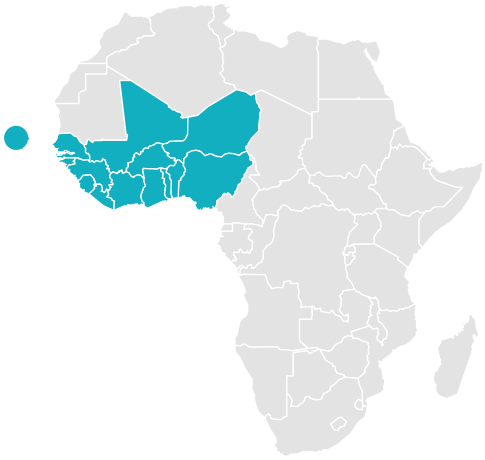
Arab Maghreb Union (AMU)



African Union (AU)



Economic Community of West African States (ECOWAS)

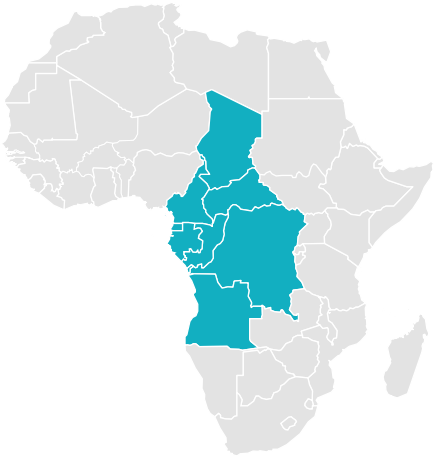


West African Economic and Monetary Union (UEMOA)



Source: OECD/SWAC 2014

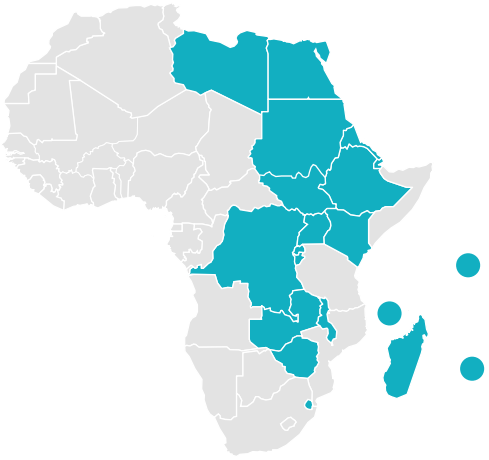
Economic Community of Central African States (ECCAS)



Central African Economic and Monetary Community (CEMAC)



Common Market for Eastern and Southern Africa (COMESA)



Southern African Development Community (SADC)



Southern African Customs Union (SACU)



Box 3.2
ECOWAS Peace, Security and Good Governance Architecture

The ECOWAS Peace and Security Architecture focuses on the prevention, management and resolution of conflicts, both within and between states. Conflict prevention is addressed through the establishment of an early-warning system based on the collection of data by four observation and monitoring centres. Conflict resolution is the task of the Mediation and Security Council (MSC), assisted by the Defence and Security Commission and the Council of Elders. This gathering of elder statesmen is appointed by the president of ECOWAS to promote mediation and conciliation in conflict situations. The Authority of Heads of States and Government remains the highest decision-making body of the mechanism, but it can delegate its powers to the nine members of the MSC so that it may function as a kind of equivalent to the UN Security Council at subregional level. The MSC is elected for two years and can function at head of state, ministerial or ambassadorial levels. The MSC is also entitled to authorise intervention in internal disputes that "threaten to trigger a humanitarian disaster" or constitute 'a serious threat to peace and security in the subregion' (ECOWAS, 1999: article 25). Peace support operations are also authorised in situations of "serious and massive violations of human rights and the rule of law" and "in the event of an overthrow or attempted overthrow of a democratically elected government" (ibid.). The ECOWAS Monitoring Group (ECOMOG) was established as a de jure organ of ECOWAS, and has formed a component of the African Standby Force (ASF) since 2004.

The Protocol on Democracy and Good Governance that was adopted by ECOWAS Heads of States in 2001 prescribed the respect of constitutional principles that include the separation of powers within member-states, the empowerment and strengthening of their parliaments, the independence of their judiciaries and the guarantee of "free, fair and transparent" elections. The protocol's first article also reasserted a policy of "zero tolerance for power obtained or maintained by unconstitutional means", demanded popular participation in decision making and strict adherence to democratic principles. Armed forces were also required to be "apolitical and ...under the command of a legally constituted political authority" (ECOWAS, 2001). Signatories also pledged to respect the "secularism and neutrality of the state in all matters relating to religion". More generally, they undertook to enforce "the rule of law, human rights, justice and good governance" and agreed to ensure "accountability, professionalism, transparency and expertise in the public and private sectors" (ECOWAS, 2001: article 34 sections 1 & 2). These prescriptions addressed more specifically the provision of electoral support and monitoring, while unconstitutional changes of government in West Africa would be sanctioned.

Source: Bach 2016

THE DYNAMICS OF CROSS-BORDER INTERACTIONS

The mitigated achievements of West Africa's regional groupings are in stark contrast with the dynamism of cross-border interactions. Cross-border flows operate in a divergent manner, operating as impediments to region-building while thriving from the preservation of tariff and non-tariff barriers. These patterns of interaction coexist with policies and processes that promote regional integration through "defragmentation", namely the removal of "a range of non-tariff and regulatory barriers [that] ... raise transaction costs and limit the movement of goods, services, peoples and capital across borders" (World Bank, 2012: xv).

Regionalisation as an obstacle to region-building

In West Africa, the dynamism of cross-border trade integration owes much to the systemic

Box 3.3
Planning for a single monetary zone in West Africa

The five non-UEMOA countries (namely Gambia, Ghana, Guinea, Nigeria and Sierra Leone) decided in 2000 to work towards the establishment of a second monetary union, the West African Monetary Zone (WAMZ) by 2003. Liberia originally participated in the union in an observatory capacity, joining formally in 2010. Due to the failure of member states to meet the required convergence criteria (Ekpo and Udoh, 2014: 66–68), the initial deadline was postponed twice, in 2005 and 2009. Initially, the plan envisaged the creation of a monetary union by 2015, before merging with UEMOA to create a single currency union for all ECOWAS member states by 2020. In 2014, the WAMZ countries decided against completing the first step, instead choosing to maintain the planned launch of a monetary union for all ECOWAS countries by 2020.

Source: Bach 2016

effects of a pattern of regionalisation that, paradoxically, thrives from the very preservation of frontiers. This issue is at the core of the "warehouse state" model, a metaphor coined by John Igué and Bio Soulé (1993) to describe the sophisticated instrumentalisation of cross-border flows by West African states in an attempt to capitalise on the edge effect of the frontier. Smuggling, also described as "re-exportation" or "transit" trade, was the backbone of the economy of warehouse states (mostly Benin, Gambia and Togo) who kept adjusting their import-export tariffs in order to maximise revenues drawn from the exploitation of cross-border differentials (Sindzingre, 1998; Igué and Soulé, 1993; Senghor, 2008; Golub and Mbaye, 2009). In practice, these policy orientations were little more than a succession of short-term measures, designed to capture the opportunities generated by the tariff and fiscal discrepancies between the eight West African member states of the CFA franc zone on the one hand, and Ghana and Nigeria on the other. The cross-border flows that this stimulated went along with the simultaneous penetration of territories and institutions by transnational players. Then as now, it was the ability of cross-border players to negotiate the goodwill of officers, bureaucrats and politicians on each side of the border that conditioned the size and scale of profits that were drawn from the exploitation of cross-border disparities.

Cross-border trafficking requires the ability to swiftly understand the interplay of changing tariff and fiscal measures, shifts in currency demand and supply, and international prices on export crops or on goods treated as illegal in other areas of (or outside) the continent. The resulting effect is a nexus of constant fluctuations in the composition and direction of cross-border flows and consequently in the articulation and impact of the networks at grassroots level. The pre-eminence of networks over policies can also take exacerbated proportions whenever, as in the eastern Democratic Republic of the Congo or in Nigeria's northeastern state, the exploitation of frontier "dividends" becomes a source of opportunity for insurgents who thrive from the erosion of state regulatory power and territorial control (Comolli, 2015: 85–86; Strazzari, 2015: 2; Lebovitch, 2013).

Cross-border trade in West Africa thrives from a combination of porous borders and the lure of tariff, fiscal and monetary incentives and, ultimately, negotiation with agents entrusted with border enforcement. Closure of a frontier is as much a risk as is its dilution within a customs union. Traders, border residents and those who benefit from bribes have a vested interest in the preservation of the territorial *status quo* (Bach, 1994; Bennafla, 2002; Walther, 2008). Warehouse states have much to lose from intra-regional trade liberalisation agendas. Re-exportation, noted a candid observer in the 1990s, "forbids that these small countries play the game of a large market within which it would no longer be possible to preserve pre-existing fiscal incentives" (Igué, 1995: 184). It is paradoxically where cross-border integration appears deeply established that institutionalisation is most resisted.

The 1970 and 1980s were a golden age for West Africa's warehouse states. The growth of their (illicit) cross-border transactions with neighbouring states seemed to reconcile public policy concerns with private activity, simultaneously contributing to the "confirmation of the border, the construction of the state and the perpetuation of national policies" (Bennafla, 2014: 1347; Bach, 2016: 56–62). Such a pattern was in sharp contrast with what was unfolding in Central Africa where the Democratic Republic of the Congo was becoming the epicentre of predatory forms of exploitation of cross-border disparities. These were, already then, associated with the fragmentation of national territory, the instrumentalisation of violence and insecurity, and situations of governance without government (Raeymaekers, Menklaus, Vlassenroot, 2008: 9; Raeymaekers, 2015; Lemarchand, 2003: 29–69; Bach, 2016: 63–66).

Integration through defragmentation

Since the 1980s, in Africa as in other regions, the momentum to eliminate import quotas, non-tariff barriers and customs duties has essentially come from national-based policy reforms. Closely related to this trend is the significant commitment of private investors and donors to defragmentation through the construction and improvement of infrastructure. Defragmentation is intrinsically characterised by the dilution of the frontiers between national, regional and global integration, and the adoption of leaner, functionally driven institutional architectures. In this sense, it represents a departure from policies that postulate the constitutionalisation of integration through sovereignty pooling and holistic agendas.

Defragmentation is often a shortcut for infrastructure rehabilitation and development-related projects. In West Africa as in East Africa, transport corridors are entangled with a history of cross-border rail, road and river linkages, a legacy of the common services established during the colonial period for the purpose of tightening, on a spoke-hub basis, the linkages between colonies and metropolitan centres. The establishment of a grid of infrastructure was guided by geo-political and strategic considerations as much as by economic motives. A good example in West Africa is the now defunct *Opération Hirondelle* (Operation "Swallow") that was originally designed in the early 1950s to export Niger's groundnuts without having to cross Nigeria (Box 3.4).

In West Africa, where two-thirds of the 10 000 km of railway tracks were built during the colonial period, railways are still primarily geared towards the transportation of minerals from the hinterland to coastal harbours and world markets (Bossard, Heinrigs and Perret, 2009: 134–135). However, a large railway revitalisation project is underway in the four neighbouring countries of Benin, Burkina Faso, Côte d'Ivoire and Niger. According to the project specifications, two lines are planned: one on the western axis between Abidjan-Ouagadougou-Kaya-Niamey, including a Dori-Assango loop, and the other on the eastern axis between Cotonou-Parakou-Dosso-Niamey. The railways will cover 2 970 km in total, necessitating the construction of 1 794 km and the rehabilitation of 1 176 km of the existing rail network. Notable progress has also been achieved since independence with respect to the creation of a regional road network, but it is still expensive to travel on West African roads and it is "sometimes as expensive as travelling on the big European toll motorways" due to the multiplication of "informal taxes" and checkpoints (ibid.: 129). Opacity is increased by the complexity of rules and the multiplication of agencies that give approval and collect the taxes required to move legally within or across African borders.

Soft infrastructure issues, namely the cost incurred by bureaucratic procedures, checkpoints and the payment of bribes along the main transport corridors of the region, account for significant and costly delays, as they generate additional forms of insecurity such as harassment, bribery and extortion by bureaucrats, customs officials and military personnel (Chambers et al., 2012: 16). The Improved Road Transport Governance Initiative (IRTGI) reports that, by the late 2000s, the multiplication of roadblocks and checkpoints – between 1.3 and 3.2 per 100 kilometres – meant that a consignment of goods moving along the West African corridors incurred delays estimated between 18 to 29 minutes per 100 km, the equivalent of seven hours of delays per average trip (Ben Barka, 2012). The same study attributed the lengthy checks that hinder the flow of goods and

vehicles at border posts and along corridors to the payment of bribes ranging from USD 3 to USD 23 per 100 kilometres, or close to USD 200 per average trip. These are the issues that the Informal Trade Regulation Support Programme (ITRSP), conceived by ECOWAS and adopted in Cotonou in 2013, aims to address through the simplification of taxation and customs procedures (Hoffmann and Melly, 2015: 28).

Innovation is another key component of the drive towards defragmentation. It adds substance to the expectations that technological leapfrogging can offer an alternative to Africa's weak financial and telecommunications infrastructure networks. Initially introduced in Kenya, M-pesa – a mobile money payment system – has rapidly spread across the continent. In West Africa, Nigeria is now a leader in the development of systems that enable peer-to-peer financial transfers between mobile phones and bank accounts (Livsey, 2015). As a result, access to finance is facilitated and partnerships are stimulated between banks (Ecobank, the Bank of Africa) and mobile phone companies (Vodaphone, Orange), both within and outside the continent (Manson and Weber, 2015; Thomas, 2014). Defragmentation and regional integration have also deepened as a result of the redeployment of banking and finance services beyond national boundaries.

Box 3.4
Opération Hirondelle (Operation "Swallow")

The now defunct *Opération Hirondelle* was established by the French in the 1950s to export groundnuts from eastern and central Niger without depending on Nigerian railways and harbours. Until 1953, Niger's ground exports, the country's main source of revenue, had been exclusively transported to the coast through Nigeria's Kano-Lagos railway. In December that year, traffic congestion on the railway forced the establishment of an alternative route that involved transportation by lorries to Parakou (Benin), and from there by railway to Cotonou. *Opération Hirondelle* was particularly costly since the road to Parakou was not tarred and, at Gaya-Malanville, the Niger River had to be crossed by ferry until the construction of a bridge was completed in 1958. Once in Cotonou, shipments were further delayed by inadequate infrastructure – there was no deep water port and all traffic was handled through a single wharf. By Niger's independence in 1960, *Opération Hirondelle* was heavily subsidised and could only handle about one-third of the country's ground exports. The pursuit of trade relations through this corridor was nonetheless seen as strategic by all parties. Benin considered the operation to be vital for the survival of its railway and the construction of a deepwater port in Cotonou, while in Niger, it was believed that the operation would contribute to curb cross-border interactions between northern Nigeria and Niger's Hausaland.

As a result, the break-up of the *Afrique occidentale française* (AOF) federation in 1959 did not seal the fate of *Opération Hirondelle*. Its continuation and expansion were instead organised through the establishment of an intergovernmental organisation, the *Organisation Commune Dahomey Niger* (OCDN), entrusted with the management of the Niger-Benin transport corridor. Both countries also committed themselves to equally sharing any deficit that would arise. In effect, the priority conferred to the preservation of this francophone transport corridor had no real development impact. OCDN activities had to be heavily subsidised and failure to secure international funding for an extension of the railway was eventually compounded by political tensions. These crystallised, in late 1963, when the expulsion of Beninese civil servants working in Niger was followed by a conflict over the ownership of the tiny island of Lété, located near Gaya-Malanville, on the Niger River. OCDN traffic was then interrupted until June 1964 and this made landlocked Niger suddenly aware of the risks of total dependence upon a single outlet to the sea.

Source: Bach 2008 : 173–174

West Africa's Ecobank, has become the leading pan-African bank with USD 20 billion in assets, 1 200 branches and pre-tax profits of over USD 380 million (Wallis, 2014). The United Bank for Africa also claims to have a presence across 19 African states, while Access Bank, already engaged in seven African countries, expects promising opportunities from the expansion of Nigerian businesses (England, 2014).

The rehabilitation of transport corridors or the dissemination of cell phone technology contributes towards improving Africa's integration in the world economy. It is, however, unclear whether this will translate into a build-up of enhanced regional capacity. The rise of a generation of globally connected African entrepreneurs is certainly changing the business climate. Accumulation no longer exclusively revolves around the capture of state resources or the privatisation of public functions by their incumbents (Bach and Gazibo, 2012). The personal trajectory and truly global investment strategies pursued, within and outside the continent by such figures as Nigerian billionaire Aliko Dangote, who provides a perfect illustration of this new trend (Wallis, 2013). For these entrepreneurs and others from the diaspora who have returned to Africa, the world economy is on the horizon (Taylor, 2012; McDade and Spring, 2005).

The drive towards defragmentation is rarely associated with regionally-endorsed programmes to stimulate integration at the grassroots such as the West African Borders and Integration (WABI) network launched by ENDA Diapol, the Malian National Direction of Borders and the Sahel and West Africa Club/OECD (2003). In 2004, following the second meeting of the WABI network in Abuja, ECOWAS announced the creation of the Cross-Border Co-operation Programme (CBCP) that was endorsed by Ministers of Foreign Affairs one year later. The CBCP aimed to foster regional integration through "cross-border initiatives and projects defined and implemented by public and private local actors" (ECOWAS, 2005). These initiatives were meant to be complementary to pre-existing sectoral programmes of cross-border co-operation to the extent that "all of the aspects of West African life are involved" (ibid.).

The establishment of decentralised cross-border micro-regions, known as *pays-frontière* (Konaré, 2004: 32) subsequently led to the inauguration of the Ouarokuy-Wanian health centre between Burkina Faso and Mali in 2011, along with the creation of a cross-border health service that includes 14 villages and serves a population of over 11 000 people (AU, 2013: 87–88). Initiated by the Municipal Development Partnership (PDM) and sponsored by ECOWAS, the pioneer Sikasso, Korhogo, Bobo Dioulasso (SKBo) Border Programme, also cuts across borders between Burkina Faso, Côte d'Ivoire and Mali and similarly seeks to create common infrastructure such as transborder community schools, health centres, and rural radios designed to cater for the populations in the borderlands. Both initiatives build upon the enabling institutional environment created by common membership to UEMOA. In addition to the ease of circulation across international borders, the trade dynamics at play within the SKBo triangle capitalise upon genuine trade complementarities, due to the operation of the three cities as regional markets between southern coastal cities and rural hinterlands. The triangle also coincides with cotton farming, a shared productive activity (Dahou, 2004; Dahou, Dahou and Gueye, 2007).

TOWARDS A REGIONAL ECONOMIC AND GOVERNANCE FRAMEWORK?

Region-building is constrained by the need to take stock of the diversity of genealogies, institutional cultures and network-led regionalisation processes. The multiplicity of regional groupings has historically been as much of an asset as a hindrance and the influence of overlapping memberships on Africa's international relations should not be minimised (Bach, 2016). This very asset has also become a source of institutional paralysis with the adoption of plans for a shift from free trade areas towards customs unions – due to mutually exclusive common external tariffs (CETs) (AfDB, 2014: 15).

Unlike what is being observed in other parts of the continent, substantive progress has been made in West Africa. In January 2006,

the Conference of Heads of State and Government adopted the common external tariff (CET ECOWAS) by extending the UEMOA CET to all Community member states. This CET comprises five categories and has been in force since January 2015.

However, the ability of ECOWAS to implement policy remains hampered by deeply-rooted regionalisation dynamics, promoted by both state and non-state actors. For Nigeria and its neighbours, in particular, certain established practices could be difficult to overcome, even if a regional economic and governance framework is introduced to encourage exporters and importers to abandon the networks and their informal border activities (Hoffmann and Melly, 2015: vii).

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Chapter 4

Social network analysis and cross-border co-operation in West Africa

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Chapter 4 explores the theory of social network analysis and its applicability for cross-border co-operation in West Africa[1]. The objective of this chapter is to show how a formal approach to the study of networks can be applied in West Africa to better understand how policy makers co-operate across borders in the region. The chapter starts by discussing some of the fundamental concepts developed by social network analysis over the last decades, including centrality, embeddedness, and brokerage. It then examines the methodological challenges of network analysis and how it differs from other approaches, before highlighting some of the policy implications of social network analysis for West Africa.

Key messages

- An original feature of the report is its use of a relational approach to cross-border co-operation known as social network analysis that studies the social, economic and political interactions between individuals, groups and organisations.
- The ability to study both the individual autonomy of social actors and their structural constraints makes social network analysis a pertinent analytical tool to inform the development policies and programmes of local communities and non-governmental organisations.
- It can also contribute to the empowerment of marginalised actors by shedding light on the structural causes behind their marginalisation, and is thus increasingly used to show how development interventions affect local communities.

FUNDAMENTALS OF NETWORK ANALYSIS

An original feature of this report is that it uses a relational approach to cross-border co-operation known as social network analysis (SNA). SNA is a burgeoning field of analysis which is primarily interested in studying how the ties between actors serve as channels for flows of material and immaterial resources such as capital, information, advice or trust. Over the last decades, SNA has evolved from a relatively peripheral area of research to a formalised body of theories, concepts, and methods that help visualise the social ties between people and measure the ways in which their interactions produce network structure.

Thus far, the majority of studies using SNA have been conducted in Western Europe and North America, where the approach originated. In the rest of the world, the use of social network approaches to describe and model contemporary societal structures is much less widespread, even in the domains of social life that are the most relational by nature, such as trade, politics or cross-border co-operation. In West Africa especially, work on cross-border co-operation using SNA constitutes a marginal field of research compared with those that look at institutions and formal agreements as the principle drivers of policy activities.

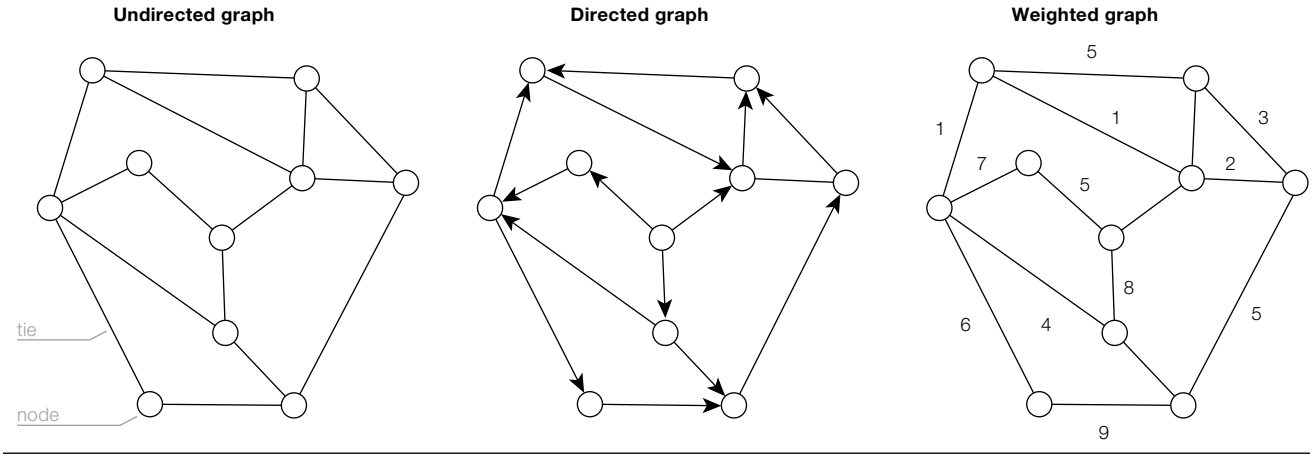
The formal study of social networks can be employed to understand the social, economic, and political interactions between individuals, groups, or organisations. Unlike other social

theories that are based upon a predefined social structure, SNA seeks to understand the origins, evolution, and impact of structure on social outcomes. SNA considers that the structure underpinning social relationships provides opportunities for or constraints on individual actions. In a network of policy makers, for example, it is assumed that the power of central actors to control information flows, give advice and orders, and influence policy outcomes comes from their structural position rather than from innate leadership capacities. Conversely, actors who operate on the structural periphery of a network must go through several of their peers in order to disseminate their ideas to the rest of the network.

SNA assumes that policy actors will develop tactics and strategies to alter the structure of a network to their advantage, rather than alter the behaviour of other actors (Brass and Krackhardt, 2012). Network tactics are often based on the principle that it is easier to influence a person that is close and present at the same time. Because the probability of forming a tie is inversely proportional to the distance, *propinquity* is a fundamental principle of network strategies. Actors are also more likely to influence people that have similar attributes or behaviours, a principle known as *homophily* and summarised by the popular expression: "birds of a feather flock together" (McPherson, Smith-Lovin and Cook, 2001). Influence over other actors is also better exerted in a stable relationship, where actors have had the time to build confidence in one another, than in a conflicting configuration where uncertainty prevails. Finally, people are also influenced by social perceptions and tend to value those who are associated with well-connected people. Asked for a loan by an acquaintance, the financier Baron de Rothschild is alleged to have replied: "I won't give you one myself, but I will walk arm-in-arm with you across the floor of the stock exchange, and you soon shall have willing lenders to spare" (Cialdini, 2013: 45).

Over the last decades, SNA has developed a rapidly increasing number of statistical tools to formally describe, represent, and model social structures. The SNA approach looks at social networks as a finite set or sets of actors who are linked to one another by social ties. A bounded set of policy actors linked by a set of relations form a *policy network* (Knoke, 2012). If policy actors are interconnected by multiple policy networks dedicated to a common issue, they form a policy *domain*. Policy domains include fields such as agriculture, energy, health, defence, transport, that are particularly relevant to cross-border co-operation. The smallest social network, composed of only two actors, is known as a *dyad*, whereas a subset of three actors is called a *triad*. Actors between which ties can be measured form a *group* and can be visually represented with a graph where the distance between the actors is proportional to their social proximity; actors closely tied to each other will appear clustered. Ties between actors can be *directed,* when each link has a

Figure 4.1
Three different ways to visually represent social ties



direction pointing from one actor to another, or *undirected,* when the direction of the links between actors is unknown. Networks can be *weighted* when the ties connecting actors have a value, or *unweighted* when only the existence of ties is represented (Figure 4.1).

In a dyad, one of the most fundamental measures of the strength of a connection is *reciprocity*, referring to a situation within which two actors acknowledge that they are engaged in mutual interaction. Reciprocity constitutes a major concern for policy makers who often rely on interpersonal relationships with representatives of regional or national authorities in other countries to design, implement, and monitor cross-border policies. The introduction of a third actor in a dyadic relation renders it possible to explore *transitivity*, a principle that assumes that two actors connected to a third actor are likely to be strongly tied to each other. For example, if a policy maker from Togo develops ties to a Nigerian policy maker who is himself connected to a Beninese counterpart, it is assumed that the Togolese and Beninese policy makers will have a good chance of also being connected.

The importance of social actors is often deduced from their centrality. Because the notion of centrality varies according to the structural context in which actors are connected, numerous measures have been developed since the late 1970s (Freeman, 1979; Freeman, Borgatti and White, 1991; Borgatti, 2005; Everett and Borgatti, 2010). Among the most commonly used forms of centrality are degree, betweenness, closeness, and eigenvector centrality.

- *Degree centrality* is a local measure that refers to the number of ties each actor has. Actors with a high degree centrality are often regarded as powerful because they are surrounded by many other actors. In West Africa, traditional chiefs often have a high degree centrality, because they are usually the centre of a large network of family, ethnic, and allegiance ties within the local community.
- *Betweenness centrality* refers to the importance of bridging disconnected actors. It is a global centrality measure calculated on the entire network and based on the number of shortest paths between actors. Actors with high betweenness centrality usually bridge actors or groups that otherwise would be disconnected. SNA literature argues that these actors bridge "structural holes", i.e. areas of relative low density of ties (Burt, 1992). Many policy makers involved in cross-border co-operation play such a brokerage role, by bridging their own nationally-organised network of colleagues and the outside world.
- *Closeness centrality* is another global measure which refers to how close an actor is to all other actors. Actors with high closeness centrality are often found among high-ranking civil servants or counsellors who have the ability to influence the choice of leaders without being officially in charge. In northern Nigeria, for example, a committee of king makers is responsible for presenting a list of candidates to the state governor, who ultimately appoints new religious leaders, known as *emirs*.
- *Eigenvector centrality* indicates whether actors are central because they have ties to other central actors. Actors with high eigenvector centrality are well connected to the parts of the network that have the greatest connectivity. Elite members of state bureaucracies are examples of such actors because they have many connections to people that are also well connected.

EMBEDDEDNESS AND BROKERAGE

Recent research conducted in a variety of disciplinary and geographical contexts has shown that social capital results from the combination of embeddedness and brokerage (Burt, 2005; Fleming, King and Juda, 2007; Uzzi, 1996; Narayan, 1999; Woolcock and Narayan, 2000; Everton, 2012). Embeddedness refers to the inclusion of actors in a tight community of friends, colleagues or kin, whereas brokerage refers to the ability to establish relationships beyond one's own community. Studying a sample of entrepreneurial households in

Uganda, Rooks et al. (2012) show, for example, that the most innovative entrepreneurs are simultaneously embedded in a cohesive group while being able to create diverse external contacts between actors that are not themselves connected.

A strong degree of embeddedness establishes trust between peers and reduces the risks associated with social, political and economic activities. Strongly embedded actors are therefore regarded as very central, in the sense that they are surrounded by a large number of other actors with whom they frequently interact to exchange information, obtain financial resources or communicate orders. However, this structural position is not without disadvantages as strongly embedded actors may lack brokerage ties that would allow them to reach external resources, such as new ideas and information.

Brokerage can generate value in three different ways, according to Spiro et al. (2013). Firstly, brokers can transfer resources between two disconnected parties. This structural position is routinely used by regional authorities involved in cross-border policies who act as a bridge between their own state and neighbouring countries. Secondly, brokers can facilitate match making between two actors to the benefit of each other, notably in polyglot regions where multilingual policy makers are able to bridge actors that would otherwise not be able to communicate effectively. Finally, brokers can co-ordinate the activities of third parties without creating a direct relationship between them, which reinforces their dependence on the broker. Freelance negotiators are used to playing this role, by mediating between governments, political parties, and other non-state actors.

CENTRALISATION AND NETWORK TOPOLOGY

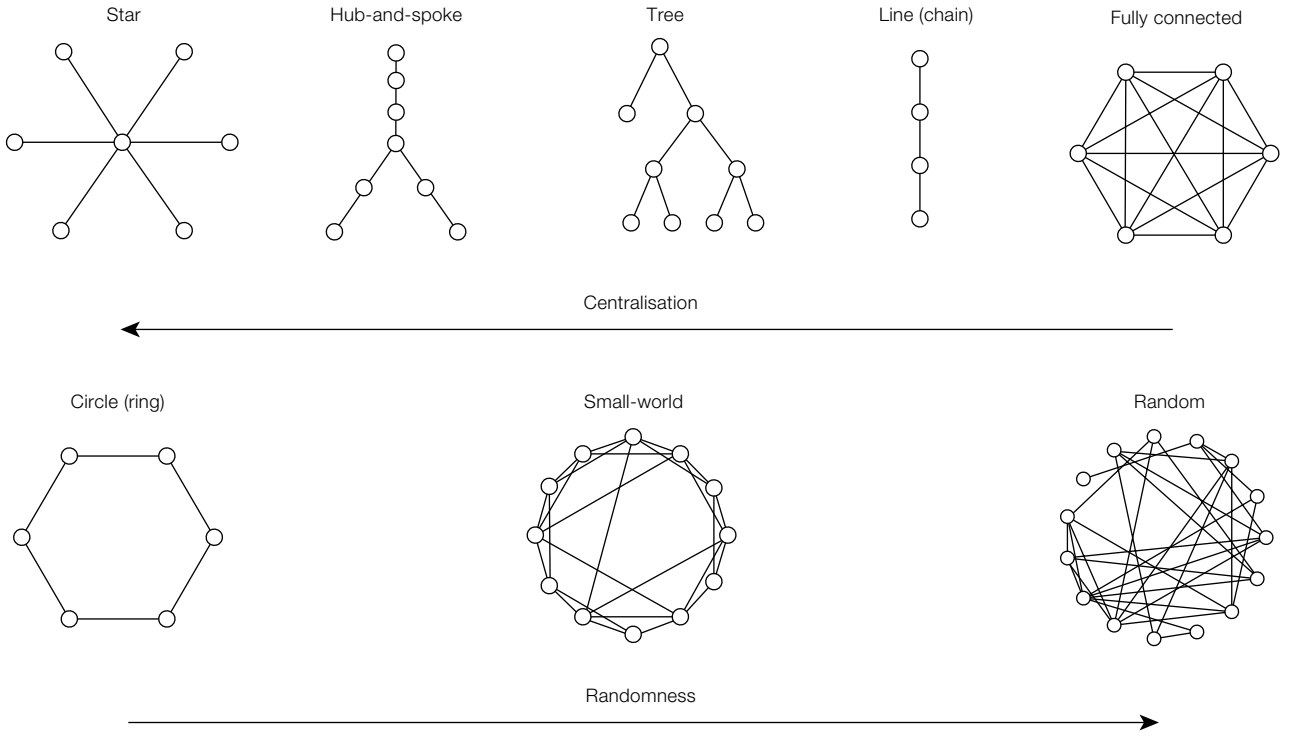
Social networks can greatly vary in size, complexity and shape. Such diversity has important consequences for social actors, whose autonomy is often constrained by the general structure of the entire network; small, clustered networks do not establish the same interpersonal relationships as large, decentralised networks, for example. Determining the variation in centrality that exists between actors can help distinguish between different categories of networks.

Centralised networks are composed of a small number of actors with many ties and tend to be efficient in terms of co-ordination, because information, orders and resources can be more easily transferred from central actors to the rest of the network. The star network – represented in Figure 4.2 – in which peripheral actors have no ties between each other, is the most extreme example of a centralised network. Its opposite is the fully connected network, a decentralised structure where every actor is connected to every other actor, which proves resilient to threats because of the redundancy of ties. Other network topologies include the hub-and-spoke network, a centralised network in which information and resources move along spokes towards a central actor, and the tree network, a hierarchical structure commonly found in military organisations.

Decentralised networks are structured in such a way that no single actor can achieve a dominant position. This type of network is particularly relevant for cross-border co-operation where a multiplicity of actors representing different institutional levels and countries makes it difficult to envisage the existence of centralised structures. This is the case in Europe, where decentralised networks have been observed (Walther and Reitel, 2013; Dörry and Walther, 2015). The line network, which is made up of a chain of actors, is a decentralised structure, as is the circle network where each actor is only connected to an adjacent actor. Circle networks become more complex when numerous ties are added, evolving towards small-world networks, wherein most actors can be reached by others through a small number of steps even if they are not immediate neighbours; or random networks, which do not exhibit any regularity (Figure 4.2). As networks evolve from circles to small-worlds, their randomness increases.

Many social networks are functionally different as their structures are a function of their overall purpose. For example, social

Figure 4.2
Examples of network topologies



Sources: adapted from Baker and Faulkner (1993), Watts and Strogatz (1998)

networks that aim to recruit people are often fully connected and do not rely on brokers because their main objective is to reach the largest number of potential recruits, whereas fund-raising networks rely much more on brokers who can connect distant investors (Leuprecht and Hall, 2014). An illustration of how the topology of networks can vary depending on the specific roles of the actors is provided by the Ayadi et al. (2013) study of informal trade across Tunisia's borders. The study shows that the organisation of trade differs significantly depending on whether trade takes place across the country's borders with Algeria or Libya. Trade with Algeria is mainly organised through a linear chain of actors that connects wholesalers with transporters and storage owners on the Algerian side. Close family and cultural ties on both sides of the border then facilitate the crossing of goods to another storage owner in Tunisia before the goods are delivered to internal Tunisian markets. In contrast, the organisation of trade on the border with Libya is more circular than linear. Once Tunisian wholesalers order a certain quantity of goods from Chinese, Turkish, or Libyan suppliers, the goods are received by Libyan agents who arrange for these to be transported to border entrepôts and stored until a Tunisian transporter comes to pick them up. The merchandise is then stored in a Tunisian entrepôt and delivered to a Tunisian wholesaler, who will finally reimburse his financier, if needed, and sell the goods to the final customers.

COLLECTING AND ANALYSING NETWORK DATA

SNA can be conducted on a large variety of written and oral sources. These sources include existing lists of actors, newspaper articles, and archives; administrative, communication or criminal records; key informants, or stakeholders directly engaged in social networks

(Marsden, 2012). When the size and composition of a population is known, the existence of social ties between actors is more easily investigated through questionnaires, interviews and participant observation, than when little is known about network memberships. In the latter case, drawing the boundaries of the surveyed network can be challenging when dealing with interdependent actors as the degree of separation is usually minimal in small-world networks (Barabási, 2003). Therefore, determining who can reasonably be identified as belonging to a network and who cannot is a central issue and a decision that is particularly difficult to make when actors do not belong to formal organisations.

While held in high esteem across many research fields, random sampling is not viewed as an appropriate sampling technique within SNA. This is because randomly selecting actors from the total population would cause a large number of relevant connections to be ignored. Therefore, snowball sampling techniques are used as an alternative to randomisation to identify new economic agents from among a subject's existing acquaintances (Frank, 2012). Snowball sampling does not assume that actors in a network are consciously aware of their interaction with the network, nor does it take account of preconceived boundaries set out by the surveyor. It is particularly adapted to the study of actors such as policy makers, who don't necessarily belong to a single institution, and whose number and activities are difficult to evaluate from a surveyor's perspective.

A snowballing survey will typically begin by identifying the first wave of interviewees, who will be asked to name people they are related to in particular ways (family, friends, neighbours, colleagues, members of an organisation), people they can trust or rely on, or people they feel close to. A number of related data such as age, gender, or education can be collected simultaneously. Several subsequent waves of interviews can then be conducted with the people identified during the first wave of interviews until the same names start to appear again and again, indicating that the boundaries of the network have been reached. A very high response rate – greater than 80% – ensures that the survey is not negatively affected by missing data points (Koskinen et al., 2013).

If a survey of the entire population of a network cannot be achieved, an alternative is to focus on individual networks, known as ego networks, which consist of a focal actor (ego) and the actors to whom the focal actor is directly connected, plus the indirect ties among these connections (called alters). Ego network analysis is particularly adapted for understanding if an actor is surrounded by a dense cluster of connections, if he or she can benefit from structural holes that separate subgroups of actors, and if their connections share similar characteristics (Everett and Borgatti, 2005).

Because structural analysis considers the ties, rather than the attributes of the actors as its main unit of analysis, it violates basic assumptions of independence, non-random sampling, and unknown distribution of variables. In order to deal with the fact that actors engaged in social networks are, by definition, not statistically independent, a set of statistical tools has been developed for constructing tests of significance that differ from traditional econometric tools (Contractor, Wasserman and Faust, 2006). The most popular probability models that take into consideration dependencies are known as Exponential Random Graph Models (ERGMs). These are based on dependence assumptions that can be specified and estimated from observed network data (Robins et al., 2007).

SNA can be employed alongside other qualitative or quantitative approaches. For example, the degree to which an individual is connected to others can be used as an independent variable in econometrics. Research on social networks in Africa has mostly focused on economic rather than political or policy outcomes. Studying informal entrepreneurs in Burkina Faso, Berrou and Combarnous (2011), for example, found that social networks enhanced manufacturing and trade by connecting entrepreneurs who had different social statuses, and by providing them with greater numbers of suppliers and financial support. In Kenya, the social connections between micro-manufacturers and traders favour the adoption of new technologies and the production of higher quality products (Akoten and Otsuka, 2007), whereas in Ethiopia the density of ties between micro-enterprises positively affects the sales and skills of manufacturers (Ishiwata et al., 2014). Furthermore, in South Africa and Ethiopia, social connections

enhance employment opportunities by helping match workers and firms in countries where informal recruitment procedures are based on word of mouth (Schöer, Rankin and Roberts, 2012; Mano et al., 2011).

State-business relationships are also crucial for the economic performance of traders (Walther, 2014, 2015a). In West Africa, small traders use their social ties with state representatives, politicians, and security officers to facilitate the passage of their goods across national borders (Kuepié, Tenikue and Walther, 2015). Social ties with local religious leaders seem to have a negative effect on business profits, however, due to the expenses resulting from social obligations. This last example illustrates one of the negative economic consequences of being overly embedded in a closed network.

SNA can also be combined with more qualitative approaches that look at the locally situated ethnographic, historical, geographical and institutional contexts in which social networks are embedded, as well as at the significance which actors attribute to their relationships. A formal approach to the study of networks has much to gain from the integration of qualitative information to explain why certain ties have been created between actors, how these connections have evolved over time, what the exact nature of these ties is, and how they are perceived by the actors involved. Qualitative interviews with policy makers are particularly useful to understand the success and challenges of cross-border policies or the difficulties of establishing ties across borders.

POLICY IMPLICATIONS

The ability to study both the individual autonomy of social actors and their structural constraints makes SNA an excellent alternative analytical tool to inform the development policies and programmes of local communities and non-governmental organisation (NGOs). Very few people are able to comprehend their own structural position in a social network without a proper visualisation of the entire network. Therefore, people tend to behave according to what they believe their social network to be, rather than an objective representation of their network. Because perceptions strongly determine power, the actors with the best perception of networks are likely to be more influential than those who only have a partial overview of the connections that exist beyond their immediate friends, allies or business partners. Formal approaches that map social ties provide a visualisation of the structural position of marginalised actors, groups and organisations which can often be difficult to ascertain when numerous actors are involved. This is particularly true of cross-border policy networks in which the existence of a national boundary adds an additional distance between the actors.

SNA can contribute to the empowerment of marginalised actors by shedding light on the structural causes behind their marginalisation. In sub-Saharan Africa and Asia, participatory approaches to SNA have been used by several international organisations, including the World Bank, the International Fund for Agricultural Development and the International Food Policy Research Institute of the United Nations to empower marginalised actors in the fields of agriculture, natural resource management, and health (Schiffer, 2012). In the basin of the White Volta in Ghana, a dedicated network mapping tool was used to understand and improve water governance among representatives from several public agencies, NGOs and traditional authorities (Schiffer, Harwich and Monge, 2010). This approach helped the actors to better understand what their goals were, if these goals were co-operative or conflicting, how the actors influenced one another and how the network could evolve to improve water governance in the region. The study found that exchanging information and providing advice was crucial for developing influence among stakeholders, and that the existence of several overlapping governance systems reduced the efficiency of fisheries management.

SNA is also increasingly recognised as a useful approach to understanding how development interventions affect local communities. For example, the World Bank (2012) has used network tools to evaluate the impact of some of its activities on agricultural productivity in

India and China. Network analysis can also help identify relevant issues that hinder community development, visualise the complexity of actors engaged in the resolution of issues, and represent the relationships between the issues themselves. Indeed, Boutilier (2011) shows that SNA can be used to visualise the consequential links between the positive and negative impacts expected from the construction of a dam in a very arid region. Using a participatory method for mapping social networks in northern Nigeria, Schiffer, Mustapha and Mustaph (2012) found a gap between policy design and implementation of maternal health and newborn survival activities, resulting in high numbers of normally preventable deaths. The network approach showed that the gap resulted from conflicting power strategies between two groups of influencers. While representatives of the health ministry were responsible for writing the budget, politicians outside of the health field were in charge of the actual disbursement of funds.

Compared with other approaches, SNA brings undisputable added value to the study of social structures and related policy interventions. Its main strength is its ability to determine the extent to which relationships affect social, economic and political dynamics. Rather than assuming that social actors are isolated players that can be sampled at random, SNA considers that each and every actor counts when it comes to understanding social structure, because what makes social actors important are the ties that bind them to the rest of the network and not just their individual attributes. SNA also provides a realistic visualisation of social organisations that is often impossible to determine by simply relying on organisation charts or official club rosters. Instead of dividing societies into several groups according to pre-determined categories and studying the social characteristics of each, SNA considers all stakeholders involved in a particular event or domain, it maps their ties, and only then identifies how the network is divided into subclusters. This makes SNA an analytical and policy tool that is particularly well suited to understanding fluid and indistinct social organisations, such as ethnic or tribal groups, informal traders, and policy makers involved in cross-border co-operation.

NOTE

1 *Portions of this chapter draw from a working paper by Walther (2015b).*

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Part II Cross-border co-operation: Potential, networks and political priorities

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Mapping cross border co-operation potential in West Africa

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Chapter 5 attempts to identify the areas in West Africa that have the greatest potential for cross-border co-operation. It is based upon research that maps seven environmental, socio-economic and political indicators, highlighting the existence of wide spatial disparities between West African regions. The research indicates that the zones with the greatest potential for cross-border co-operation are concentrated in southern Senegambia, along the borders of Burkina Faso, in the Accra-Lagos conurbation, between Niger and Nigeria, and in the north of Cameroon, as these regions present greater cross-border accessibility and border market density than others. In particular, they share natural, agricultural or pastoral resources, do not face significant linguistic divides, and poverty gaps are neither too wide nor too narrow, promoting synergies and movement between countries. From an institutional perspective, it is easier to roll out cross-border programmes in those areas where the relevant borders are well delimited.

Key messages

- To identify the areas in which there is potential for cross-border co-operation in West Africa, seven regional integration indicators were analysed: agricultural and pastoral resources, languages, legal status of international borders, political stability, population, poverty and water resources.
- The Sahelo-Saharan zones are, broadly, those with the least potential, especially those struggling with security issues, such as the northern Mali-Niger zone.
- The Sahel is characterised by high co-operation potential, for example, in southern Senegambia, on the borders of Burkina Faso and between Niger and Nigeria, due to an abundance of border markets with high population potential and shared resources.
- The southern part of the region, on the coast of the Gulf of Guinea, is more heterogeneous, with unfavourable border co-operation potential in segments between Sierra Leone, Guinea and Liberia but high potential between Ghana, Togo and Benin, particularly in the Accra-Lagos conurbation.

HETEROGENOUS BORDERS AND TERRITORIAL DISCONTINUITIES

Territorial discontinuities in West Africa are often exacerbated by government action. As far back as the colonial era, many investments in road and rail were carried out to reorganise regional trade within the colonies, forcing the main traders operating in the region's trade corridors to restructure their own networks (Howard, 2005). This territorial reorganisation was not fundamentally brought into question in the years following the independence of West African states and, as a result, many countries have focused on investments within their capitals, encouraging the specialisation of national territory according to specific agro-climatic conditions, and prioritising infrastructure that connects them to the rest of the world rather than to their neighbours. Therefore, despite recent trans-African projects, the West African road network remains particularly poor with regard to cross-border connections: only four major paved roads cross the 1 497 km border between Niger and Nigeria, for example.

This reorganisation of West Africa, which contrasts with the fluidity of pre-colonial territories, intensified the heterogeneity of border areas. In southern Senegambia or on the periphery of Nigeria, the existence of agricultural subsidies and import bans led to the creation of warehouse states (Igué and Soulé, 1992) and generated a high level of informal cross-border activity. New markets such as Diaobé in Senegal, Sinkansé in Burkina Faso, and Gaya in Niger saw rapid growth, driven by small-scale contraband and regional re-export flows, as well as agricultural trade based on agro-climatic complementarities. Despite being located away from national decision making centres, these markets attract small businesses and major traders, each operating at their own level to leverage the potential offered by trans-border differentials, develop transnational networks, and contribute to the integration of West African peripheral zones from the bottom-up. In other regions, however, the existence of national borders is far from sufficient to promote regional economic growth, even informal. The absence of specialised trading communities, the lack of economic complementarities and very small differences in legislation all accentuate the marginality of these regions (Box 5.1).

ASSESSING THE POTENTIAL OF CROSS-BORDER CO-OPERATION

The heterogeneity of West African border spaces is a central issue in cross-border co-operation policy. Policy should be based on the resources of each region, in order to introduce cross-border initiatives that are adapted to local populations. Certain regional characteristics can be considered as favourable to the creation of co-operation structures, while others will hamper them. The existence, for example, of agricultural complementarities across several countries could be exploited to develop a common sector, while the absence of cross-border country roads in a region would handicap functional interaction between producers, traders and consumers.

In order to better understand where co-operation could take place in West Africa, the following analysis builds on seven indicators of regional integration which affect – though may not necessarily determine – the potential of cross-border co-operation: population, water resources, agricultural and pastoral resources, languages, legal status of international boundaries, political stability, and poverty (Table 5.1).

Without being exhaustive, these seven indicators cover a wide range of environmental, social, economic and political issues. They also relate to two fundamental dimensions of spatial integration: interaction, which refers to the relationships between socio-economic players, and convergence which describes the internal homogeneity of regions. The difference between interaction and convergence is important for several reasons. First, some regions may become increasingly connected (interaction) without necessarily becoming more similar over time (convergence). This is frequently the case when a large, urbanised region borders a more rural one; despite commuting and migration flows between the two regions, their economic development follows different paths. Secondly, convergence between regions may be the result of internal dynamics that have little to do with cross-border interactions. The development of capital cities located close to borders, such as Lomé or N'Djamena, for example, is primarily explained by national rather than cross-border dynamics.

A positive and linear relationship is expected between the potential for cross-border co-operation and the majority of the indicators listed above: the greater the value of the indicators, the greater the assumed potential for cross-border co-operation. This is the case for the population variable, which measures the number of people that can potentially be reached from border markets considering the existing transport network, border delays and local terrain. Border regions with high population potential will be highly likely to engage in cross-border co-operation, because proximity increases interactions between policy makers, business transactions between traders, and information exchange within civil society. Water, agricultural and pastoral resources can also be mapped, assuming

Box 5.1
Two approaches to West African borders

Over the past twenty years, the body of literature examining borders has expanded spectacularly, with a high proportion of works devoted to Africa, testifying to the immense potential of border dynamics when compared to other parts of the world (Nugent, 2012). There are two main schools of thought:

The first is inspired by econometric research carried out in the rest of the world (McCallum, 1995; Engel and Rogers, 1996; Fontagné et al., 2005) which examines the amplitude of border differentials in terms of trade and development (Aker et al., 2014). The result is that in West Africa, border discontinuities generally reflect major macroeconomic differences (Cogneau et al., 2015). For example, Côte d'Ivoire's border regions are less developed than Abidjan but are more so than the border regions of neighbouring countries. Where border regions are particularly distant from the capital, national redistribution is weaker, opening the door to dynamics that are more regional than national. Despite the dominance of the informal market and cross-border networks in West African economies, the discontinuities observed in border regions reveal the insulating impact of national boundaries in terms of the spread of economic development (World Bank, 2009).

The second school of thought is referred to as border studies (Wastl-Walter, 2011; Wilson and Donnan, 2012). Its proponents are historians, political scientists, geographers, anthropologists and other specialists of the social and political sciences. It highlights the distinctive characteristics of border regions, their relations with the state, the consequences of the simultaneous opening and closing of borders, and the identities that arise from the relative marginality of these spaces (Bach, 2016; Igué and Soulé, 1992; Nugent and Asiwaju, 1996). This school of thought has gradually moved away from analysing the border itself to take into account border zones and actors, and the terms *borderlands* and *borderlanders* crop up frequently (Asiwaju and Adeniyi, 1989; Miles, 2014; Hüsken and Klute, 2010; Feyissa and Hoehne, 2010).

Rather than viewing West African borders as artificial obstacles or invisible lines between ethnic communities, border studies show how social partners exploit colonial partitioning, often in collaboration with governments. The study of trading networks (Dobler, 2016; Egg and Igué, 1993; Meagher, 2003; Twijnstra et al., 2014; Titeca and Herdt, 2010; Walther, 2015; Zeller, 2015) and their criminal equivalents (Korf and Raeymaekers, 2013) represent two particularly well-documented and inseparable dimensions of national peripheries. See the African Borderlands Research Network (ABORNE) website at www.aborne.org/ and the Journal of Borderlands Studies (JBS) website at www.tandfonline.com/toc/rjbs20/current.

that cross-border co-operation is easier when shared resources provide incentives to collaborate along value chain segments. Finally, the mapping of linguistic discontinuities is made on the assumption that a common language – whether it is vernacular, vehicular or of colonial origin – should facilitate the development of shared norms and values between stakeholders involved in cross-border co-operation.

From an institutional perspective, cross-border co-operation is also greatly influenced by the legal status of international borders. Regions with clearly demarcated and delineated borders should be more favourable to cross-border co-operation than those where the exact location of the border is unknown or disputed. Another relevant indicator is political instability in border regions where it is assumed that political instability negatively affects the chances of building durable cross-border institutions. While it is true that the proliferation of violent transnational extremist groups in the region since the early 2000s may encourage countries to co-operate for security reasons,

Table 5.1
Indicators of regional integration

Indicator	Definition	Type of integration
Population	Number of people who can potentially be reached from any border market in less than four hours	Interaction
Water resources	Existence of shared surface water and aquifers	Interaction
Agricultural and pastoral resources	Existence of shared agricultural production basins and transhumance patterns	Interaction
Languages	Existence of major discontinuities between languages	Convergence
Legal status of international borders	Existence of clearly demarcated and delineated borders	Convergence
Political stability	Existence of border disputes, conflicts and transnational violent extremist groups	Interaction
Poverty	Difference of poverty rates between contiguous regions	Convergence

the overall effect of such political instability is detrimental to cross-border co-operation because it disrupts trade networks, creates flows of refugees and diverts public resources that could otherwise be attributed to development needs.

For poverty rate differentials, which are measured as the difference between poverty rates between two regions, it is presumed that the relationship with cross-border co-operation potential is not linear but follows an inverted U-shaped curve ('∩'). Regions with relatively low and relatively high differentials for this indicator should have low cross-border potential. This assumption builds on earlier work by Lundquist and Trippl (2013) in Europe, which showed that the highest potential of integration was achieved when two systems divided by a border were different but functionally close, i.e. differences between regions in economic performance and capability were small. Very small border differentials usually do not provide enough incentive for local, regional or national actors to co-operate with their neighbours, while huge differentials discourage them from engaging in joint initiatives due to the low likelihood of finding synergies.

POPULATION POTENTIAL: THE ROLE OF BORDER MARKETS

The number of people who can be reached from border regions varies widely between different parts of West Africa. Some borders cut through dense, well-connected population basins; between Accra and Lagos, for example, while others have been drawn through vast swathes of sparsely populated land, like the Mali-Mauritania frontier. These regional differences have major repercussions on communications infrastructure, major facilities or the services developed for the border population. In order to represent this spatial heterogeneity, the indicator examined in this section calculates the number of people who can be reached within four hours of each of the 135 border markets identified in West Africa (OECD/SWAC, 2014).

Border markets are key hubs of social and business exchange in border regions, with very particular characteristics owing to their specific location at the crossroads of the major trade flows through West Africa and on to the rest of the world (Dobler, 2016; Walther, 2014, 2015). Compared to other markets, border markets have a number of special features:

Box 5.2
Calculating population potential

Seven datasets were combined to model travel times in the region:

1 European Space Agency (ESA) Land Cover: Global land cover maps at 300 m (10" arc seconds) spatial resolution, with a time series of five years. These maps were produced using a multi-year and multi-sensor strategy in order to make use of all suitable data and to maximise product consistency.
2 Open Street Map (OSM) Road: A collaborative project to create a free editable map of the world, with an emphasis on creating a high quality road network.
3 Global Roads Open Access Data Set (gROADSv1): Best available public domain roads data by country, using the United Nations Spatial Data Infrastructure Transport (UNSDI-T V2) as a common data model.
4 Shuttle Radar Topography Mission (SRTM) Height: Elevation models distributed in two levels (SRTM-1 with data sampled at one arc second intervals in latitude and longitude, and SRTM-3 sampled at three arc seconds).
5 Global Administrative Areas (GADM 2.8): A spatial database of the location of the world's administrative areas and boundaries.
6 LandScan™ 2014 Global Population Database by Oak Ridge National Laboratory: Considered the most precise global data source for population distribution, for both spatial resolution and temporal characteristics.
7 Africapolis (part of the e-Geopolis programme) – 2015 Update, comprehensive and homogenous database on urbanisation, covering 17 West African countries spanning the period 1950 to 2010. Its original methodology combines demographic sources, satellite and aerial imagery to provide population estimates and geolocation at the level of individual agglomerations, http://stats.oecd.org.

All datasets were converted to raster datasets with a spatial resolution of 10" arc seconds (~300 m) matching the ESA land cover data.

- First, border markets attract a very particular economic actor: major traders who know how to exploit the differences in exchange rates, taxes, prices, and national import and export regulations. These traders, who act as intermediaries between the different national markets, are able to provide the major West African consumer centres with agricultural and manufactured goods from all over the world. Their activity is a major factor in the prosperity of border marketplaces, which often experience sudden booms or rapid slumps when there are changes to national laws.
- In addition to the major traders, border markets also have a high number of small businessmen that operate on a local level in cross-border trade. They have often developed personal relationships with government representatives who are responsible for controlling the borders which they cross every day, transporting consumer goods and agricultural products on their head, by bike or by bush taxi.
- Border markets are not just preferred locations for traders, but also outlets for locally grown produce such as onion, millet, sweet potato and maize, which are either consumed by the urban population or exported to other national consumer centres. Tradeswomen retailing fruit and vegetables are particularly active on these markets.

The indicator developed specifically for this report uses existing border markets to map the extent of the border regions' population pool (Box 5.2). Initially developed to calculate population potential in Europe (Van Eupen et al., 2012; Gløersen, 2012; Jochem, 2016), it was modified by the Alterra Institute at Wageningen University in the Netherlands and adapted to the

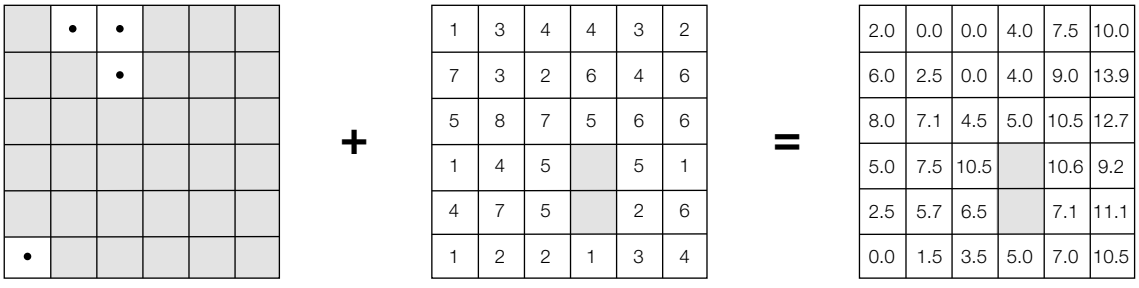
specificities of West Africa. The maps produced by the model show drive-time lines connecting all locations that can be reached at the same time (isochrones).

Travel times are calculated on the basis of "friction surface", i.e. a grid that models movements between points depending on their average speed in any direction (Figure 5.1). After having divided the region into small cells, the time needed to cross each cell is estimated on the basis of a large variety of indicators that include existing road networks, land cover, topography, and rivers. To calibrate the model, the authors selected an average of 30 km/h as a reference travel speed for trucks and bush taxis, two popular means of transportation in the region. Land cover was used to simulate slower off-road speeds, taking into account the rough vegetation and slow speeds on existing small roads and tracks not covered by global road databases. Rivers and steep slopes are interpreted as potential obstacles that lower and restrain speed.

The most innovative geographic feature of the model is the introduction of national borders. The model calculates how many people could be reached from each border market with and without a border delay of one hour, which can be seen as the absolute minimum delay for a national border crossing in West Africa considering that waiting times of up to several days are common across the region (Ben Barka, 2012). The difference between the two values indicates what proportion of the population would benefit from the elimination of border delays. This is an approximation of the barrier imposed by borders on the international flow of people and products.

The model considers five types of daily mobility ranging from 30 minutes (close proximity to a market) to 4 hours (generally the maximum accepted market influence). These values differ significantly from those used in Europe, where average speed is much higher and private cars are used more often, resulting in a 45-minute threshold for daily commuting.

Figure 5.1
Calculating the final travel cost to each source point using a friction surface

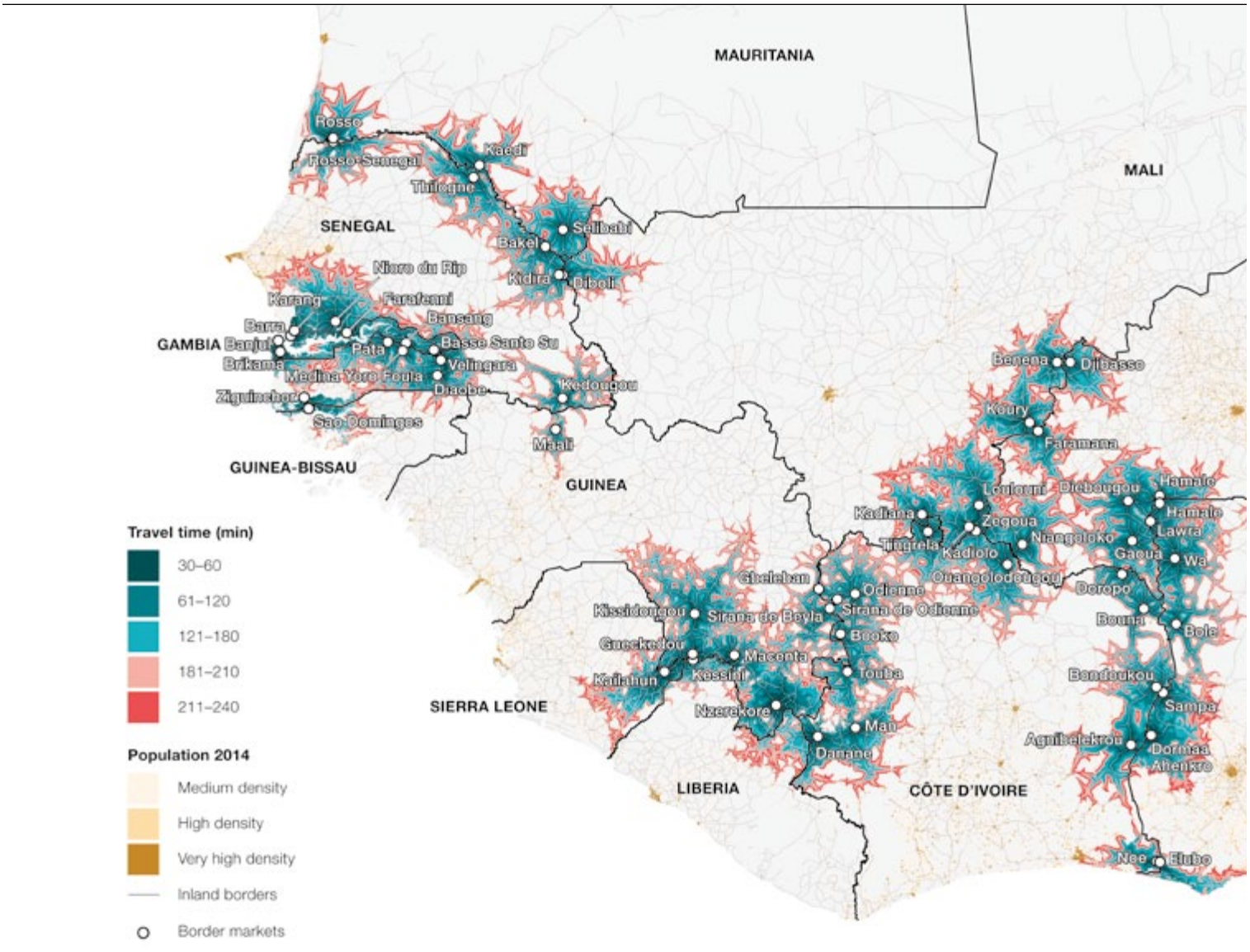


Source: ESRI 2012

Mapping the population potential of West Africa (Map 5.1) reveals the heterogeneity of border spaces. Some regions have clusters of markets (described in more detail in Maps 5.2 to 5.5), often organised as twin cities, while large stretches of border have none at all. From west to east, the densest markets are in southern Senegambia, in the central section of the Gulf of Guinea, between Niger and Nigeria, and in northern Cameroon. Conversely, border markets are rare in Fouta Djallon, Liptako-Gourma, between Liberia and Côte d'Ivoire, and between Niger and Mali.

Population potential analysis makes it possible to establish the spatial boundaries of functional border regions in West Africa, that is to say the areas in which socio-economic interaction is potentially intense. In the west, the regions that are potentially the most dense and accessible are those in southern Senegambia (markets of Ziguinchor, Farafenni, Diaobé) and along the Senegal River (markets of Rosso, Kaédi, Bakel), where a territorial continuity can be seen between the markets' population basins. The borders

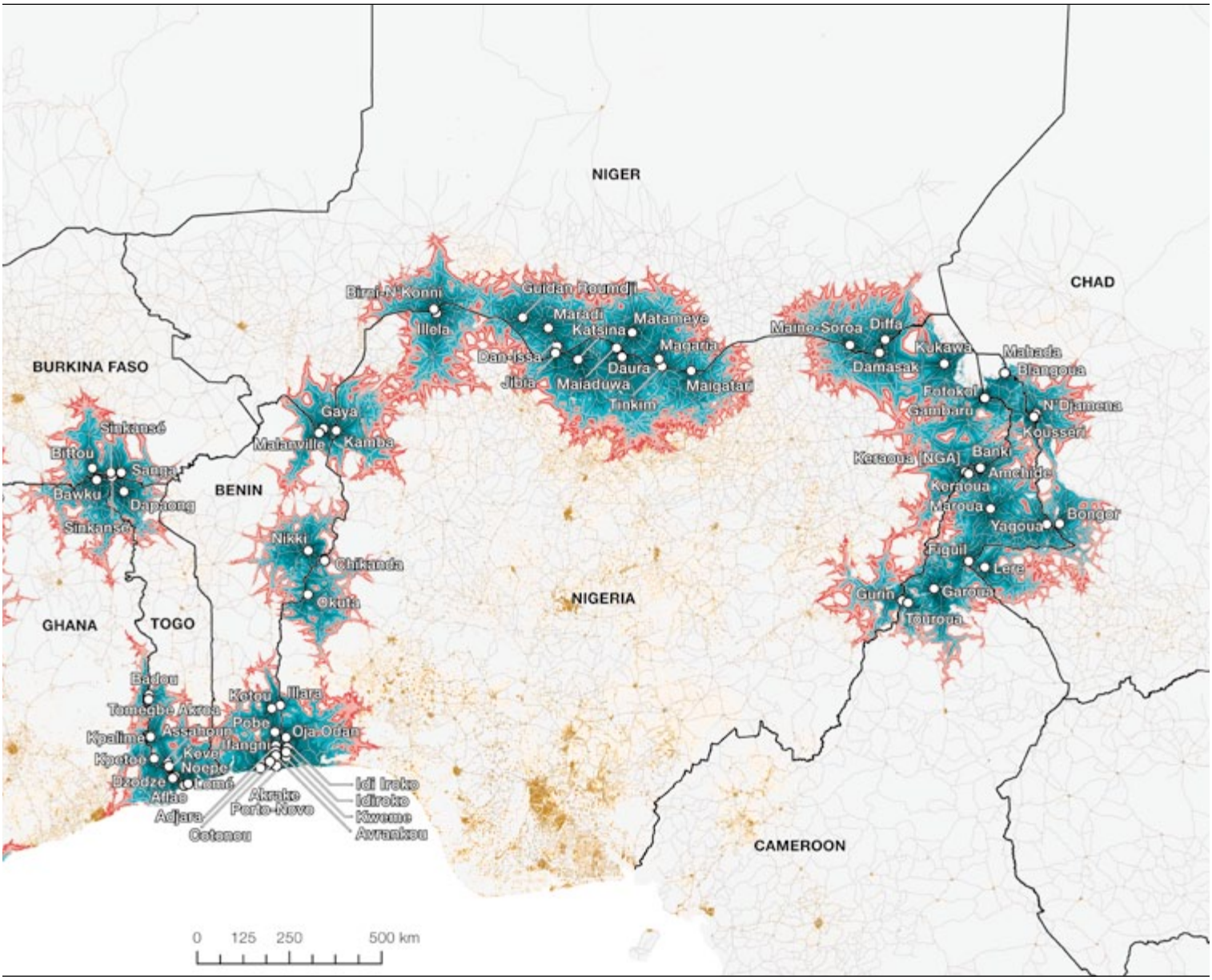
Map 5.1
Population potential of West African border markets



Sources: European Space Agency 2010; Moriconi-Ebrard, F., D. Harre and P. Heinrigs 2016; Open Street Map 2014; Global Roads Open Access Data Set 2016; Shuttle Radar Topography Mission 2014; Global Administrative Areas 2016; LandScan™ 2014 Global Population Database. This map was created by Alterra Research Centre, Wageningen University.

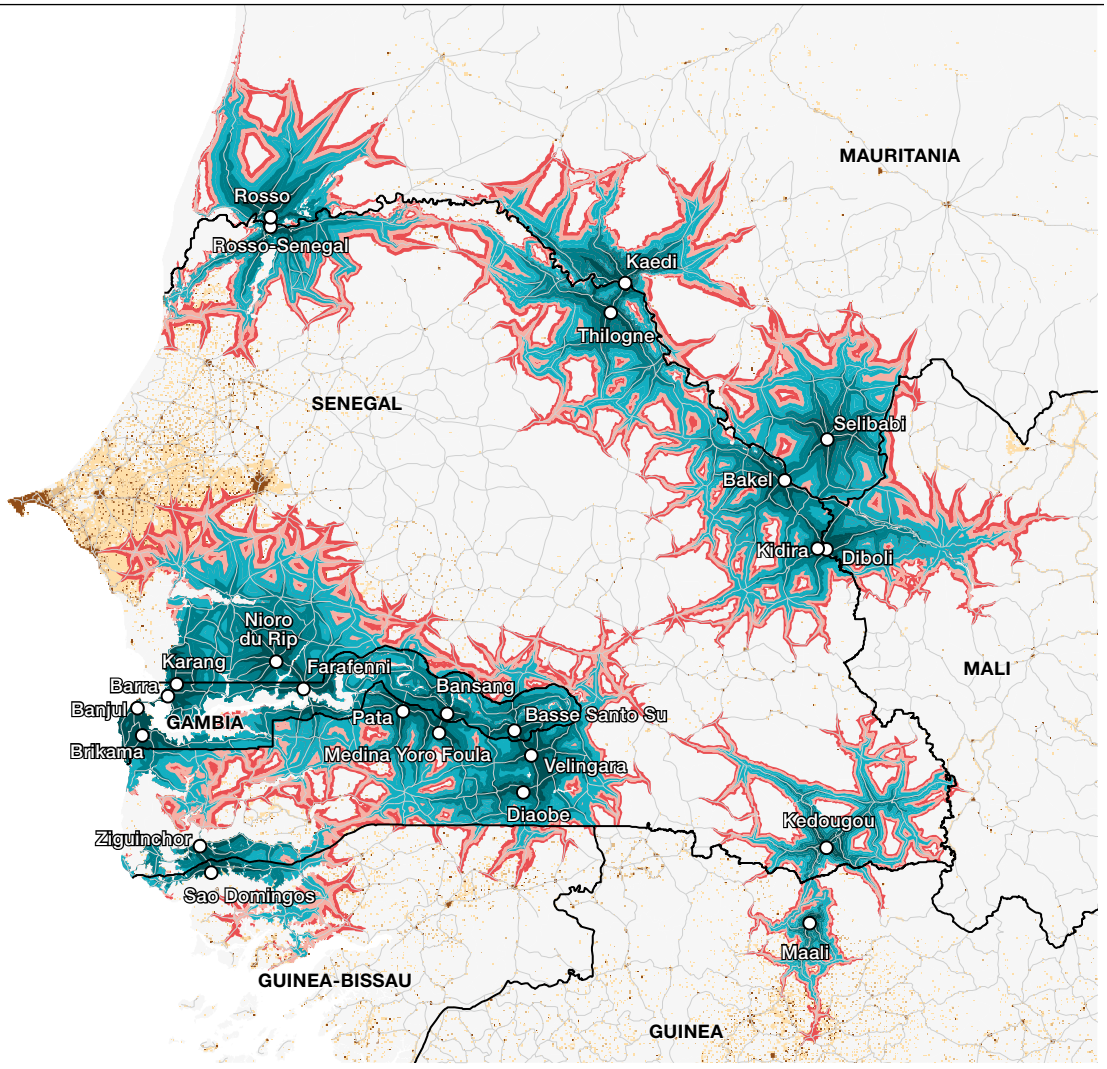
of Côte d'Ivoire also represent a focal point for regional integration, comprising three submarket clusters: between Kissidougou, Nzerekore, Man and Odienné in the west; between Kadiolo, Kadiana and Zégoua in the north; and between Wa and Agnibelekrou in the east (Maps 5.2 to 5.5). Remarkable territorial continuity can be seen between these potential population basins. There are three cross-border basins in northern Togo (Bittou, Dapaong, Sinkansé [Burkina Faso]), Borgou (Nikki, Okuta) and Dendi (Gaya, Malanville, Kamba) that are relatively separate from others in the region.

Further east, the two biggest population potential zones are in northern Nigeria and around Lake Chad. The former, centred around the north of Hausaland, straddles the border over a wide area of the Niger-Nigeria border, and between Birni N'Konni and Maigatari. The latter is also vast, covering the far east of Niger, Lake Chad and northern Cameroon down to Touroua (Maps 5.6 to 5.10).



Map 5.2

Population potential of southern Senegambia, Rosso, Kaédi, Kédougou and western Mali



Travel time (min)

- 30–60
- 61–120
- 121–180
- 181–210
- 211–240

Population 2014

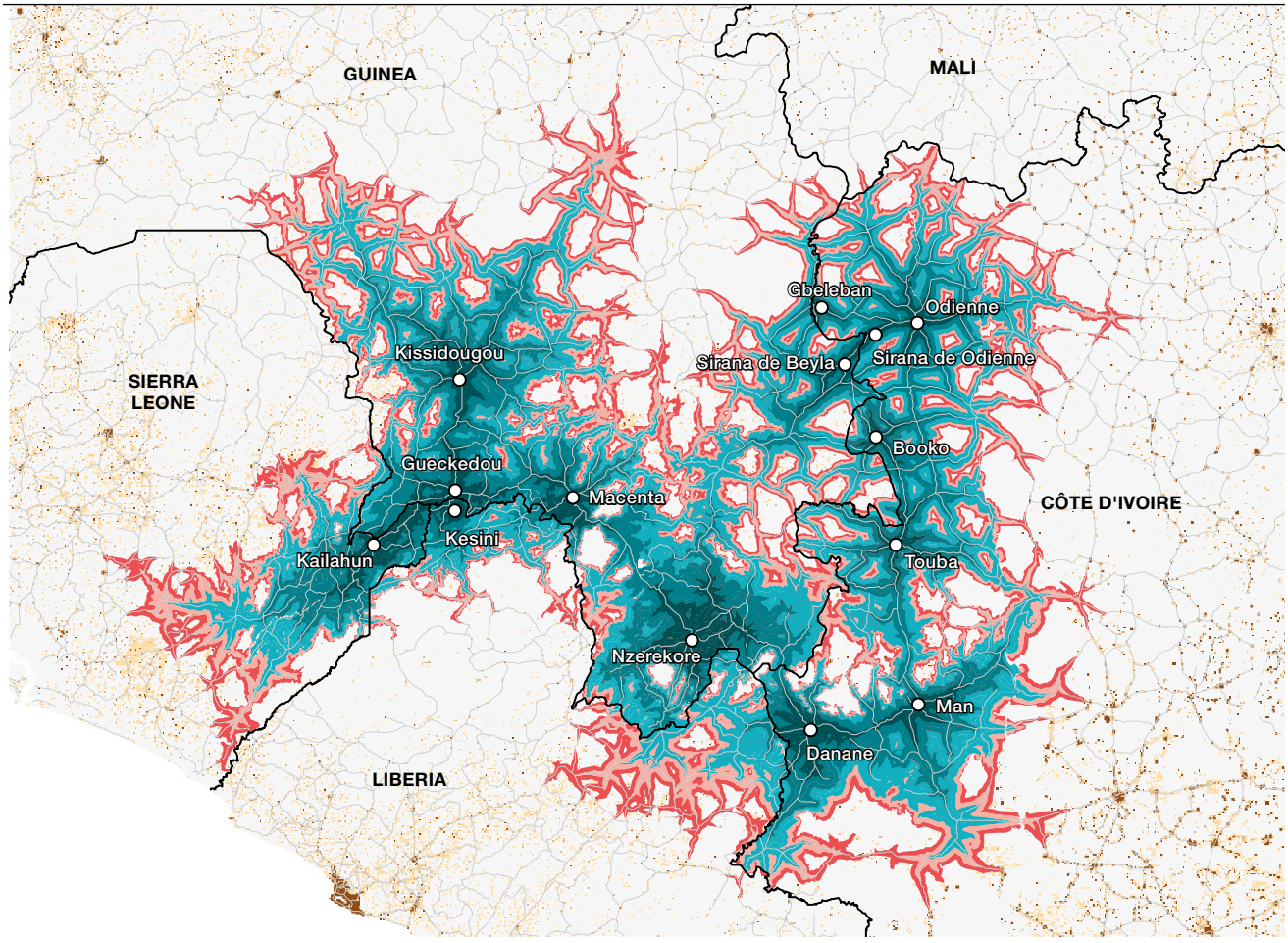
- Medium density
- High density
- Very high density
- Inland borders
- Border markets

0 125 250 km

Sources: European Space Agency 2010; Moriconi-Ebrard, F., D. Harre and P. Heinrigs 2016; Open Street Map 2014; Global Roads Open Access Data Set 2016; Shuttle Radar Topography Mission 2014; Global Administrative Areas 2016; LandScan™ 2014 Global Population Database. This map was created by Alterra Research Centre, Wageningen University.

Map 5.3

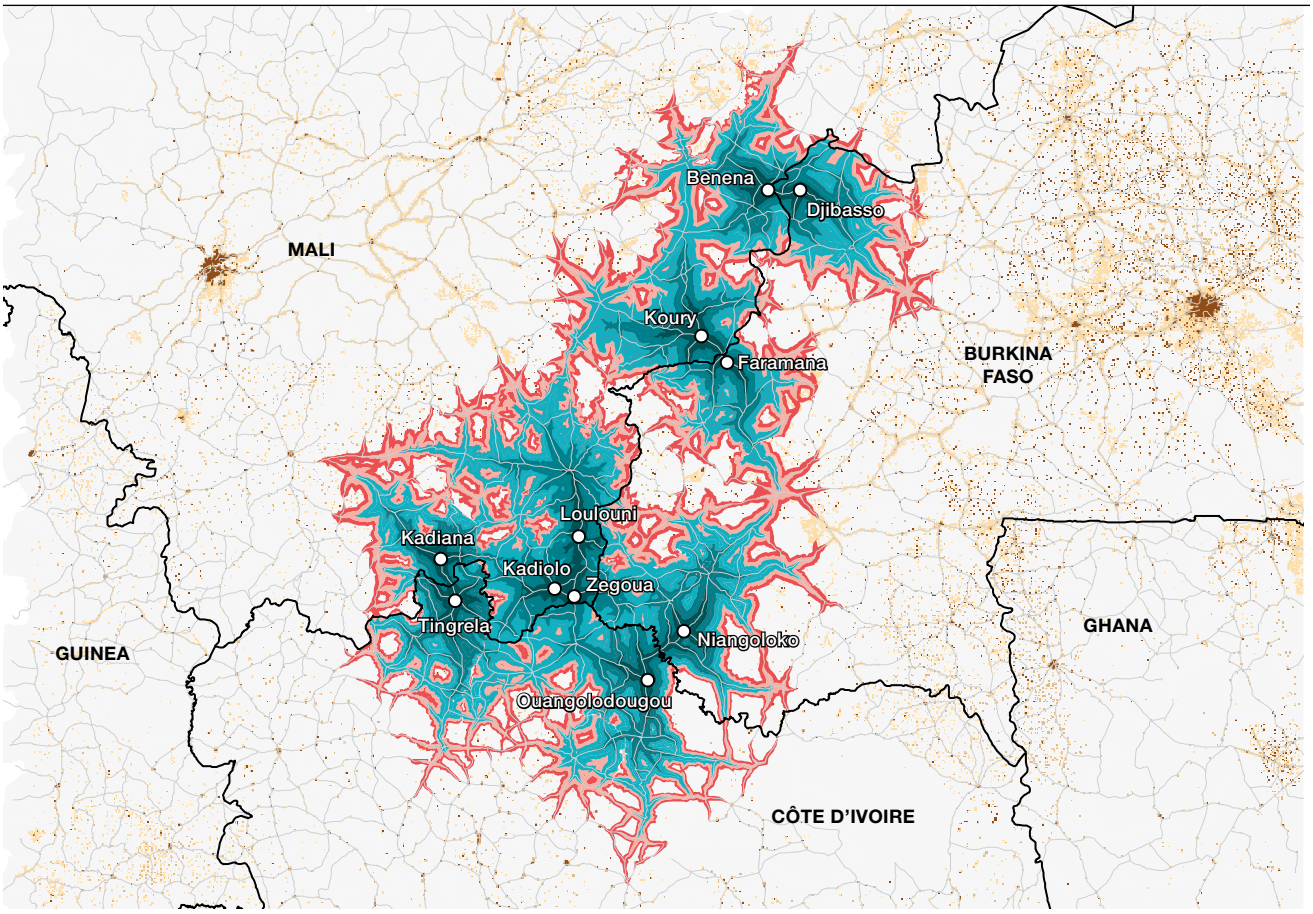
Population potential of eastern Guinea



Sources: European Space Agency 2010; Moriconi-Ebrard, F., D. Harre and P. Heinrigs 2016; Open Street Map 2014; Global Roads Open Access Data Set 2016; Shuttle Radar Topography Mission 2014; Global Administrative Areas 2016; LandScan™ 2014 Global Population Database.
This map was created by Alterra Research Centre, Wageningen University.

Map 5.4

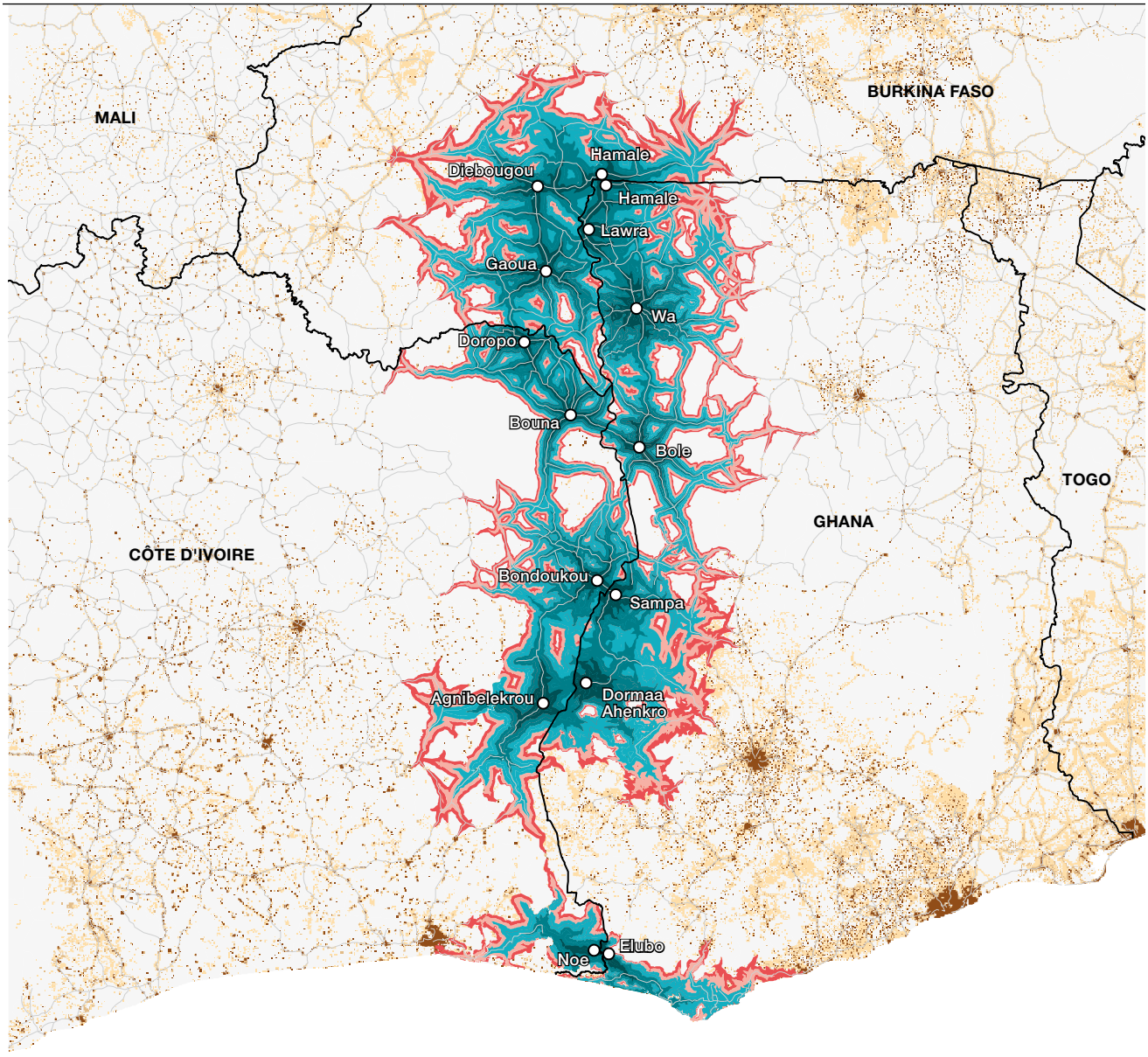
Population potential of southern Mali



Sources: European Space Agency 2010; Moriconi-Ebrard, F., D. Harre and P. Heinrigs 2016; Open Street Map 2014; Global Roads Open Access Data Set 2016; Shuttle Radar Topography Mission 2014; Global Administrative Areas 2016; LandScan™ 2014 Global Population Database.
This map was created by Alterra Research Centre, Wageningen University.

Map 5.5

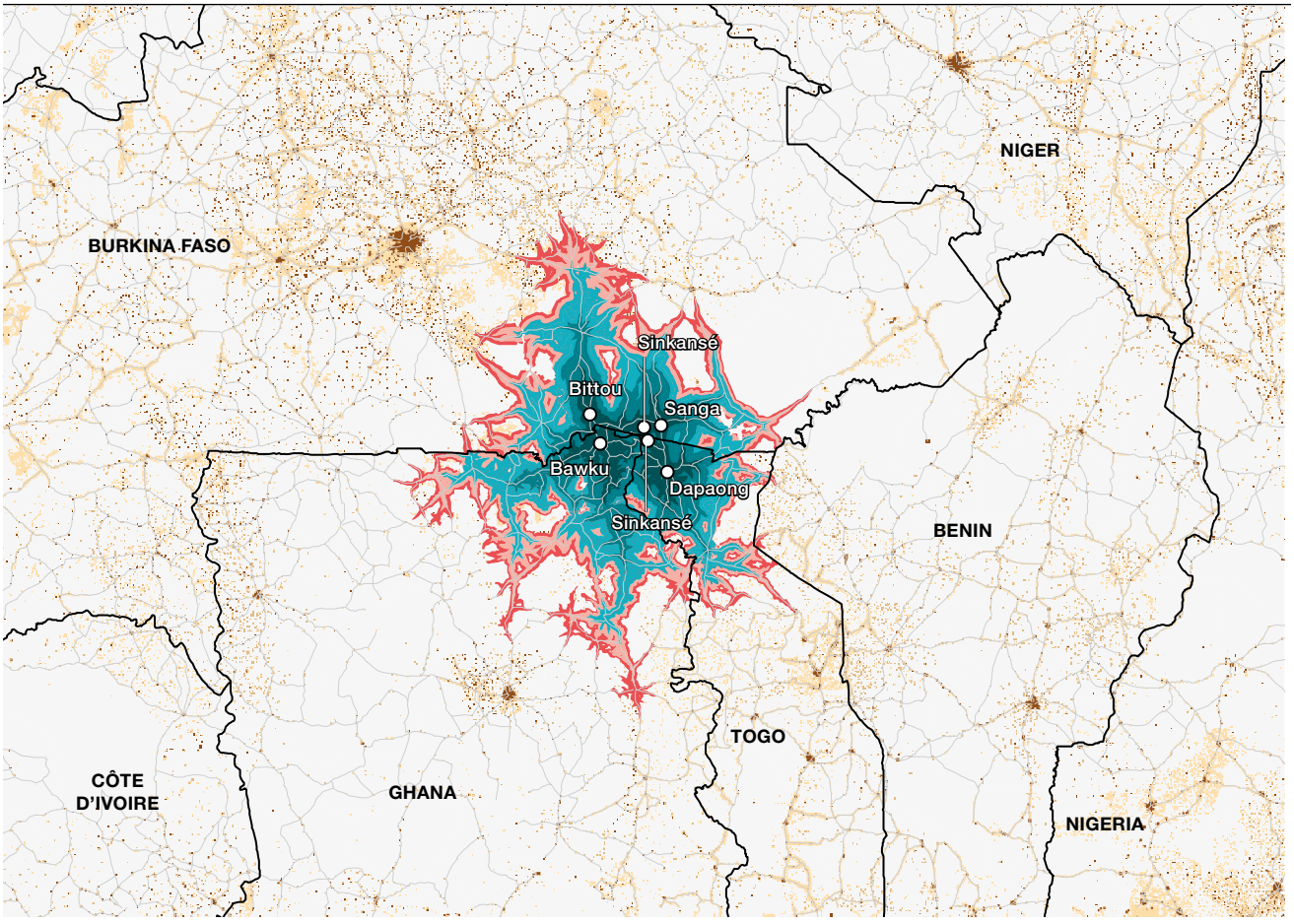
Population potential of northern Ghana, Bondoukou and the Ghanaian Coast



Sources: European Space Agency 2010; Moriconi-Ebrard, F., D. Harre and P. Heinrigs 2016; Open Street Map 2014; Global Roads Open Access Data Set 2016; Shuttle Radar Topography Mission 2014; Global Administrative Areas 2016; LandScan™ 2014 Global Population Database.
This map was created by Alterra Research Centre, Wageningen University.

Map 5.6

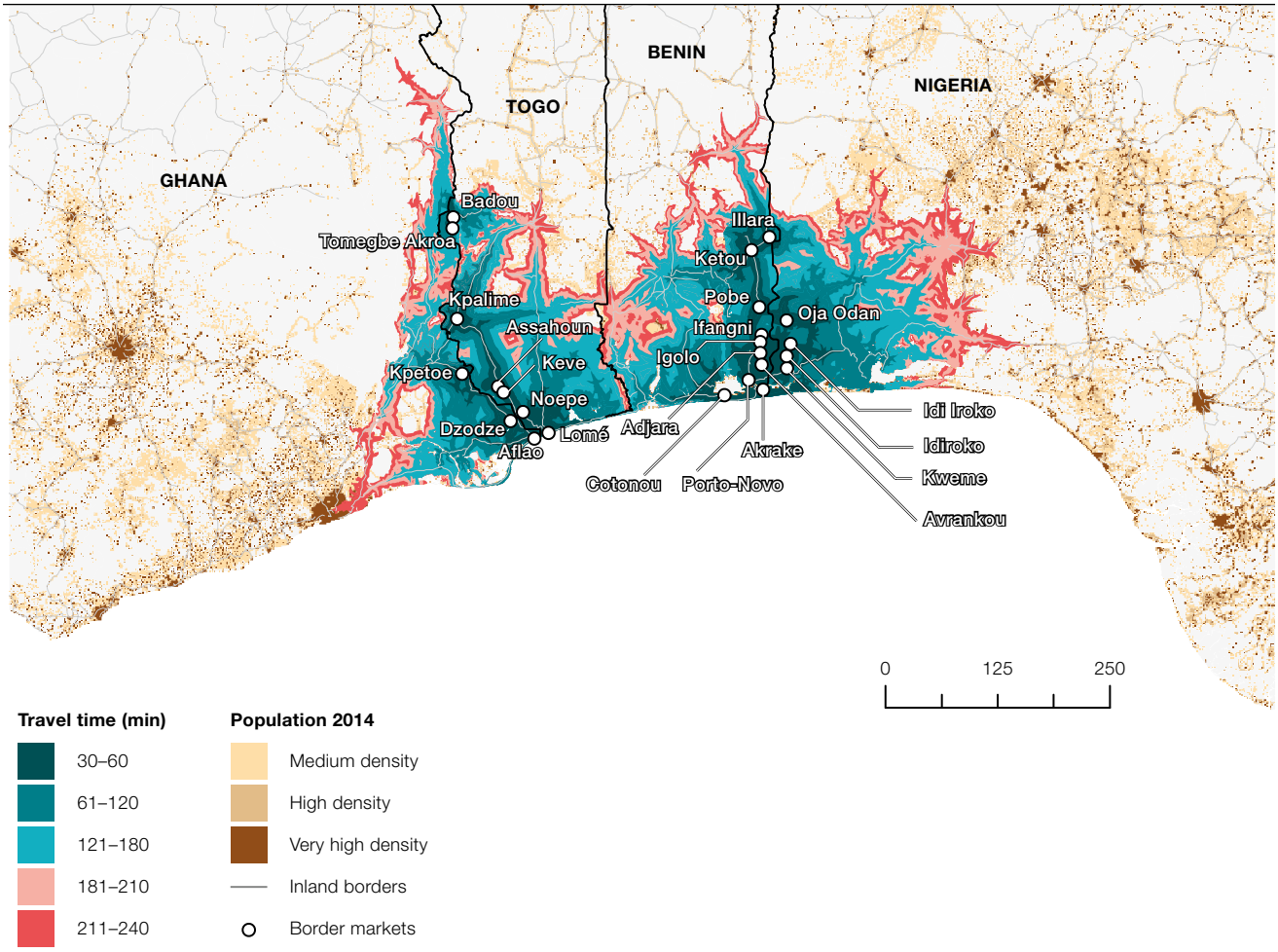
Population potential of northern Togo



Sources: European Space Agency 2010; Moriconi-Ebrard, F., D. Harre and P. Heinrigs 2016; Open Street Map 2014; Global Roads Open Access Data Set 2016; Shuttle Radar Topography Mission 2014; Global Administrative Areas 2016; LandScan™ 2014 Global Population Database. This map was created by Alterra Research Centre, Wageningen University.

Map 5.7

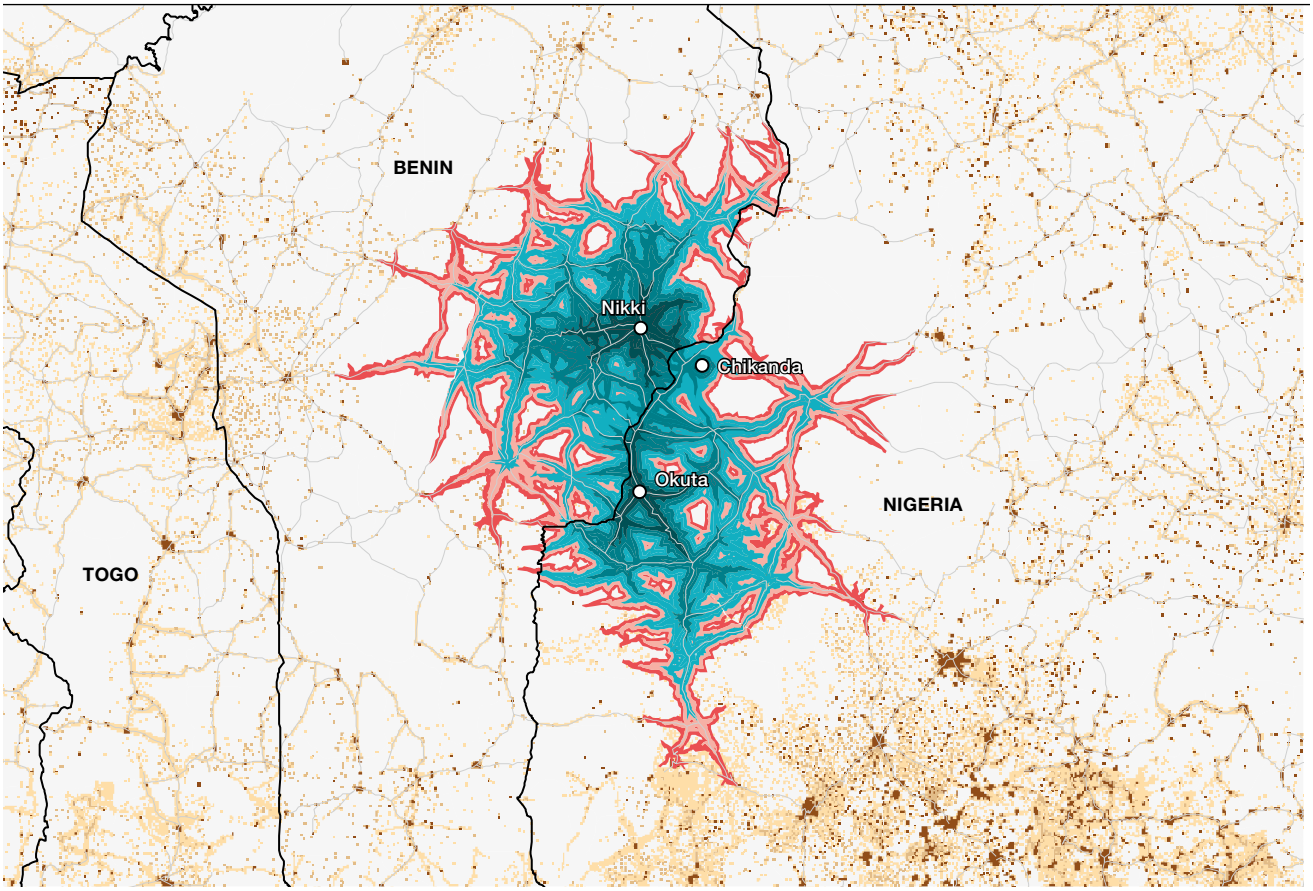
Population potential of southern Togo-Ghana and southwest Nigeria



Sources: European Space Agency 2010; Moriconi-Ebrard, F., D. Harre and P. Heinrigs 2016; Open Street Map 2014; Global Roads Open Access Data Set 2016; Shuttle Radar Topography Mission 2014; Global Administrative Areas 2016; LandScan™ 2014 Global Population Database. This map was created by Alterra Research Centre, Wageningen University.

Map 5.8

Population potential of Nikki-Chikanda-Okuta



Travel time (min)

- 30–60
- 61–120
- 121–180
- 181–210
- 211–240

Population 2014

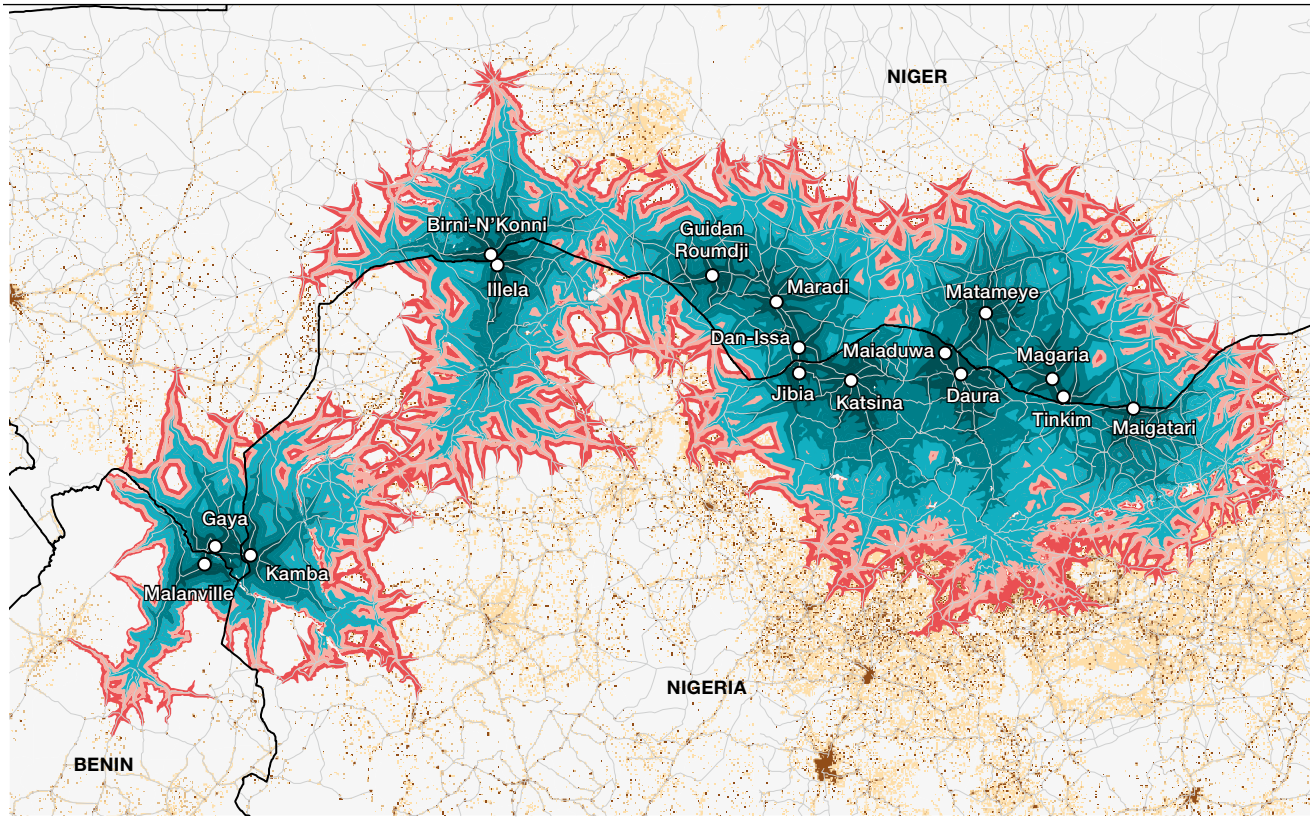
- Medium density
- High density
- Very high density
- Inland borders
- Border markets

0 125 250 km

Sources: European Space Agency 2010; Moriconi-Ebrard, F., D. Harre and P. Heinrigs 2016; Open Street Map 2014; Global Roads Open Access Data Set 2016; Shuttle Radar Topography Mission 2014; Global Administrative Areas 2016; LandScan™ 2014 Global Population Database. This map was created by Alterra Research Centre, Wageningen University.

Map 5.9

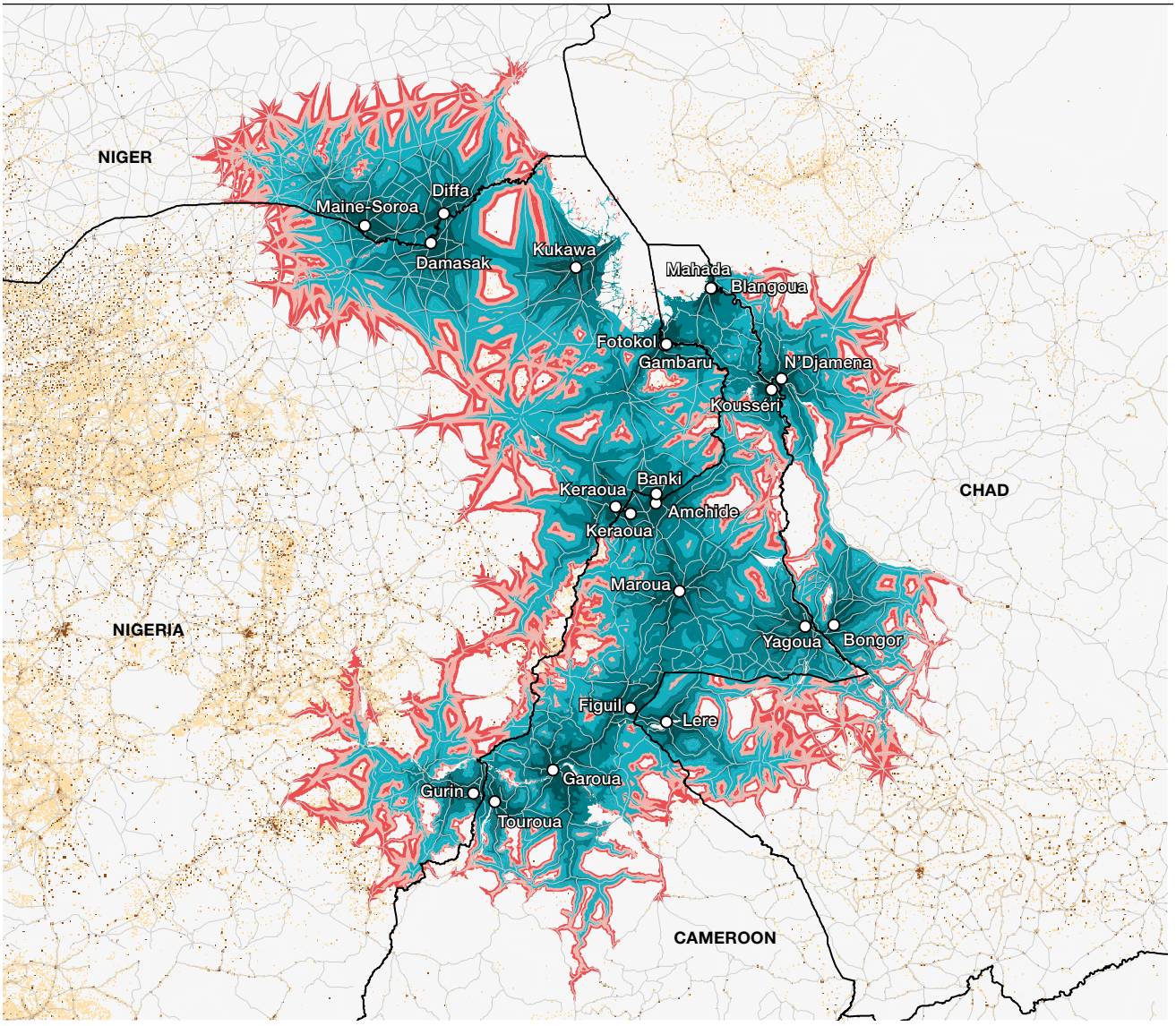
Population potential of Gaya-Malanville-Kamba, Birni N'Konni-Illela and northern Nigeria



Sources: European Space Agency 2010; Moriconi-Ebrard, F., D. Harre and P. Heinrigs 2016; Open Street Map 2014; Global Roads Open Access Data Set 2016; Shuttle Radar Topography Mission 2014; Global Administrative Areas 2016; LandScan™ 2014 Global Population Database. This map was created by Alterra Research Centre, Wageningen University.

Map 5.10

Population potential of Lake Chad and northeast Nigeria



Sources: European Space Agency 2010; Moriconi-Ebrard, F., D. Harre and P. Heinrigs 2016; Open Street Map 2014; Global Roads Open Access Data Set 2016; Shuttle Radar Topography Mission 2014; Global Administrative Areas 2016; LandScan™ 2014 Global Population Database. This map was created by Alterra Research Centre, Wageningen University.

Nigeria's borders have, without a doubt, the greatest population potential in West Africa, especially in the southwest and the north of the country (Map 5.11). In the Gulf of Guinea, the presence of very large urban centres such as Lagos and Cotonou explains why some border markets (for example, Adjara) have a demographic potential of over 10 million people. In northern Nigeria, the demographic scale of the population basins is attributable to high population

density coupled with the presence of large urban centres such as Sokoto, Kano, Katsina, Maradi and Zinder. Compared with these two regions, the other West African population potential zones are substantially less populous, especially in the basins around Lake Chad and southern Senegambia, despite their vast size.

Mapping population potential is a way to both visualise the demographic pool of each market and to evaluate the border effect. Comparing the number of people who can be reached with or without a border delay, the indicator can calculate the border effect in each population area. In the Lake Chad zone, for example, 1.98 million people can be potentially reached within four hours of the Kousséri border market, close to N'Djamena. If there were no border delays, over 2.7 million people could be reached within the same timeframe, representing a gain of almost one-third. This additional population is particularly important towards Nigeria and northern Cameroon (Map 5.12).

The gain in population that could theoretically be obtained by eliminating border delays is greatest between Benin and Nigeria (the Kétou and Illara markets) and between Niger and Nigeria, where the Nigerien markets of Dan Issa, Matameye, Magaria and Tinkim have the most to win from the opening of Nigerian borders. In the rest of the region, demographic gains are smaller but often represent an increase of more than one-third, which is the case for the markets around Lake Chad (Gambaru, Mahada, Blangoua, Fotokol) and in the Dendi (Gaya and Malanville) (Maps 5.13 to 5.21).

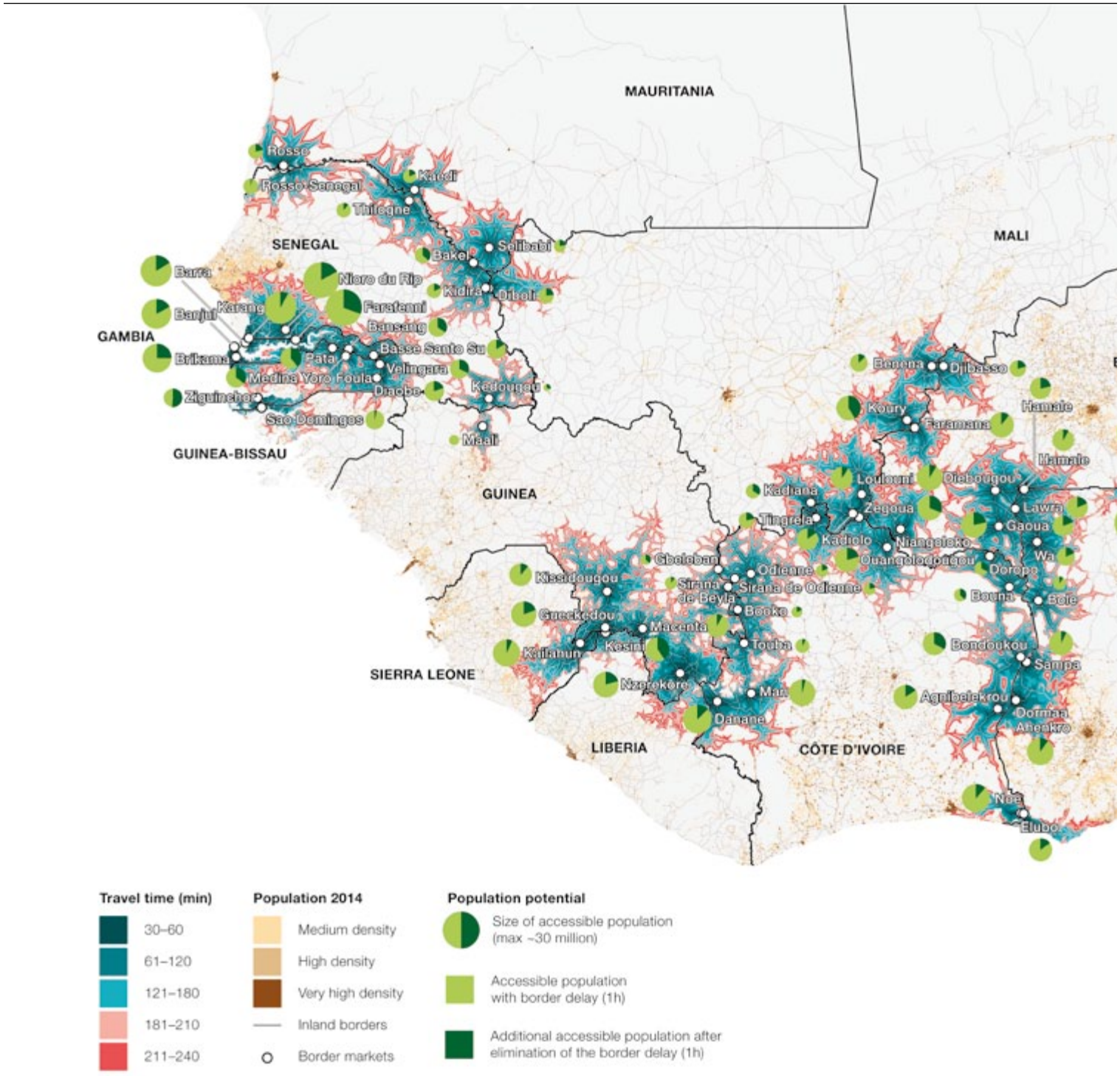
The potential population gains from opening the borders are particularly striking when border markets are grouped by major functional regions. Table 5.2 shows how many people could be potentially reached within four hours from all markets in each region, with and without border delays. Since the population basins of markets overlap geographically, these figures do not represent absolute numbers of people, but the potential for all the markets within a given region. Consumers and merchants may therefore find themselves within a zone where several markets are present, presenting them with the opportunity to diversify the markets which they visit. Border markets located in southwest Nigeria, for example, are able to reach the urban populations of the major regional centres of Cotonou and Lagos, increasing the regional potential by a corresponding amount. The southwest and north of Nigeria are the two regions that would most benefit from a reduction in border delays, while significant gains could be made in Dendi (Gaya, Malanville, Kamba), around Lake Chad, in southern Senegambia, southern Mali and between Togo and Ghana. In the Lake Chad region, the potential gain from the elimination of border delays represents almost half of the population reached, whereas in Dendi, the west and south of Mali, and northern Nigeria, it is over one-third.

Population potential is strongly dependent on the density and quality of the West African road network. When the former colonies acquired their independence, concerted efforts were made to connect the handful of regions that had a dense network of paved roads in order to form a regional network. The major cities of the Sahel, isolated for many years, were gradually integrated into the coastal network, while some major regional centres such as Nouadhibou in Mauritania and Kayes in Mali were finally linked to their capitals. Fifty-five years after independence, the West African network is denser and better connected than ever, especially between Abidjan and Lagos.

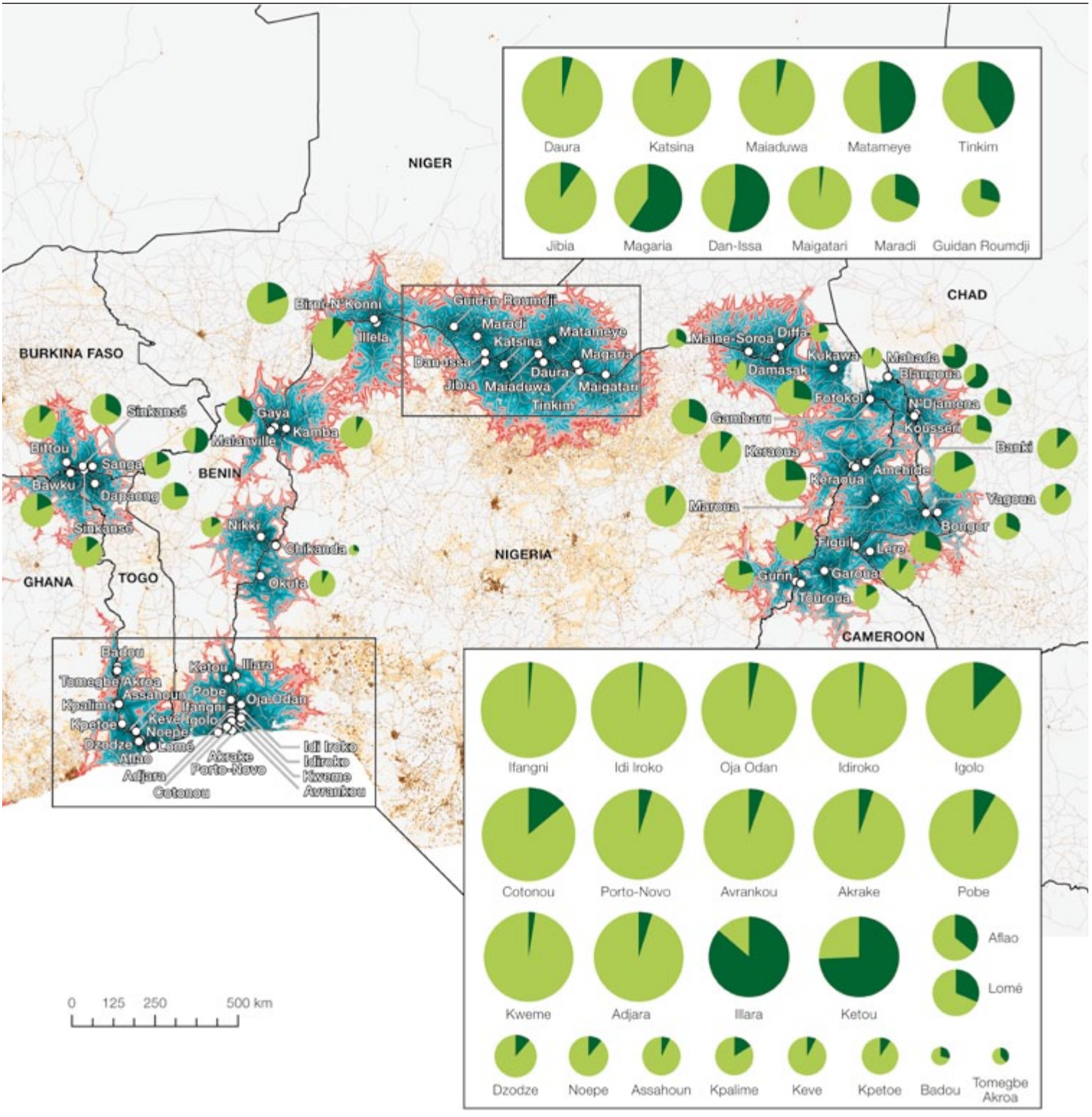
Despite these developments, road density in West Africa remains low compared to other regions in the world. Mali is larger than states of Texas and California combined but has only 5 522 km of paved road, compared to 1.72 million km in those two states. The West African network also remains firmly structured along national rather than regional lines: the major road corridors such as the Trans-Mauritanian Highway (Route de l'Espoir) between Nouakchott and Néma, the RN1 (Route Nationale 1) between Niamey and Diffa in Niger, and the trans-Mali road between Bamako and Gao all culminate in dead ends. Only Nigeria has a dense road network in all its regions. The low density of cross-border roads considerably distorts to population zones that can be reached from a given market. This effect is particularly stark between Sierra Leone, Guinea and Liberia; in the Senegal valley between Rosso, Kaédi and Bakel; and in northern Togo, where the major thoroughfares passing through Bawku and Dapaong run parallel to the border.

Map 5.11

Population potential by border market, with and without border effect

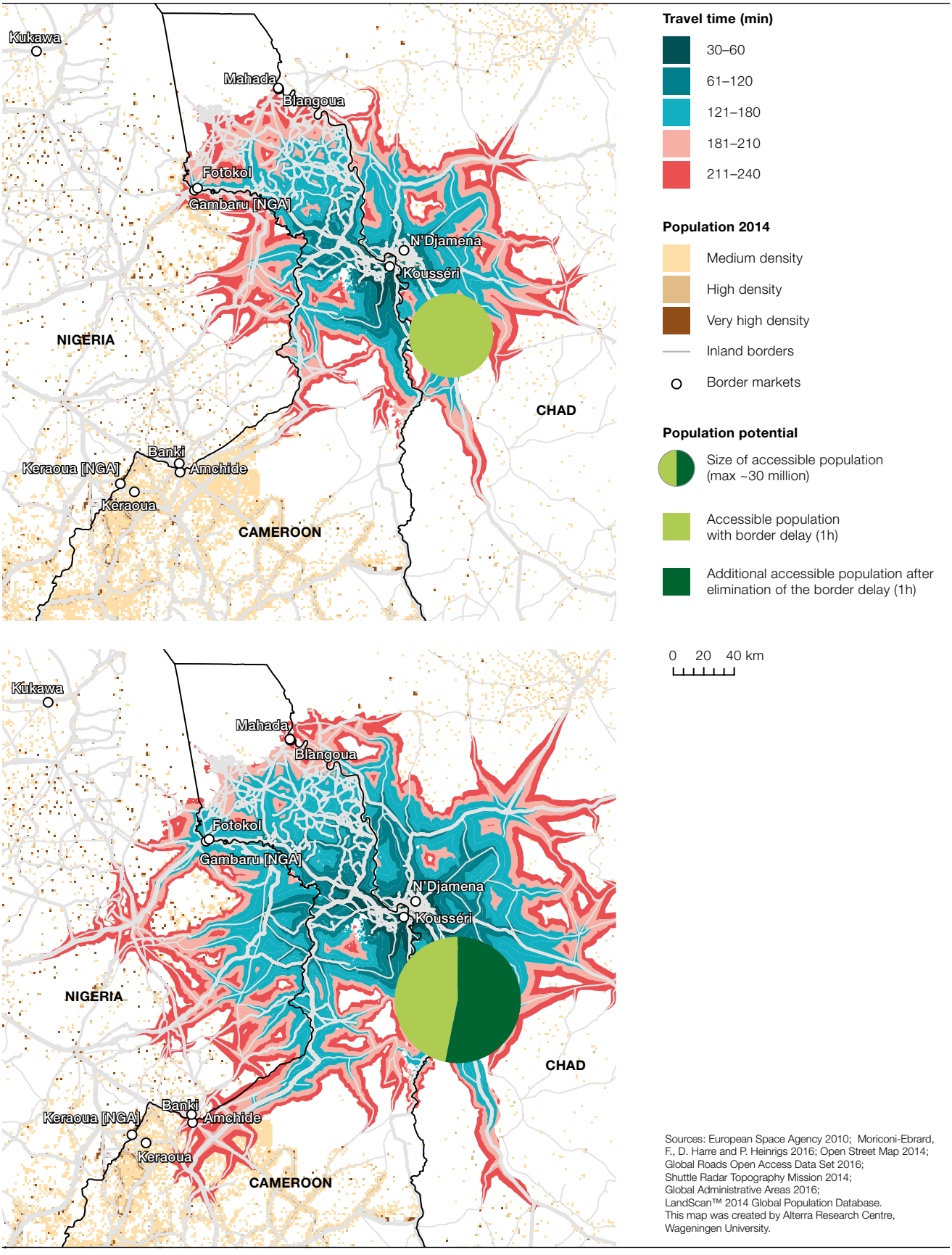


Sources: European Space Agency 2010; Moriconi-Ebrard, F., D. Harre and P. Heinrigs 2016; Open Street Map 2014; Global Roads Open Access Data Set 2016; Shuttle Radar Topography Mission 2014; Global Administrative Areas 2016; LandScan™ 2014 Global Population Database. This map was created by Alterra Research Centre, Wageningen University.


NIGER
BURKINA FASO
BENIN
NIGERIA
GHANA
TOGO
CHAD
CAMEROON
Daura
Katsina
Maiaduwa
Matameye
Tinkim
Jibia
Magaria
Dan-Issa
Maigatari
Maradi
Guidan Roumdji
Birni-N'Konni
Illela
Sinkansé
Gaya
Kamba
Malanville
Bittou
Sanga
Bawku
Dapaong
Nikki
Okuta
Maine-Soroa
Diffa
Damasak
Kukawa
Mahada
Blangoua
Fotokol
N'Djamena
Gambaru
Kousséri
Banki
Ketaoua
Amchide
Keraoua
Marona
Yagoua
Bongor
Figuil
Lere
Gurin
Garoua
Touroua
Badou
Tomegbe
Akroa
Assahoun
Kpalime
Pobe
Ifangni
Oja Odan
Kpetoe
Keve
Igolo
Noepe
Dzodze
Lomé
Aflao
Akrake
Porto-Novo
Adjara
Cotonou
Idi Iroko
Idiroko
Kweme
Avrankou
Ifangni
Idi Iroko
Oja Odan
Idiroko
Igolo
Cotonou
Porto-Novo
Avrankou
Akrake
Pobe
Kweme
Adjara
Illara
Ketou
Aflao
Lomé
Dzodze
Noepe
Assahoun
Kpalime
Keve
Kpetoe
Badou
Tomegbe Akroa
0 125 250 500 km

Map 5.12

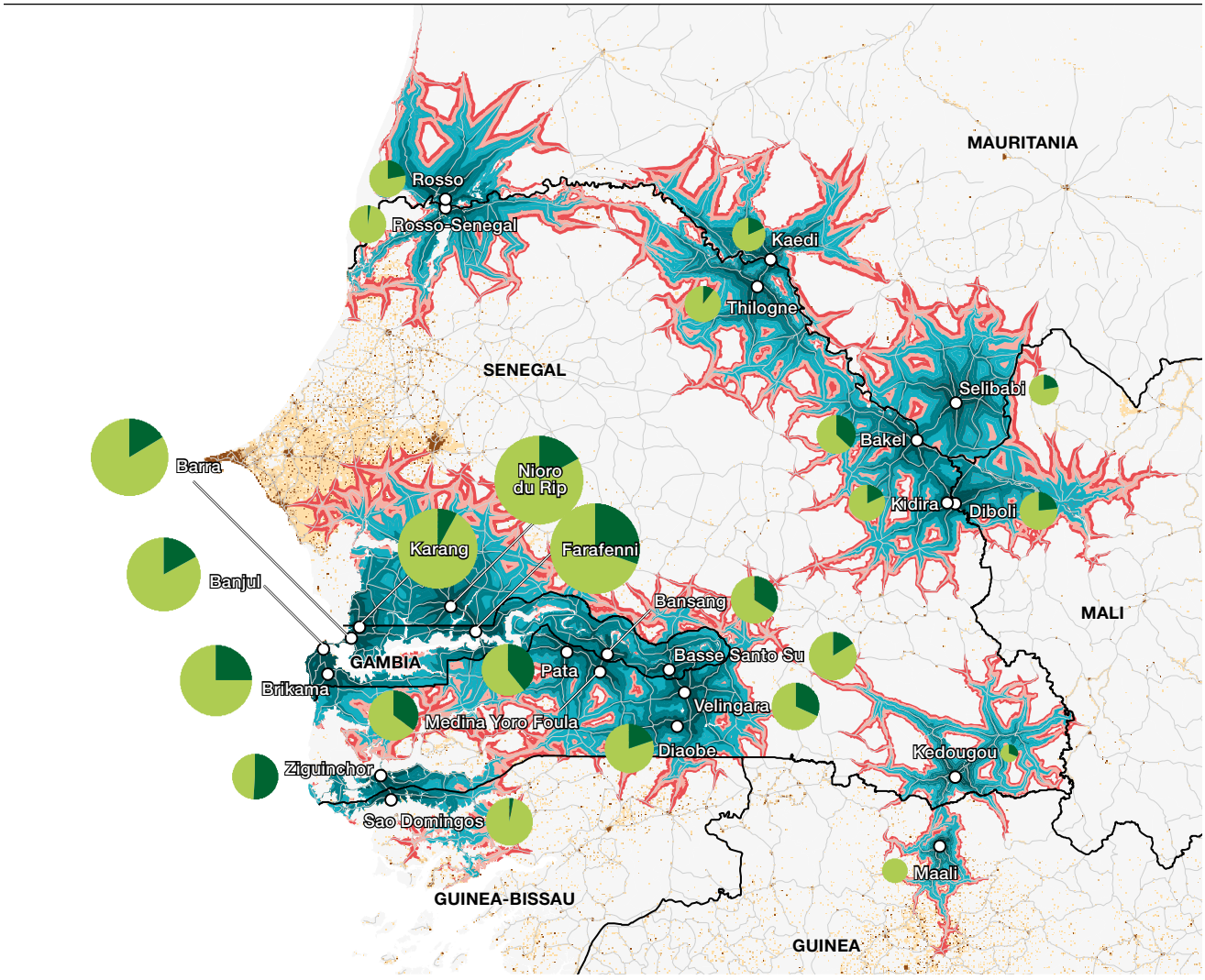
Population potential of Kousséri (Cameroon) with and without border effect



Sources: European Space Agency 2010; Moriconi-Ebrard, F., D. Harre and P. Heinrigs 2016; Open Street Map 2014; Global Roads Open Access Data Set 2016; Shuttle Radar Topography Mission 2014; Global Administrative Areas 2016; LandScan™ 2014 Global Population Database. This map was created by Alterra Research Centre, Wageningen University.

Map 5.13

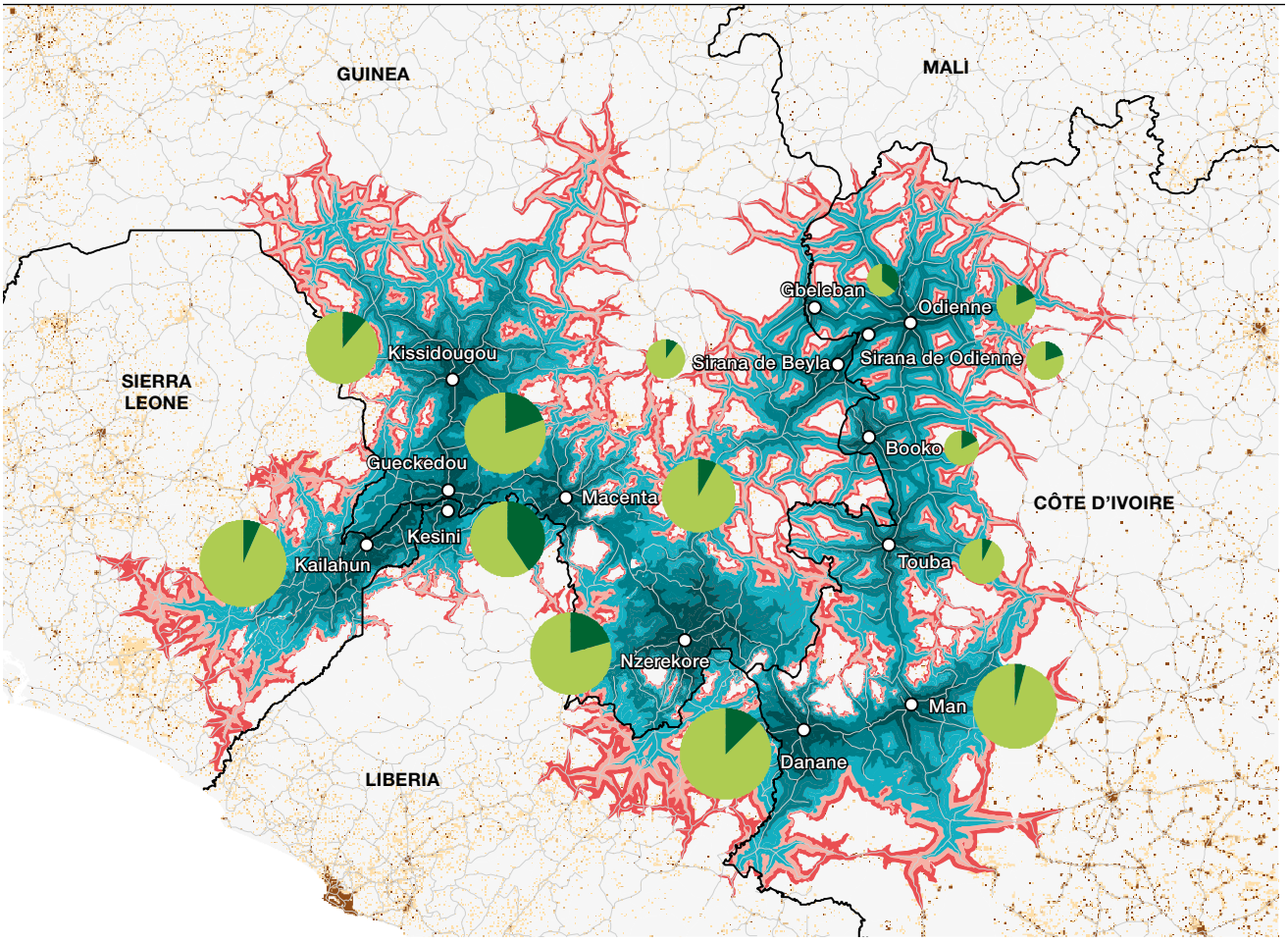
Population potential of Senegambia, with and without border effect



Sources: European Space Agency 2010; Moriconi-Ebrard, F., D. Harre and P. Heinrigs 2016; Open Street Map 2014; Global Roads Open Access Data Set 2016; Shuttle Radar Topography Mission 2014; Global Administrative Areas 2016; LandScan™ 2014 Global Population Database.
This map was created by Alterra Research Centre, Wageningen University.

Map 5.14

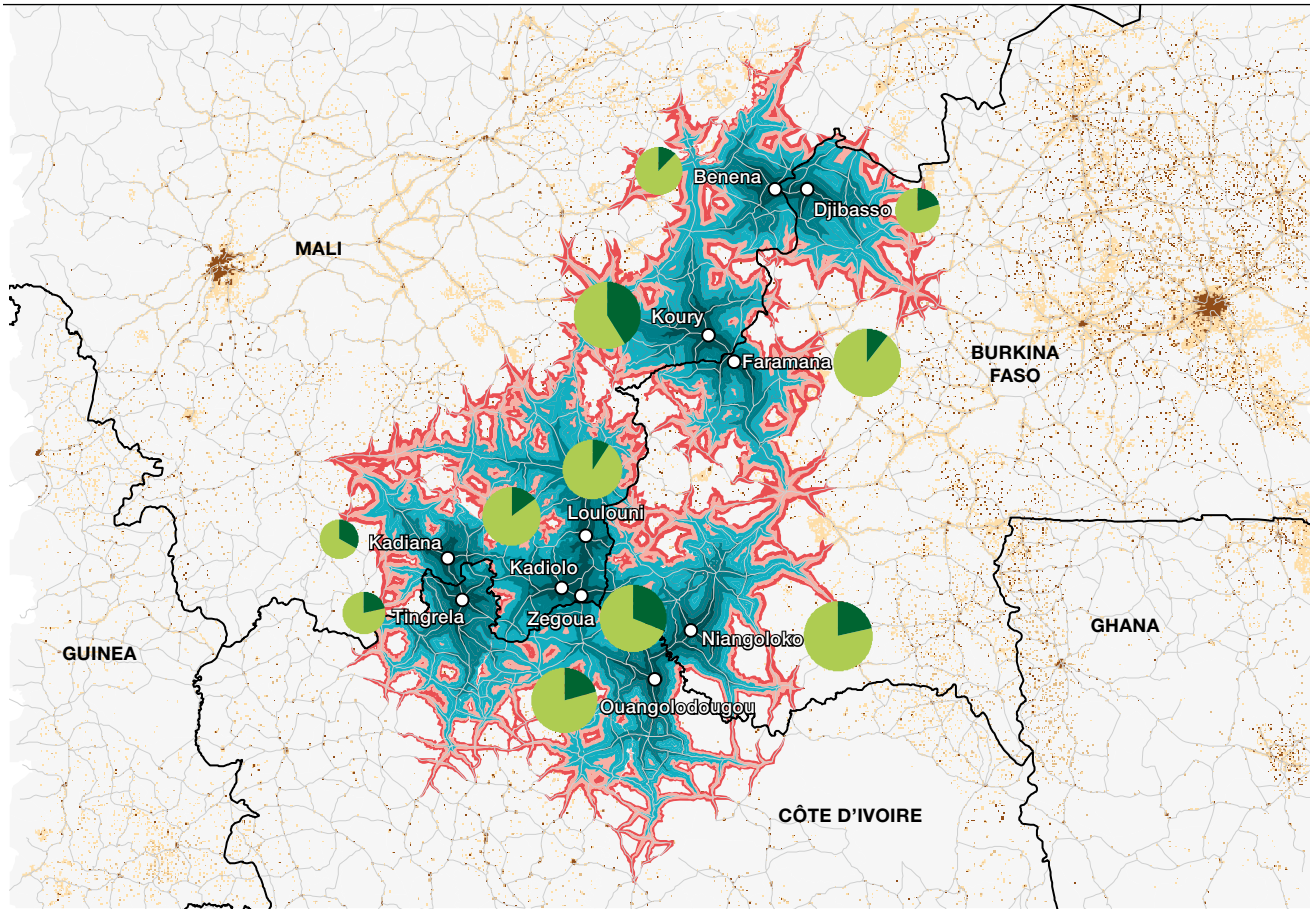
Population potential of eastern Guinea, with and without border effect



Sources: European Space Agency 2010; Moriconi-Ebrard, F., D. Harre and P. Heinrigs 2016; Open Street Map 2014; Global Roads Open Access Data Set 2016; Shuttle Radar Topography Mission 2014; Global Administrative Areas 2016; LandScan™ 2014 Global Population Database.
This map was created by Alterra Research Centre, Wageningen University.

Map 5.15

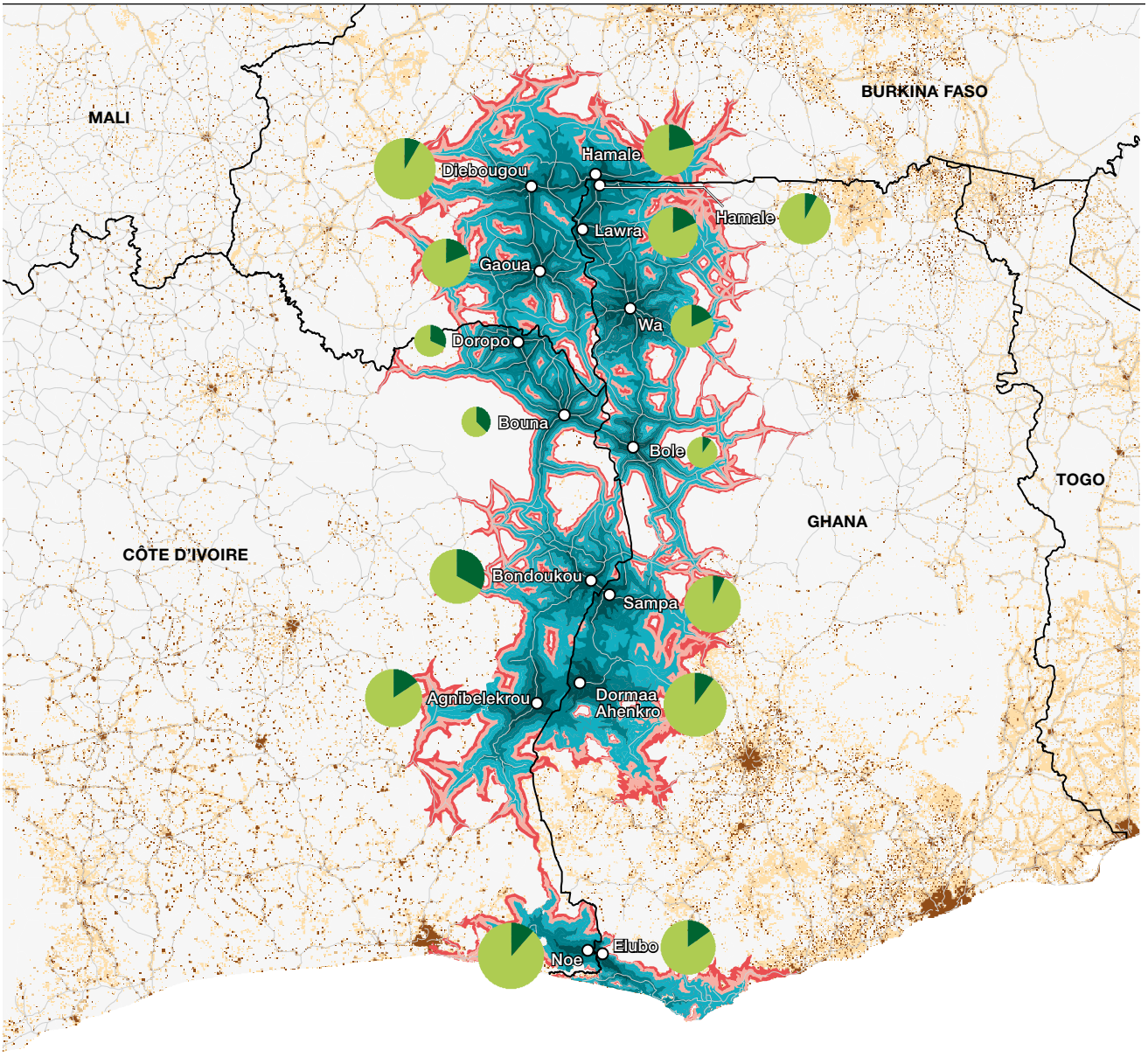
Population potential of southern Mali, with and without border effect



Sources: European Space Agency 2010; Moriconi-Ebrard, F., D. Harre and P. Heinrigs 2016; Open Street Map 2014; Global Roads Open Access Data Set 2016; Shuttle Radar Topography Mission 2014; Global Administrative Areas 2016; LandScan™ 2014 Global Population Database.
This map was created by Alterra Research Centre, Wageningen University.

Map 5.16

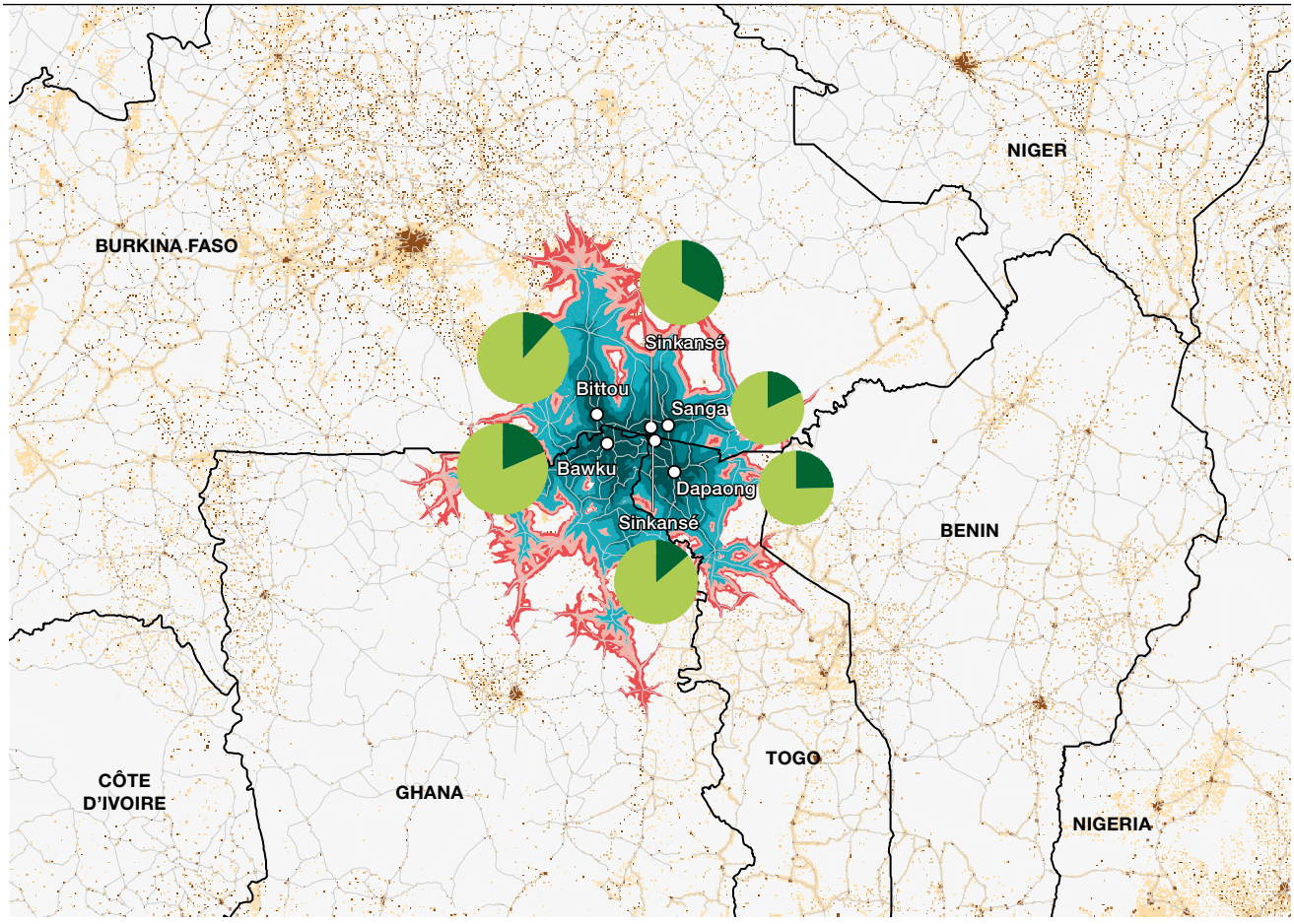
Population potential of the Ghana-Côte d'Ivoire border with and without border effect



Sources: European Space Agency 2010; Moriconi-Ebrard, F., D. Harre and P. Heinrigs 2016; Open Street Map 2014; Global Roads Open Access Data Set 2016; Shuttle Radar Topography Mission 2014; Global Administrative Areas 2016; LandScan™ 2014 Global Population Database.
This map was created by Alterra Research Centre, Wageningen University.

Map 5.17

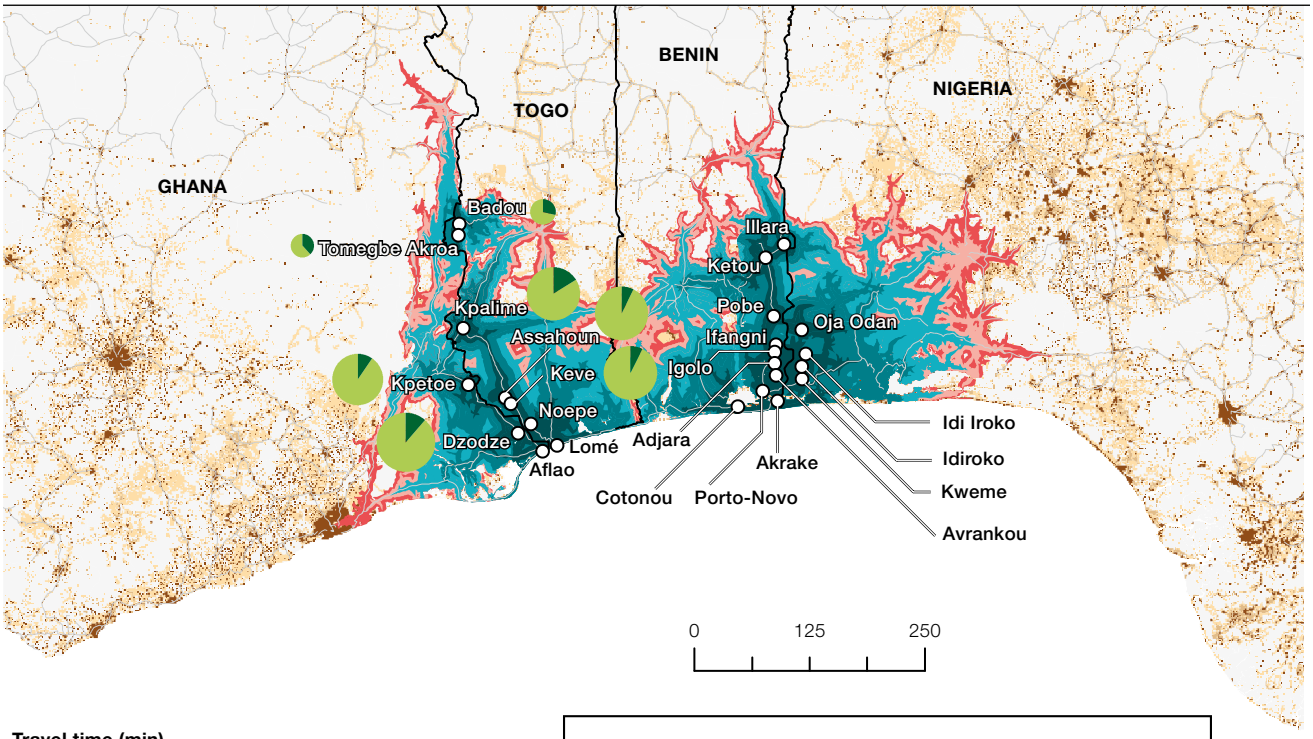
Population potential of northern Togo, with and without border effect



Sources: European Space Agency 2010; Moriconi-Ebrard, F., D. Harre and P. Heinrigs 2016; Open Street Map 2014; Global Roads Open Access Data Set 2016; Shuttle Radar Topography Mission 2014; Global Administrative Areas 2016; LandScan™ 2014 Global Population Database. This map was created by Alterra Research Centre, Wageningen University.

Map 5.18

Population potential of southwest Nigeria, with and without border effect



Travel time (min)

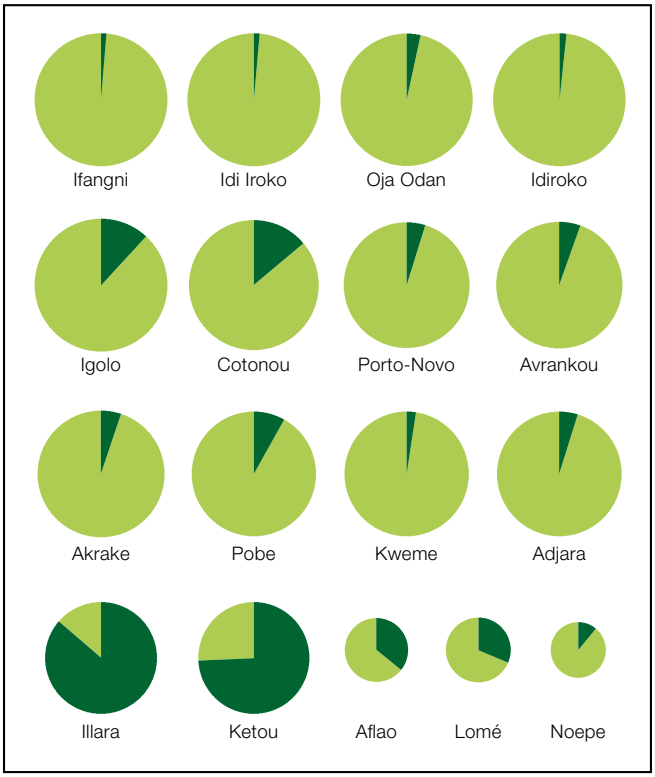
- 30–60
- 61–120
- 121–180
- 181–210
- 211–240

Population 2014

- Medium density
- High density
- Very high density
- Inland borders

Population potential

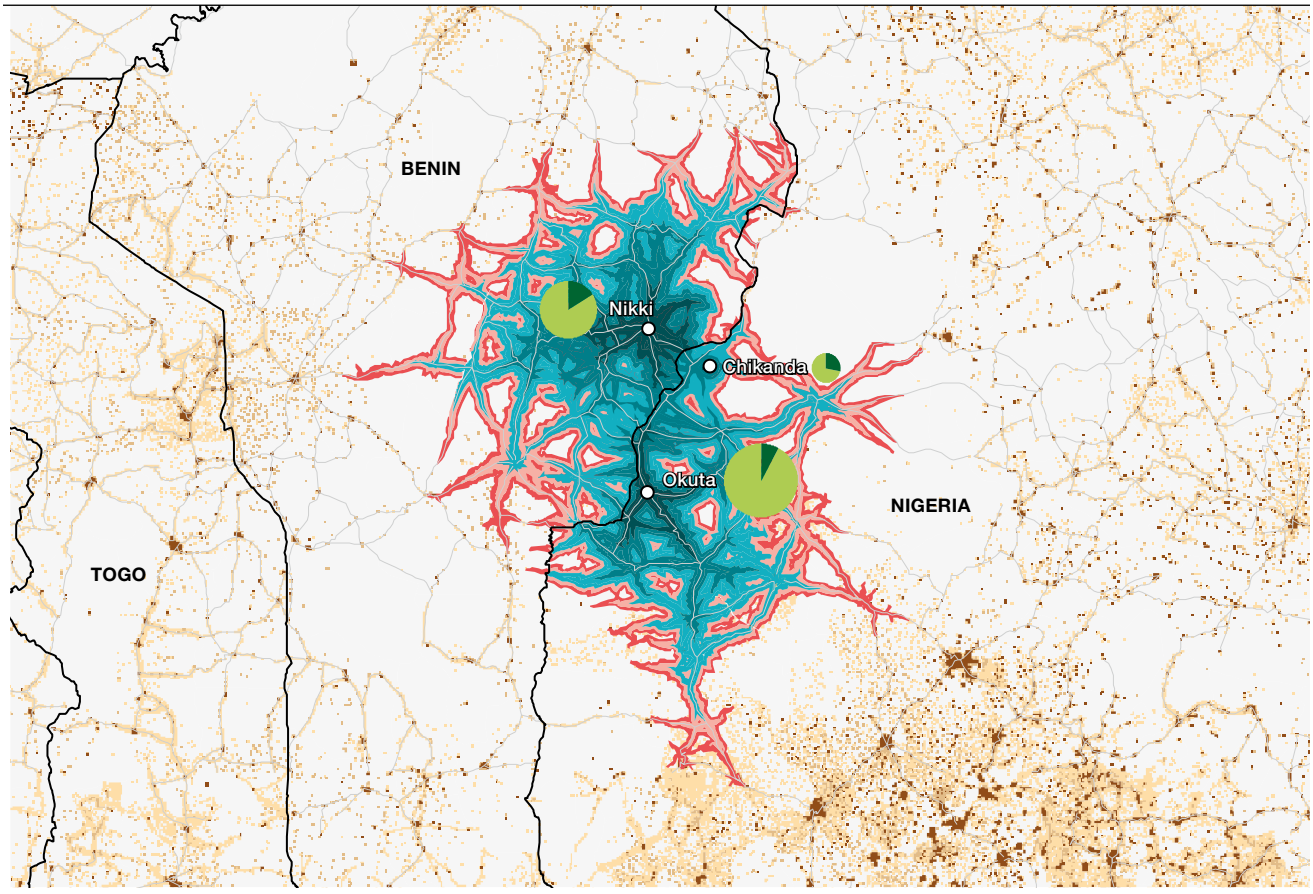
- Size of accessible population (max ~30 million)
- Accessible population with border delay (1h)
- Additional accessible population after elimination of the border delay (1h)



Sources: European Space Agency 2010; Moriconi-Ebrard, F., D. Harre and P. Heinrigs 2016; Open Street Map 2014; Global Roads Open Access Data Set 2016; Shuttle Radar Topography Mission 2014; Global Administrative Areas 2016; LandScan™ 2014 Global Population Database. This map was created by Alterra Research Centre, Wageningen University.

Map 5.19

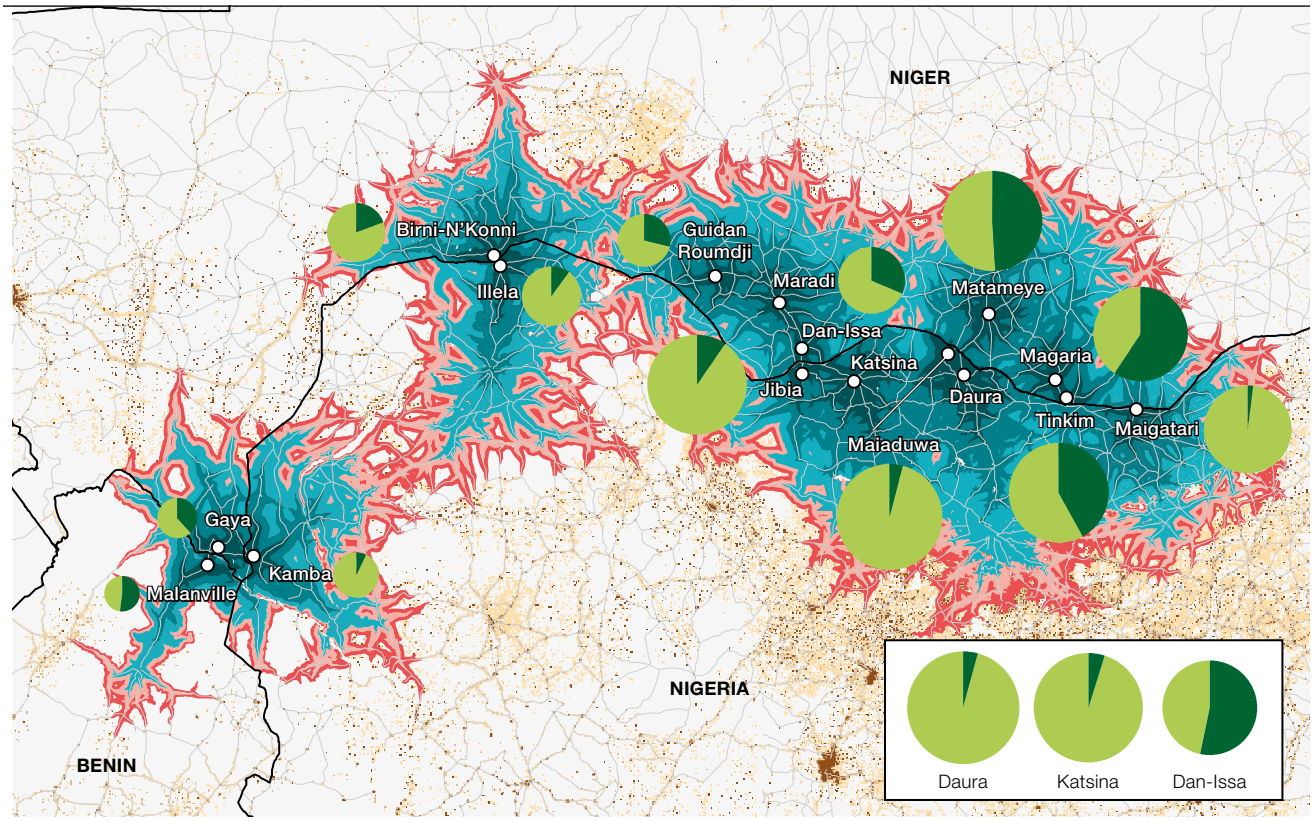
Population potential of Borgou, with and without border effect



Sources: European Space Agency 2010; Moriconi-Ebrard, F., D. Harre and P. Heinrigs 2016; Open Street Map 2014; Global Roads Open Access Data Set 2016; Shuttle Radar Topography Mission 2014; Global Administrative Areas 2016; LandScan™ 2014 Global Population Database. This map was created by Alterra Research Centre, Wageningen University.

Map 5.20

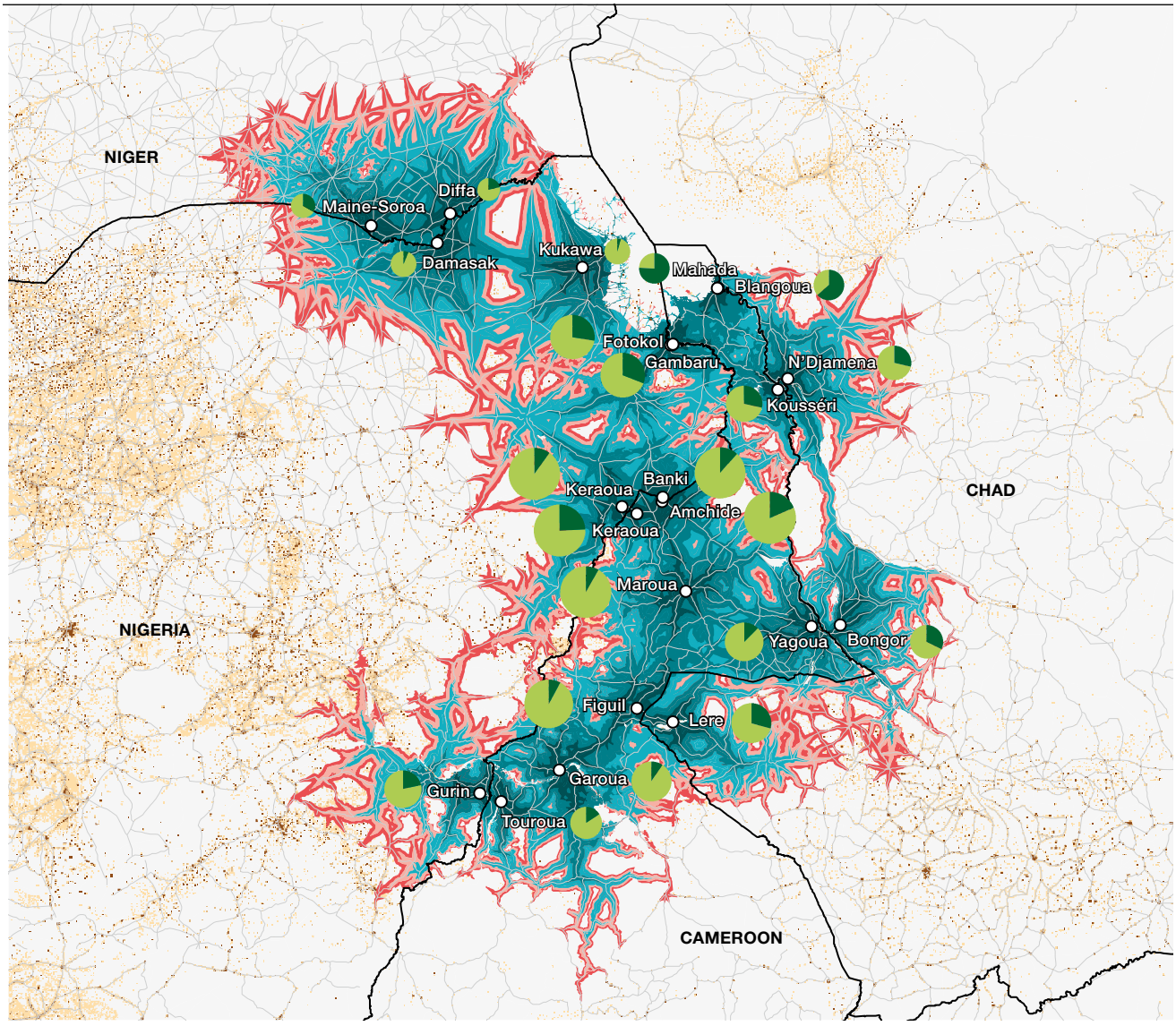
Population potential of northern Nigeria, with and without border effect



Sources: European Space Agency 2010; Moriconi-Ebrard, F., D. Harre and P. Heinrigs 2016; Open Street Map 2014; Global Roads Open Access Data Set 2016; Shuttle Radar Topography Mission 2014; Global Administrative Areas 2016; LandScan™ 2014 Global Population Database. This map was created by Alterra Research Centre, Wageningen University.

Map 5.21

Population potential of Lake Chad, with and without border effect



Sources: European Space Agency 2010; Moriconi-Ebrard, F., D. Harre and P. Heinrigs 2016; Open Street Map 2014; Global Roads Open Access Data Set 2016; Shuttle Radar Topography Mission 2014; Global Administrative Areas 2016; LandScan™ 2014 Global Population Database. This map was created by Alterra Research Centre, Wageningen University.

Table 5.2
Population potential by functional region

Functional regions	Population reachable without border delays	Population reachable with border delays	Difference	Difference %
Lake Chad	22 282 186	14 961 224	7 320 962	49
Gaya-Malanville-Kamba	8 149 907	5 797 864	2 352 043	41
Western Mali	2 539 195	1 889 360	649 835	34
Northern Nigeria	166 854 100	125 388 053	41 466 047	33
Southern Mali	13 695 146	10 485 904	3 209 242	31
Southern Senegambia	30 451 205	23 760 542	6 690 663	28
Northern Togo	18 043 115	14 388 356	3 654 759	25
Southern Togo-Ghana	45 063 704	36 555 445	8 508 259	23
Northern Ghana	10 087 579	8 347 133	1 740 446	21
Bondoukou	7 342 882	6 138 438	1 204 444	20
Eastern Guinea	18 509 359	15 558 879	2 950 480	19
Birni N'Konni-Illela	11 456 374	9 665 866	1 790 508	19
Northeast Nigeria	46 077 213	38 885 407	7 191 806	18
Kaédi	1 202 762	1 018 115	184 647	18
Southwest Nigeria	372 341 544	319 190 771	53 150 773	17
Ghanaian Coast	4 041 408	3 468 159	573 249	17
Nikki-Chikanda-Okuta	3 965 936	3 433 079	532 857	16
Rosso	1 326 804	1 167 236	159 568	14
Kédougou	473 857	426 233	47 624	11

Note: the population indicated is not an absolute figure but an aggregate potential for all markets in each functional region.

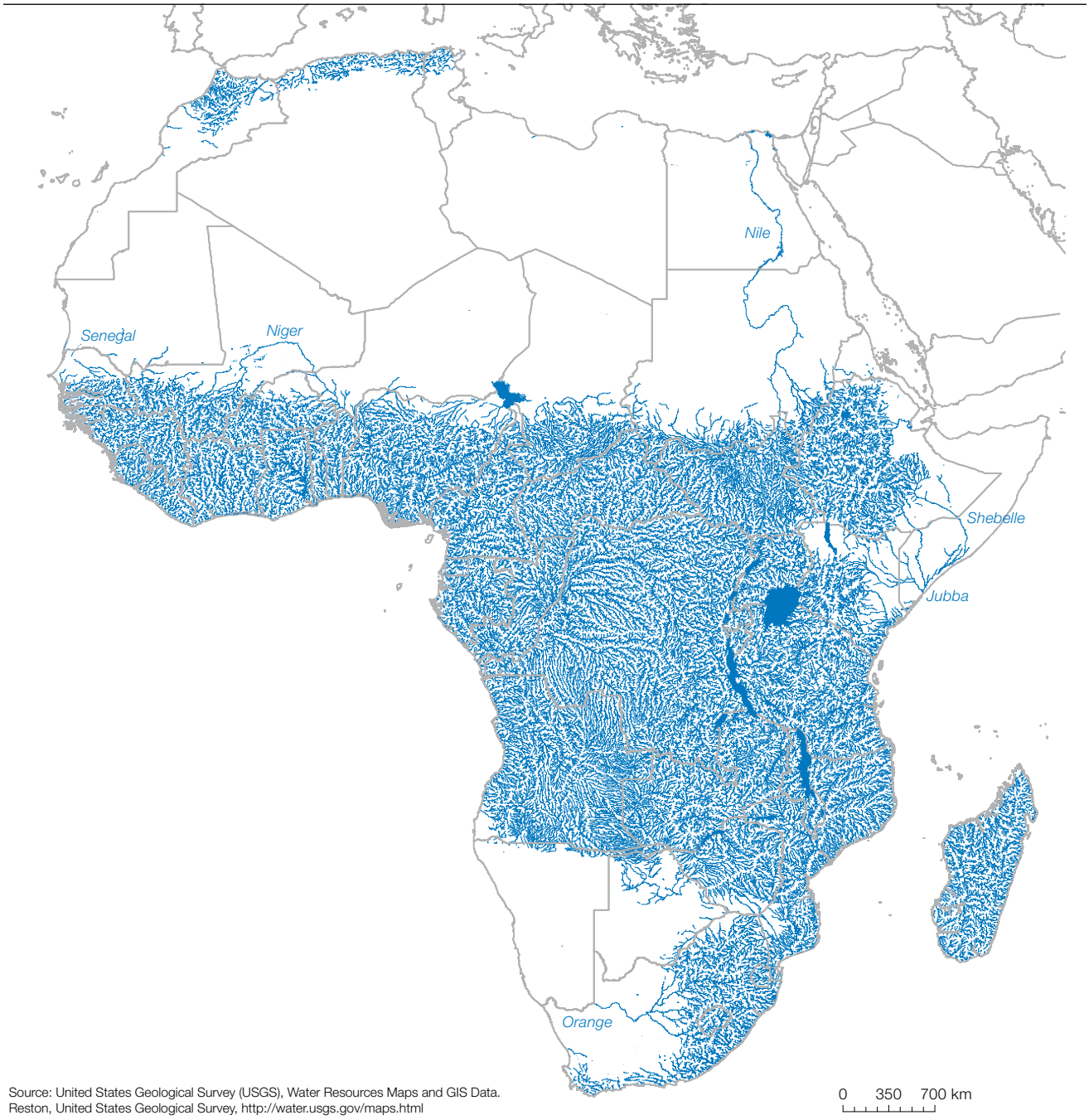
Sources: European Space Agency 2010; Moriconi-Ebrard, F., D. Harre and P. Heinrigs 2016; Open Street Map 2014; Global Roads Open Access Data Set 2016; Shuttle Radar Topography Mission 2014; Global Administrative Areas 2016; LandScan™ 2014 Global Population Database.

SURFACE AND GROUND WATER RESOURCES

Natural resources, when shared between countries, are generally favourable to international regulation and do not exacerbate border tensions (Brunet-Jailly, 2015), whereas situations of extreme resource asymmetry as seen around the Great Lakes, for example, can often worsen conflicts. The reason for what would appear at first to be a paradoxical observation, is that countries which share resources recognise the intrinsic value of the border regions where these resources can be exploited, usually resulting in consensus with their neighbours. This is the case for the water resources examined by this indicator, which have in most cases led to co-operation between African states. As in the rest of the world, conflicts over water are rare in Africa.

However, few indicators reveal a more contrasted vision of Africa than its river

Map 5.22
Surface watercourses in Africa

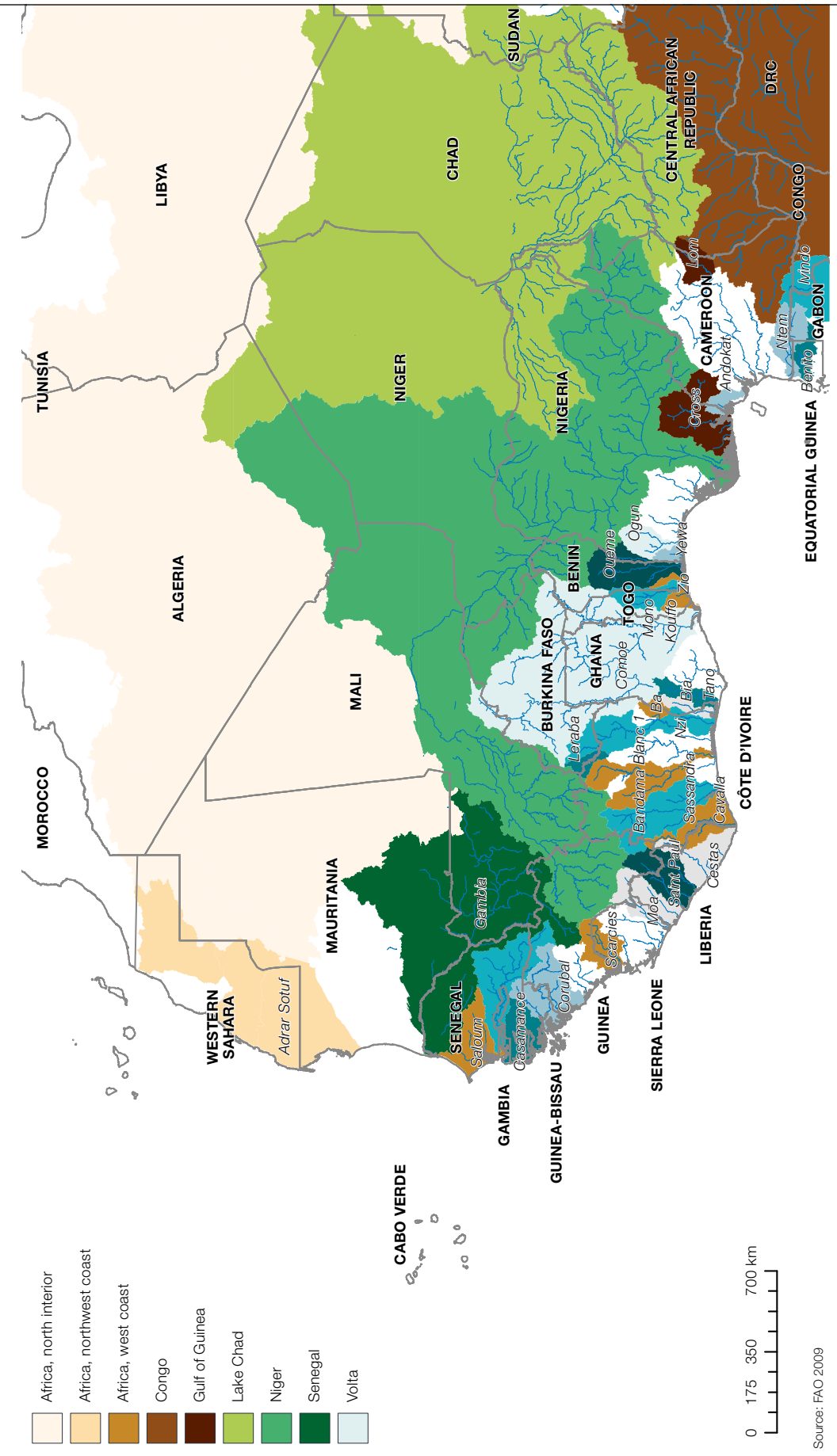


Source: United States Geological Survey (USGS), Water Resources Maps and GIS Data. Reston, United States Geological Survey, http://water.usgs.gov/maps.html

systems (or watercourses). Shown according to their permanent or seasonal character, the continent's watercourses appear to divide the landmass into a series of uneven zones (Map 5.22).

North of the equator, the Atlas Mountains protect a narrow band of humidity above the Sahara which stretches out over almost one-third of the continent and whose many *wadis,* which dried before the end of the Neolithic era, flow only intermittently. South of the Sahara, most watercourses are perennial, except in the Horn of Africa and the Kalahari Desert. Only a handful of rivers originating in the Great Lakes region (the Nile), the tableland of Ethiopia (the Jubba and the Shebelle) and the Drakensberg (the Orange) manage to overcome arid conditions. In the Sahel, the

Map 5.23
Cross-border catchment basins in West Africa



major permanent rivers – Senegal, Gambia, Niger and the Lake Chad system – originate in the wet tropical regions and flow along the fringes of the Sahara.

West Africa has no fewer than 28 cross-border catchment basins (Map 5.23). The Lake Chad drainage system is the largest, covering 2 380 000 km² including its inactive area in the Sahara, while the Niger River basin incorporates the greatest number of countries (11 including its inactive area). Other cross-border catchment basins of regional significance include the Volta, which is shared between six countries, and the Senegal, which is shared by Mauritania, Senegal, Mali and Guinea. The countries around the Gulf of Guinea cover catchment areas that are less extensive, such as the Cavalla between Liberia, Guinea and Côte d'Ivoire, but which are just as vital to the local populations for their water resources.

Such is the importance of cross-border catchment basins that West African countries have set up a number of regional organisations to manage the environment since the 1960s. No fewer than six basin organisations are currently responsible for promoting cross-border governance and investment: the Senegal River Basin Development Organisation (OMVS) and the Gambia River Basin Development Organisation (OMVG), its Gambian counterpart; the Mano River Union (MRU); the Volta Basin Authority (VBA); the Niger Basin Authority (NBA); and the Lake Chad Basin Commission (LCBC) (Chapter 5). Despite these initiatives, the number of hydraulic projects in West Africa remains low by international standards. With the exception of Burkina Faso, which has developed an earth-fill dams policy, most West African countries have invested very little in dams until recently (Table 5.3). Only the Akosombo, Kossou, Kainji and Manantali dams, built between 1965 and 1980, have a capacity of over 1 billion cubic metres (FAO, 2016a).

The as yet largely untapped potential of the region's water resources prompted the Economic Community of West African States (ECOWAS) to set up a Water Resources Co-ordination Unit (WRCU) to protect and develop water resources (ECOWAS, 2011, 2012). This initiative records the impact of the investments made to date and identifies the regional projects with the greatest development potential. These efforts have helped to rekindle the region's interest in dams since the turn of the millennium. The most ambitious projects concern the Niger River basin and, to a lesser degree, the Volta and the Gambia. The Republic of Niger, for example, has launched work on the Kandadji Dam, 200 km north of Niamey, which should eventually help control the erratic flow of the Niger River, supply water to the capital, enable irrigation for local agriculture and generate electricity.

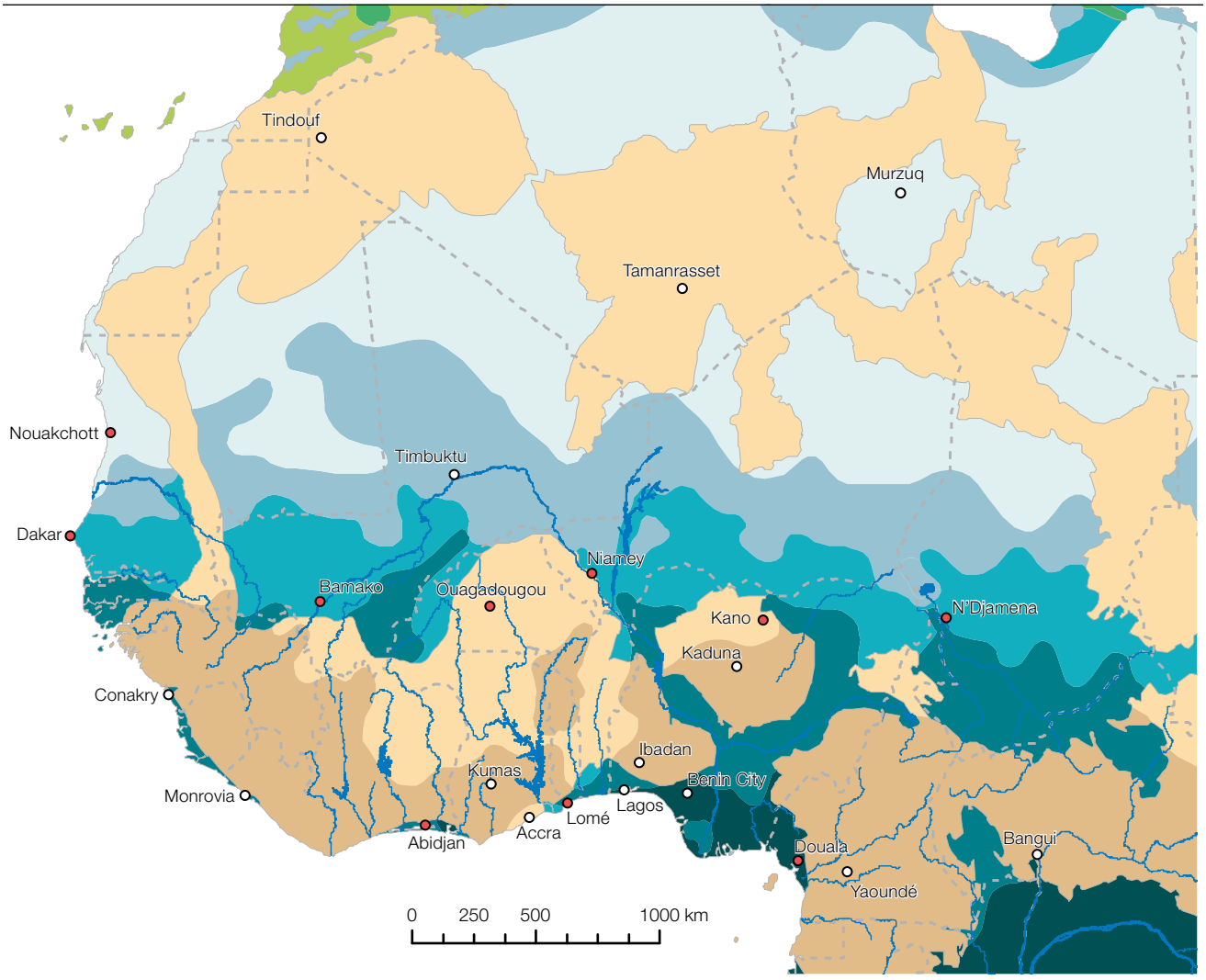
In addition to surface water, Africa also has considerable groundwater reserves, amassed thousands of years ago when the climate was more clement. In West Africa, these reserves are generally located in Sahelo-Saharan areas

Table 5.3
Number and capacity of West African dams

Country	Number of dams	Reservoir capacity (million m³)
Benin	7	4 154
Burkina Faso	145	5 338
Cameroon	20	23 121
Côte d'Ivoire	33	37 244
Gambia	1	0
Ghana	31	148 504
Guinea	22	1 837
Liberia	8	239
Mali	14	20 595
Mauritania	1	500
Niger	31	1 694
Nigeria	89	45 631
Senegal	5	250
Sierra Leone	8	220
Togo	6	1 717
Total	**421**	**291 043**

Source: FAO 2016a

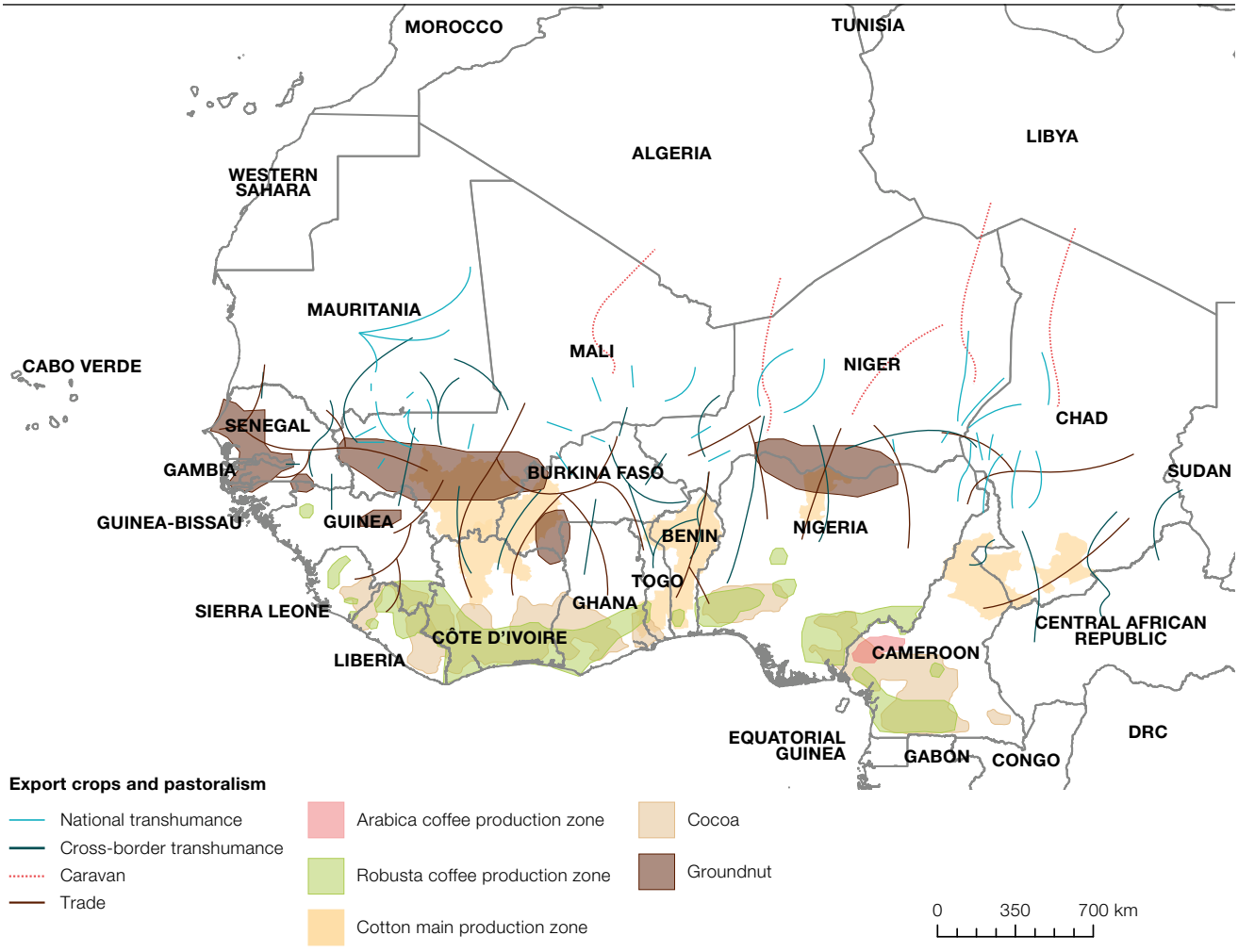
Map 5.24
Main aquifers in West Africa



Source: Reproduced and adapted with the permission of BGR/UNESCO (2008), "Groundwater Resources of the World 1:25 000 000", Hannover and Paris.

(Map 5.24), where most of the sedimentary basins are found: the Senegal-Mauritanian basin, the Taoudenni basin in the north of Mauritania and Mali, the Iullemeden basin between Mali and Niger, and the Chad basin. The northern parts of these basins correspond to arid areas which have seen very little human habitation in the past 10 000 years. Fossil waters in the sedimentary basins remains largely untapped, but are the subject of growing interest in Sahelo-Saharan countries looking to organise shared and sustainable management of this resource (OSS, 2008, 2014).

Map 5.25
Export crops and pastoralism



Sources: FAO-CIRAD 2012; ICAC 2005; OECD/SWAC 2009; AFD/CIRAD/CILSS/IFAD 2009; Pourtier 1995

THE NEED TO COMBINE AGRICULTURE AND PASTORALISM

In West Africa, agricultural and pastoral activities are often practised together, either by populations tending both land and livestock or because West African terrain sustains crops and herds at different times of the year. Another factor is that the main agricultural basins and transhumance routes cross national borders.

The main West African export crops introduced under colonisation are unambiguously transnational (Map 5.25). The Gulf of Guinea is dominated by the production of coffee and cocoa from Sierra Leone to Ghana, and again from eastern Nigeria to Cameroon. Groundnut basins cover several countries in the Sahel region, from Senegal in the west to Hausa country in the east.

The same is true of cotton, whose main production zones are found in Senufo country between Mali, Burkina Faso and Côte d'Ivoire; between Togo and Benin; and between Cameroon and Chad. Cotton is cultivated from the south of the Sahel almost as far down as the Gulf of Guinea, making it the ultimate West African "cross-border crop" (OECD/SWAC, 2009). Cotton drives the engine of a thriving regional economy of growers, ginning plants, carriers and local tradespeople. Because of competition from Chinese and Indian producers and the massive import of second-hand clothes, however, the majority of West African cotton that is not used by local tradespeople,

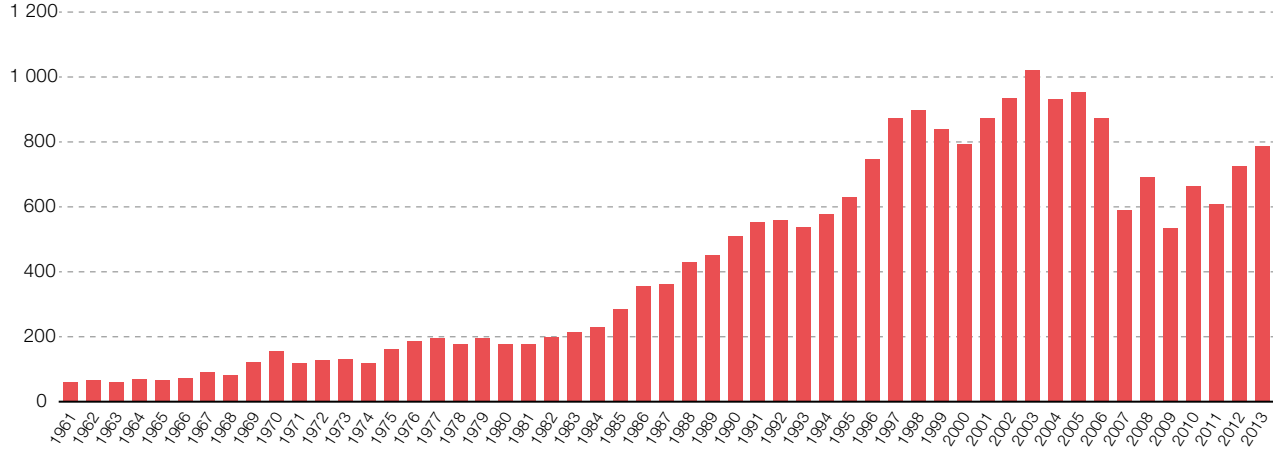
but is exported as fibre rather than processed locally. The industry has also been struggling since the collapse of the market in the mid-2000s, caused by global overproduction, large-scale sales of cotton stocks by China, flat yields connected to technological and climatic factors, and by competition from countries where cotton-growing is subsidised (Figure 5.2 and Box 5.3).

The broad outline of regional flows – whether caravan routes or long-distance pastoral routes – also cross national borders. West Africa can be divided into four main Sahelo-Saharan areas of movement, each of which gravitates around a densely settled nucleus in the Sahel (Senegambia, the Niger bend, Hausa country, Lake Chad) and fans out towards the mountains, salt mines and pastures of the Sahara (Retaillé and Walther, 2011). Similarly towards the south, the zones in which livestock travel are not confined to national borders. Because of rising demand for meat in coastal cities, Sahelian herds are driven on foot and by lorry along the major cross-border thoroughfares, sometimes over several months. Between Burkina Faso, Niger, Togo and Benin, for example, there are several itineraries for leading herds to the major consumer markets.

Demand in West Africa is growing not only for export crops, but also for agricultural products, driven by the region's strong demographic growth: the population of West Africa grew from 73 to 317 million between 1950 and 2010 (OECD/SWAC, 2014). At the same time, the spatial distribution of the population changed significantly, with cities growing by a factor of 25 in 60 years, from 5 to 133 million inhabitants. In 1950, no country had a level of urbanisation greater than 20%, but by 2010 this figure had reached 42% across the region as a whole. Six countries, including Nigeria, had an urbanisation level of 45% or more by 2010. Cities are growing in both size and number. Urban growth is expressed not only by concentration in the largest cities, but also by the development of a network of medium and small towns: in 1950, there were 152 West African agglomerations of over 10 000 inhabitants; in 2010, there were 1 947. Urban border agglomerations, which represent 20% of the regional urban population within a 50 km radius of a border and 53% within a 100 km radius, are part of these regional changes as they tighten the links between rural and urban spaces beyond national boundaries (OECD/SWAC, 2014).

Markets are focal areas for the concentration, sale and distribution of regional farming produce. Their growth follows the increase in import-export flows between Africa and the rest of the world and the increase in consumer demand for locally produced foodstuffs. Continuous urban growth complements the integration of the rural space into this market economy and is therefore one of the

Figure 5.2
Annual production of cotton fibre in West Africa, 1961–2013 (1 000 tonnes)



Source: FAO 2016b

main drivers of the transformation of agrifood production systems and production growth.

The expansion of food markets can be measured against changes in the non-agricultural population. Urbanisation implies a decrease in the proportion of households engaged in agricultural activities both in urban and rural areas, as other services and activities take off. As 50% of the West African population is no longer engaged in farming activities, the acquisition of food has changed: in cities, consumers buy most food on the markets, with over 90% of their purchases on average made within various distribution circuits (OECD/SWAC, 2013). In rural areas, the share of market supply came to an estimated half of the economic value of food consumption in 2010. At regional level, according to estimated figures, at least two-thirds of food needs are now met by markets.

The real value of intra-regional trade in agricultural production is often underestimated in West Africa because the greatest number of transactions are informal and do not appear in official statistics. Trade in small quantities is particularly common and often cross-border, and the exemption of local products from import duties further complicates the task of record-keeping. Research in this field (Soulé and Gansari, 2010) shows that the five main grain market basins are cross-border (Map 5.27):

- In the west, the Senegambian basin, centred around Senegal, is mainly concerned with flows of local rice, millet and sorghum.
- In the centre, the basin covering Côte d'Ivoire, Ghana, Togo, Mali and Burkina Faso is dominated by maize.
- In the east, Nigeria is a major centre for the production and consumption of farming produce and a crucial market for its neighbours in Benin, Niger and Chad. It accounts for 60% of total intra-regional flows and its major products are millet, sorghum, maize, cowpeas and re-exported rice (from Benin to Nigeria).
- In the Gulf of Guinea, the Ibadan-Lagos-Accra conurbation, which encompasses several agglomerations in Nigeria, Benin, Togo and Ghana, is another basin of regional significance, with maize flows of 300 000 tonnes and re-exported rice amounting to 500 000 tonnes.
- The Sahel belt comprising Mauritania, Mali, Burkina Faso, Niger and northern Nigeria mainly produces millet and sorghum.

Box 5.3
Cotton in West Africa

Cotton is an important part of the West African economy. While the region's share of global production is modest, ranking sixth overall, the commodity contributes a noteworthy proportion to the GDP of the region's largest cotton-producing economies (ICAC, 2016). According to national statistics, the value added of the cotton sector in Benin, Burkina Faso and Mali comprises between 2.4% and 4.3% of GDP (FAO, 2016b). Including Côte d'Ivoire, these four countries are known as the C-4 countries of West Africa as a notable proportion of their populations are dependent on the crop. Cotton is the primary economic activity for over 2 million of these countries' farmers and provides livelihoods for more than 10 million households (USAID, 2015).

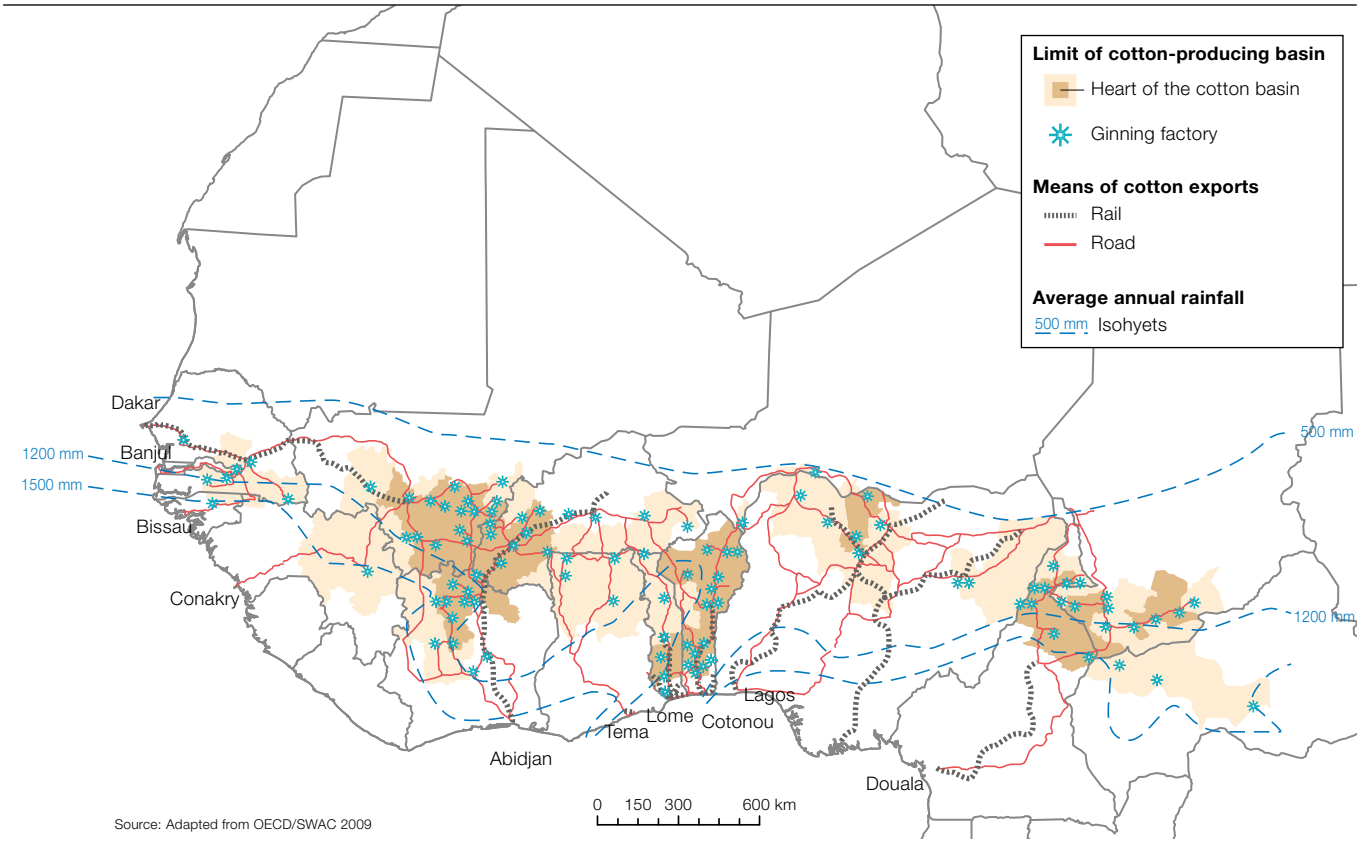
The cotton sector is also a vital source of export revenues and precious foreign exchange for the region. Earnings from cotton exports represent as much as 16% of total export revenues in the C-4 nations, and up to 60% of the value of their agricultural exports. The majority of cotton exports are destined for the textile industries of East, South and Southeast Asia, with China buying over a quarter of West Africa's total cotton exports in 2013, valued at USD 430 million, followed by Indonesia, Malaysia, Singapore, Bangladesh and India, making the West African region the second largest exporter worldwide. However, the large volume of unrecorded cross-border trade in West Africa suggests that the origin of exports described in official figures may not be fully accurate.

The location of production basins in West and Central Africa makes the cotton industry a pertinent sector for cross-border co-operation. Rain-fed cotton is the dominant production technique in the region, concentrated in the tropical zones where dry seasons and humid seasons alternate. Thus the five main cotton-production basins evident today were developed on the most suitable land that lies on and below the 15° line of latitude, receiving between 500 mm and 1 500 mm of rainfall per annum on average, as can be seen on Map 5.26. This area spans 14 different countries from Senegal to southeastern Chad and into the heart of the Central African Republic. Production of cotton lint in 2014 was particularly sizeable on the borders of Burkina Faso, Côte d'Ivoire and Mali, at approximately 625 000 metric tonnes, as well as Burkina Faso's borders with Benin and Togo, amounting to around 375 000 metric tonnes, while almost 250 000 metric tonnes were produced between Nigeria, Cameroon and Chad.

However, the extent of the development of West Africa's cotton sector varies widely as a result of different policies towards the commodity over time and between countries. These differences are particularly evident in the variations between the organisational structure of value chains, the involvement of the state in the sector and the location of activities. Indeed, cotton producers have varied access to extension, training, input supply and marketing services depending on which side of the border they are situated. Nigeria, for example, has a notably more advanced sector for transforming cotton from its raw form into textiles and clothing than many other countries in the region (Gazanfer, 2007). Whilst Benin, Burkina Faso, Côte d'Ivoire and Mali have also developed strong ginning facilities, Nigeria has a much larger capacity for transforming this cotton lint into textiles and clothing due to the factories that were largely developed during the 1980s, a time when the

Map 5.26

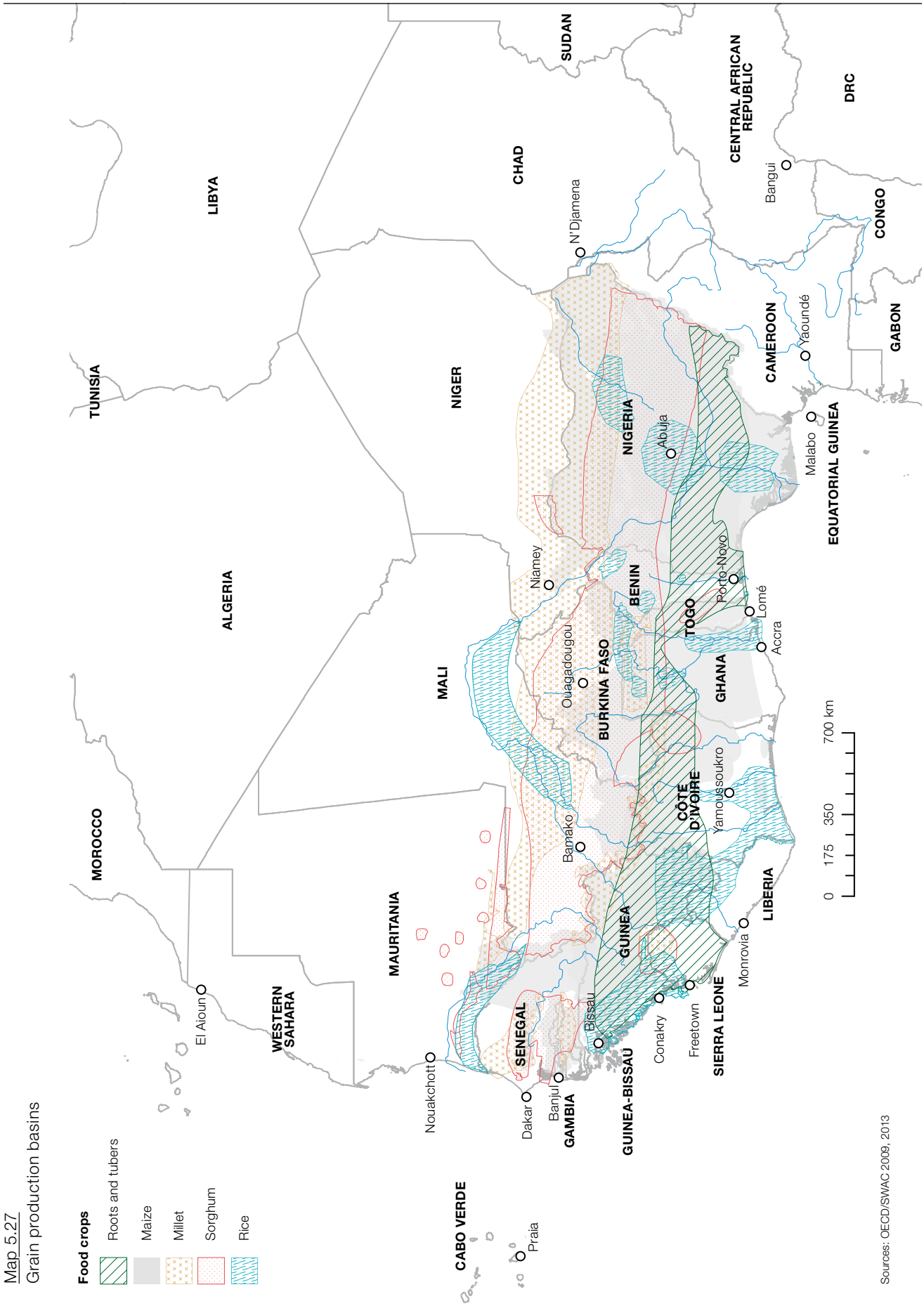
West Africa's cotton zones, ginning factories and exports



industry provided around 500 000 direct jobs with over 250 functional factories (TAP Cotton, 2016). While the sector was only operating at 55% capacity in 2014, this has risen from below 30% in 2010 and a recent government textile strategy hopes to push this number further upwards (Nigerian Investment Promotion Commission, 2016).

It has been suggested that the process of liberalising national sectors will gradually eliminate policy disparities, but there have been occasions when liberalisation programmes have been conducted without detailed dialogue between neighbouring countries. Existing policy disparities can limit the economic potential of countries in the region, and thus effective implementation of cross-border co-operation strategies could help harmonise national policies. Indeed, ECOWAS has stated in the past that it intends to promote the "development of cross-border co-operation ties among the different national cotton companies in order to harmonise their strategies and methods of intervention, reduce costs of inputs, develop synergies and reduce costs of collection, ginning and transportation to the ports" (ECOWAS, 2004).

Map 5.27
Grain production basins



Sources: OECD/SWAC 2009, 2013

VERNACULAR, VEHICULAR AND COLONIAL LANGUAGES

Though guidance on cross-border co-operation best practices does exist (SWAC/OECD, 2007), the everyday work of cross-border actors consists in exchanging tacit information, i.e. information that is hard to codify and pass on, as opposed to documented information such as laws and regulations. Exchanging information requires a large number of interactions, during which the form and content of cross-border action can gradually be defined. Some crucial issues discussed by cross-border actors deal with where to set up new structures, the allocation of human resources, and the co-financing of projects – questions for which there are no standard responses. The process of constructing a cross-border region resembles an apprenticeship, insofar as the production of the standards and values on which the cross-border co-operation will be based takes place at the same time as the process of passing on the relevant information.

These exchanges are facilitated by the existence of a common language. The European experience shows how language barriers are among the most enduring obstacles to regional integration (Bartz and Fuchs-Schündeln, 2012). Even in regions where the public sector has been involved in cross-border co-operation going back to the 1960s, language barriers between people with different native languages still have considerable influence over the way in which information is exchanged (Walther and Reitel, 2013). In West Africa and in other regions of the world, cross-border co-operation also relies on the ability of people separated by national borders to understand one other.

West Africa is unique for having a great many languages. There are 886 spoken languages, of which 501 are used regularly by all age groups. The spoken languages of West Africa represent 41.4% of all languages on the continent, a figure that belies its relative population of just 29.8%. The list includes a certain number of vehicular languages, or *lingua franca,* which have developed through political structures, precolonial trading, migration, or trans-national pastoral groups. Vehicular languages play an important role in Africa because vernacular languages are so fragmented between regions. West Africa also has three languages imported during colonisation: French, English and Portuguese, which are widely used by political elites and administrations. Many countries have one or more official and national languages, recognised by law *(de jure)* or by usage *(de facto)* (Table 5.4).

There are three main African language families in West Africa: Niger-Congo, Nilo-Saharan and Afro-Asiatic. With almost 437 million speakers and 1 524 spoken languages, the Niger-Congo family is the biggest in the world (21.5% of the world total). It covers most of sub-Saharan Africa, with the exception of the south, which falls into the Khoisan family. In West Africa, the Niger-Congo family has several subgroups: Atlantic, Mande, Gur, Igbo, Benue-Congo, Kru and Kwa (OECD/SWAC, 2009).

The Nilo-Saharan family has 199 spoken languages (2.8% of the world total) and around 43 million speakers. It includes Kanuri, spoken around Lake Chad, and Songhay, spoken around the Niger bend. The Afro-Asiatic family numbers 366 spoken languages (5.2% of the world total) and around 381 million speakers, mostly in Arab countries and North Africa and, to a lesser extent, in West Africa. It includes languages such as Arabic and its Mauritanian and Chadian variants, Tuareg and Hausa.

A great many main languages are spoken exclusively or predominantly in a given country, such as Wolof in Senegal, Susu in Guinea, Mende and Temne in Sierra Leone, Mossi in Burkina Faso, Ashanti in Ghana, Yoruba, Igbo and Kanuri in Nigeria (OECD/SWAC, 2009). A connection can be drawn between linguistic discontinuities and national borders in around ten West African regions (Map 5.28). The significance of these discontinuities should not be overestimated, however, insofar as language groups do not form sharply delineated, homogenous blocs but flexible areas with blurred edges, which can overlap according to the language skills of their speakers, the mobility of pastoral groups and trading diasporas. Map 5.28 was simplified to present the most widely spoken languages, in order to illustrate the major transition zones between language families rather than a strict demarcation of what is actually rather fluid.

Table 5.4
Official and national languages by country

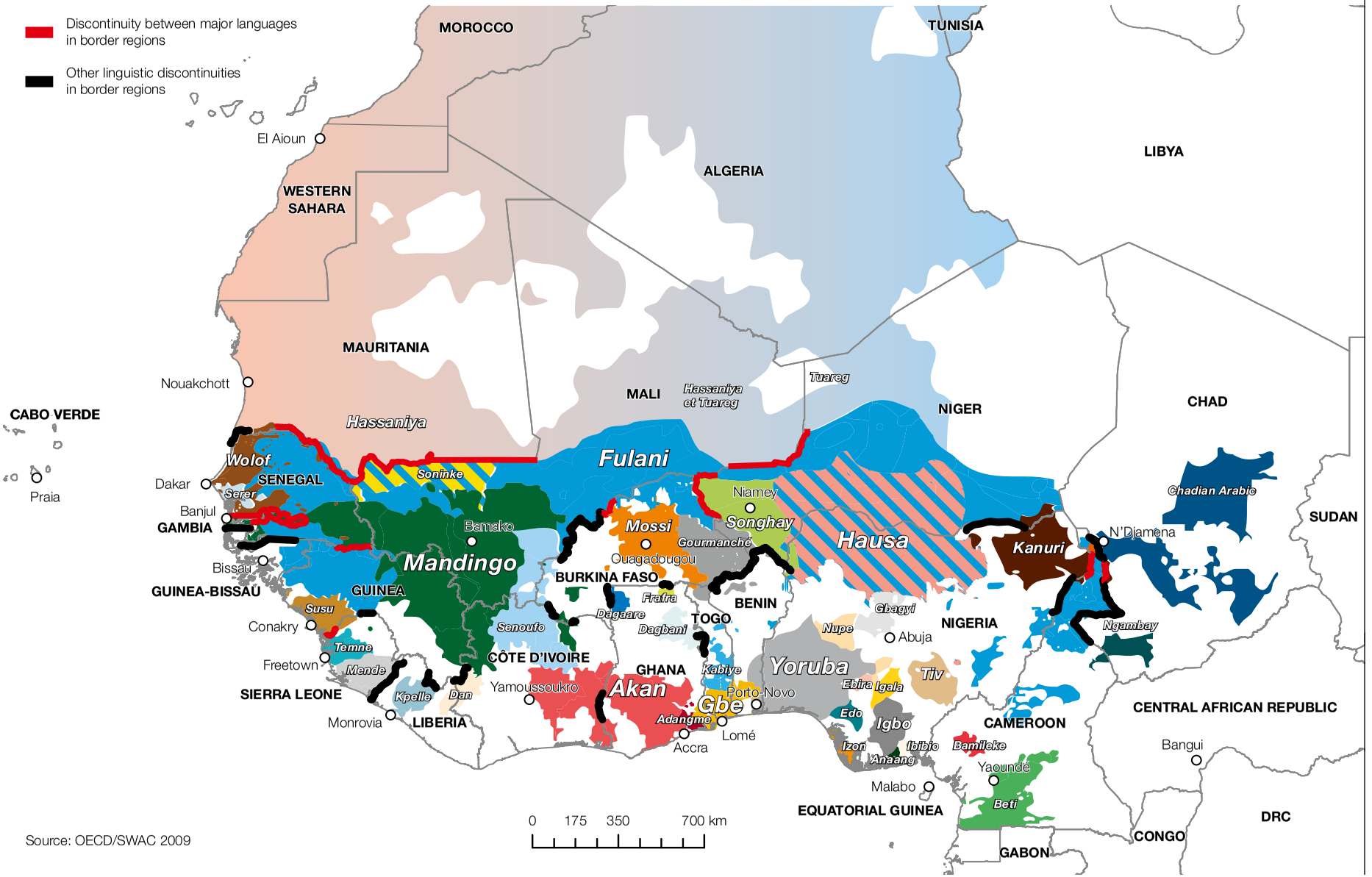
	Official language(s)		National language(s)	
	de jure	***de facto***	***de jure***	***de facto***
Benin	French		All indigenous languages	
Burkina Faso	French		Mossi, Jula, Fulani	
Cameroon	French, English			
Cabo Verde	Portuguese			Cabo Verdean Creole
Côte d'Ivoire	French			
Gambia		English	All indigenous languages	
Ghana		English		
Guinea	French			Fulani, Mandingo
Guinea Bissau		Portuguese		Crioulo
Liberia		English		
Mali	French			Bambara
Mauritania	Arabic		Arabic, Fulani, Soninke, Wolof	
Niger	French		All indigenous languages	Hausa
Nigeria		English		
Senegal	French		Wolof, Serer, Jula, Mandingo, Soninke, Fulani	Wolof
Sierra Leone		English		
Chad	French, Arabic			
Togo	French		Kabye, Ewe	

Sources: OECD/SWAC 2009 and Statistiques mondiales 2015

Between Senegal and Mauritania, for example, the valley of the Senegal River is a transition zone between populations speaking languages of the Niger-Congo family, such as Wolof and Fulani, and those from the Afro-Asiatic family who speak Arabic. The border between Mali and Mauritania also gradually separates speakers of Fulani and Soninke from Arab speakers. Further south, the Senegal-Gambia border also roughly corresponds with the linguistic discontinuity between Wolof and Mandingo, whereas the Guinea-Sierra Leone frontier divides Susu from Temne. In the west of Niger, clear breaks can also be seen between Fulani, Songhay and Gourmanché speakers, and the borders drawn across the Lake Chad basin split up the Kanuri, Fulani and Arabic languages, representing the three main language families: Nilo-Saharan, Niger-Congo and Afro-Asiatic.

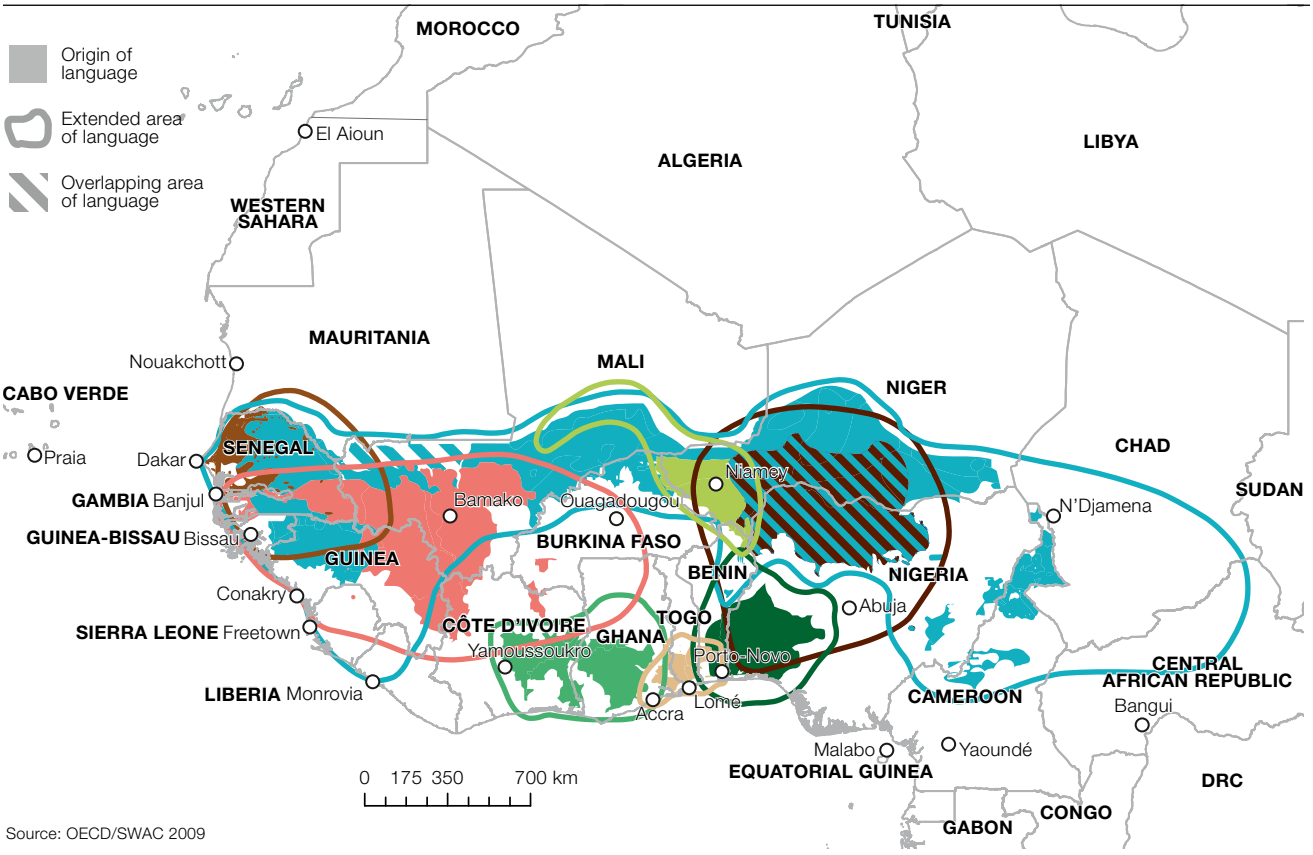
As well as marking out the discontinuities between the major vernacular languages, this

Map 5.28
Vernacular languages in West Africa



Source: OECD/SWAC 2009

Map 5.29
Vehicular languages in West Africa



Source: OECD/SWAC 2009

map shows cases in which a major linguistic group extends right up to the national border without coming up against another major group. For example, this is the case for the Mende language in eastern Sierra Leone, the Fulani language in the north of Cameroon, and some small language groups in northern Ghana speaking Dagaare, Frafra or Dagbari.

Paradoxically, the three regions with the starkest language discontinuities between West African countries have also launched regional cross-border initiatives: the Senegal valley with the OMVS, the west of Niger with the Integrated Development Authority of the Liptako-Gourma Region (ALG) and the Lake Chad basin with the LCBC. This apparent contradiction is explained by the fact that discontinuities in indigenous languages cannot be seen as a restrictive factor in cross-border interaction, as the presence of vehicular and colonial languages also needs to be taken into account.

Mapping the six vehicular languages usually recognised by linguists – to which Wolof and Songhay can be added – shows that above all, West Africa is remarkably well integrated from a linguistic point of view (Map 5.29). This is most striking in the Sahel, where Wolof, Mandingo, Fulani, Songhay and Hausa play a vital cross-border role from Dakar to N'Djamena. Akan, Gbe and Yoruba play the same role in the central part of the Gulf of Guinea. A second feature of vehicular languages in West Africa is that they overlap, especially in Senegambia (Wolof, Fulani, Mandingo) and in western Niger (Songhay, Fulani, Hausa), providing greater opportunities for communication between speakers of different mother languages. The importance of vehicular languages is a legacy of precolonial structures, such as the Mali and Songhay empires, and evidence of the vitality of modern trade networks, which rely on cross-border diaspora. Hausa, for example, allows its speakers to do business all the way from Agadez, situated at the gates of the desert, to the Gulf of Guinea.

After vernacular and vehicular languages, there are the colonial languages: French, English and Portuguese. There are few instances in West Africa where the exchange of information is hampered by the fact that a neighbouring country speaks a different colonial language. This situation only concerns Cabo Verde, Guinea-Bissau, Gambia, the border between Sierra Leone and Guinea, that between Liberia and its neighbours Guinea and Côte d'Ivoire, Ghana and Nigeria (an exception is made for the English-speaking part of Cameroon). In other cross-border regions, the official or de facto national language can serve for the purposes of cross-border communication. This is the case for Sahelian countries such as Mauritania, Mali, Niger and Chad which can use French or Arabic to communicate with their neighbours in the Maghreb; other former French colonies such as Senegal, Guinea, Côte d'Ivoire, Burkina Faso, Togo and Benin (French); and Sierra Leone and Liberia (English). This situation facilitates regional co-operation: in that: "the regional level therefore fully reflects the national practices in which the colonial language is considered, de facto or de jure, as an official language" (OECD/SWAC, 2009). Colonial languages are widely used in regional organisations in West Africa: English, French and Portuguese are the official languages of ECOWAS, and French is the language of UEMOA. French is also spoken by Mali, Mauritania and Senegal in the OMVS; and by Niger, Burkina Faso and Mali in the ALG. In the Lake Chad region, French and English are used in the LCBC.

BORDERS IN THE PROCESS OF DEMARCATION

The legal status of borders is a strong factor in determining the nature and degree of cross-border co-operation between states. The most propitious situation is one in which the borders are clearly delimited (recognised by international treaties) and demarcated (visibly and undeniably marked on the ground). In many West African regions, however, the status and location of colonial borders remain vague, which can be the cause of tension between states. Following independence, many border disputes arose between West African states, despite the principle of the intangibility of borders adopted by the Summit of Heads of State and Government of the Organization of African Unity in Cairo in July 1964, to ensure political stability. Nine border disputes have been settled by the International Court of Justice in The Hague since 1975 (Table 5.5).

To solve the problem of the continent's inexact borders, the African Union Border Programme (AUBP) was created with the aim to unite and integrate Africa through peaceful, open borders while protecting and promoting the interests of the people living in these zones. Set up in 2007 and funded by the German Agency for International Co-operation (GIZ) between 2008 and 2015, the project facilitates delineation and demarcation operations for fifteen partner countries in Africa. It is developing operational support for local, regional and institutional (skilled staff, organisational development) cross-border projects. The adoption of the Niamey Convention on cross-border co-operation (2014) at the Summit of Heads of State and Government represents a major step forward in terms of recognising the need to adopt relevant legislation for the development of cross-border activities. At the local level, the AUBP is working on the creation of joint border commissions like the South Sudan-Sudan Joint Border Commission (2012). It also has a memorandum of understanding with ABORNE on the sharing of information and expertise relevant to African borders. Despite major progress in the definition and demarcation of borders, the AUBP has to tackle the task of preserving peace just as cross-border trafficking and terrorism are once again on the rise, while regional organisations and states are faced with the challenge of enacting the directives contained in the Niamey Convention on cross-border co-operation.

During the course of the last ten years, the combined efforts of West African states, the International Court of Justice and the African Union have encouraged border demarcation and delineation. Disputed border segments are now limited to the edges of the Western Sahara, whose status is still not unanimously recognised,

Table 5.5

Border disputes brought before the International Court of Justice, 1975–2016

Case	Status	Major decisions
Border dispute between Burkina Faso and Niger	Judgment of 16 April 2013, recognised by both parties.	Disputed region divided between the parties.
Border dispute between Benin and Niger (#125)	Judgment of 12 July 2005, recognised by both parties.	Niger's claims in relation to the Niger River accepted. Benin's claims in relation to the Mékrou River accepted.
Land and maritime boundary between Cameroon and Nigeria (#94)	Judgment of 10 October 2002, challenged by the Nigerian Senate.	Transfer of sovereignty from Nigeria to Cameroon.
Maritime delimitation between Guinea Bissau and Senegal (#85)	Judgment of 12 November 1991 and Order of 8 November 1995, recognised by both parties.	Senegal's claims in relation to Cape Roxo accepted (1989). Maritime area managed by a bilateral agency (1993).
Territorial dispute between Libyan Arab Jamahiriya and Chad (#83)	Judgment of 3 February 1994, recognised by both parties.	Chad's sovereignty over the Aouzou Strip restored.
Territorial dispute between Burkina Faso and the Republic of Mali (#69)	Judgment of 22 December 1986, recognised by both parties.	Burkina Faso takes sovereignty over the contested rivers and Mali over the contested villages.
Case concerning the continental shelf between Libyan Arab Jamahiriya and Malta (#68)	Judgment of 3 June 1985, recognised by both parties.	Delimitation suggested by the Court. Just one part of the contested area is covered by the judgment.
Case concerning the continental shelf between Tunisia and Libyan Arab Jamahiriya (#63)	Judgment of 24 February 1982, contested by Tunisia.	Parties' claims rejected by the Court, which delineated two adjacent segments.
Advisory opinion on the Western Sahara (#61)	Advisory opinion of 16 October 1975.	Territorial sovereignty not recognised by the Court. The existence of long standing ties of allegiance does not override self determination.

Source: OECD/SWAC 2014

and the border between Burkina Faso and Benin, where tensions remain around the Koalou village on the Pendjari River. The delineation of Senegal's borders has been the subject of much discussion with Gambia, Guinea, Guinea-Bissau and Mauritania. The border dispute between Burkina Faso and Niger was settled by the International Court of Justice in 2013, and Guinea and Sierra Leone agreed in 2012 to settle their dispute over the town of Yenga, occupied by Guinean troops since 2001 in order to help Sierra Leone's army fight the rebels of the Revolutionary United Front (RUF). Progress has also been made in establishing the Burkina Faso-Mali border, achieved in 2009 (AU, 2013), the demarcation and delineation between Nigeria and Chad which is in the process of finalisation, and the delineation between Benin and Togo.

POLITICAL STABILITY: BORDER VIOLENCE AND TRANSNATIONAL EXTREMIST GROUPS

Political violence in West Africa is overwhelmingly contained within national borders. Border disputes and open conflicts between states, such as Mali and Burkina Faso (Agacher Strip War, 1985–86) or Chad and Libya (Aouzou Strip War, 1973–87) remain rare, as do conflicts between states and non-state actors whose claims are, for the most part, essentially national rather than transnational. While it is true that the number of countries affected by Islamist violence has risen in the last ten years, its space for action is being reduced as African states and the international community react. The spatial concentration of activity, confirmed by a reduction in the number of locations targeted by extremist groups and in the average distance between violent events, points more towards opportunistic relocation than to an escalation of conflicts in the region (Dowd, 2016).

The two large regions that continue to be affected by transnational violence include areas of the Sahel-Sahara where different groups affiliated with Al-Qaeda are present, and the northeast of Nigeria which is plagued by Boko Haram. Mali's borders are another major focus of political instability, particularly in northern Liptako-Gourma, in the north of Kidal and to a lesser degree with Mauritania. This instability can be explained by the presence of groups such as Al-Qaeda in the Islamic Maghreb (AQIM), Ansar Dine, the Movement for Unity and Jihad in West Africa (MUJAO), Al-Mourabitoun and the Signed-in-Blood Battalion, have gradually moved from northern Algeria, where the Salafist Group for Preaching and Combat (GSPC) was historically based, towards the Sahel (Map 5.30). Having established reliable relations in the Sahel region, especially in northern Mali, they carried out multiple operations from Mauritania to Chad until 2011. In 2012, the launch of a combined offensive between armed groups affiliated with Al-Qaeda and separatist militants in the National Movement for the Liberation of Azawad (MNLA), resulted in a spatial concentration of violent events between Bamako and Tamanrasset. The military counter-offensive co-ordinated by France and its African partners from 2013 was followed by the relocation of some groups from Mali to Libya, the emergence of new groups in central Mali, and attacks against international forces and the region's capital cities.

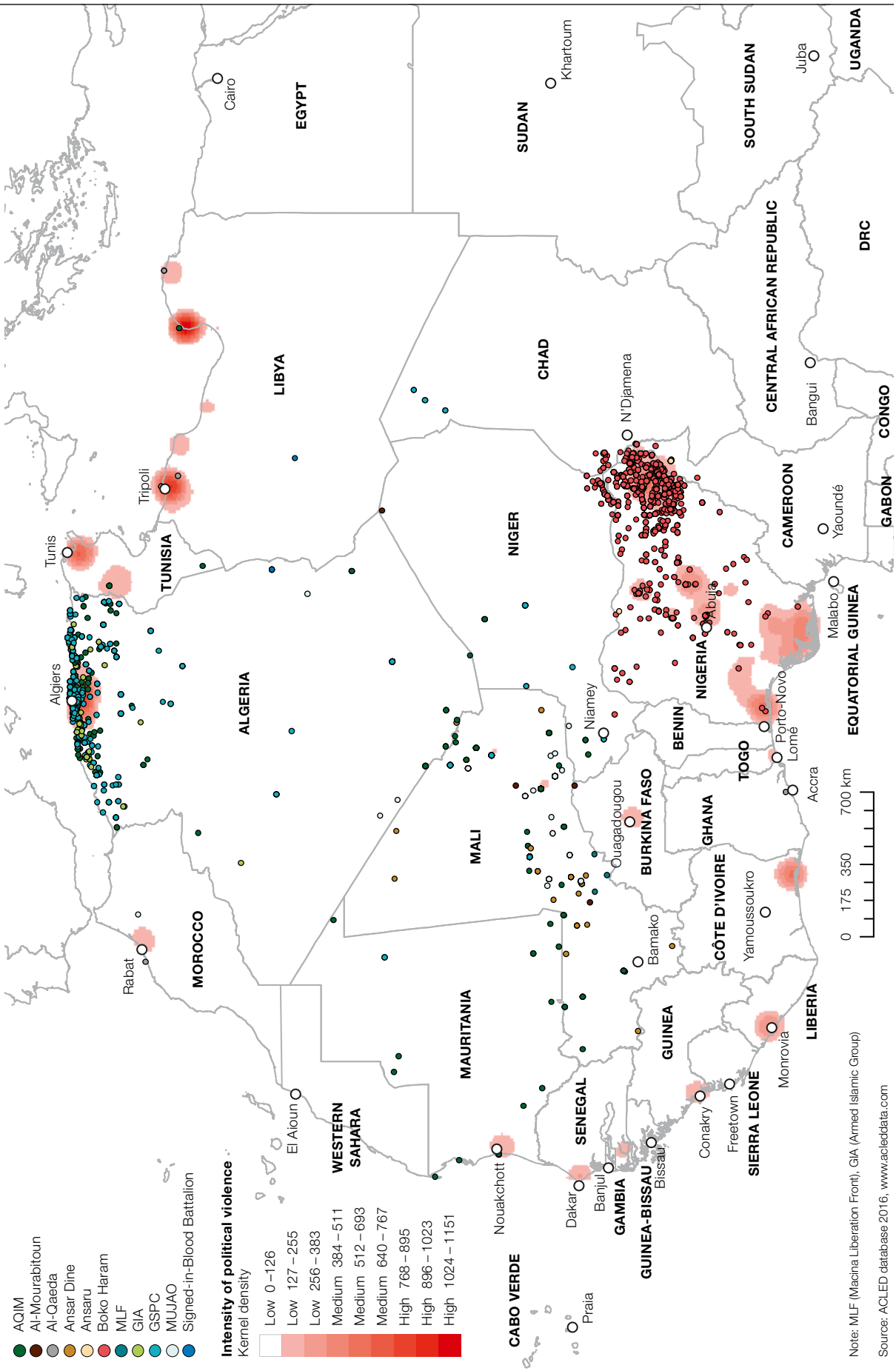
The Boko Haram group has moved from its historic heartland in Maiduguri outwards to the rest of Nigeria. Its operations, which are particularly deadly, only began to spread into neighbouring countries in 2013 when the group attacked Niamey prison, following which there were numerous attacks in Cameroon, Niger and Chad. Despite these events, Boko Haram continues to focus on Nigeria, which has been the target of over 86% of its attacks since 2003.

Given the level of violence against civilians and government forces by Boko Haram, Lake Chad is without a doubt the region most affected by political instability in West Africa. In 2015, Boko Haram claimed more lives than any other terrorist organisation world wide (IEP, 2015), triggering an exodus of over 2.2 million people within Nigeria and causing over 220 000 refugees to flee to neighbouring countries (UNHCR, 2016). Acts of violence committed by the group have had a lasting impact on trade networks, damping activity in markets which are the favoured targets of suicide bombers, and leading to a reduction in cultivated land in the region around Lake Chad (Van den Hoek, 2016) (Map 5.31).

Peace seems largely to have returned to southern Senegambia, where separatist rebels from the Movement of Democratic Forces of Casamance (MFDC) were fighting government forces until 2009. In other border regions, the violence seen over the last ten years was chiefly linked to riots or tensions between land and livestock farmers, two causes that are not likely to fundamentally threaten cross-border co-operation.

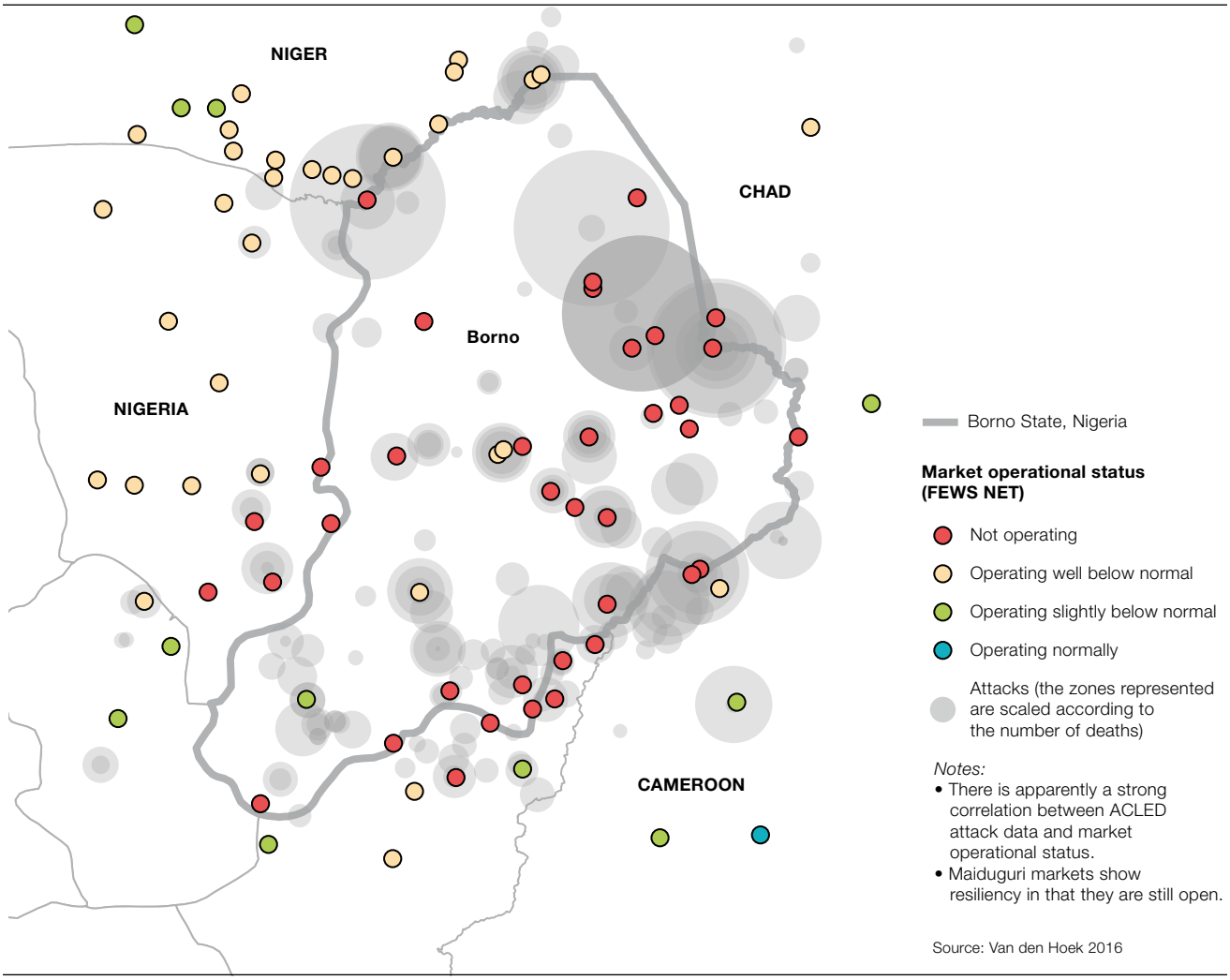
The political instability generated by radical groups has raised fundamental questions concerning the co-operative bodies responsible for the region's security. Several co-operation entities and "Sahel strategies" have been developed. Some – such as the Joint Operational Army Staffs Committee (CEMOC) created in 2010 in Algeria and the African Union's Joint Fusion and Liaison Unit (2010) and Nouakchott Process (2013) – are focused

Map 5.30
Political violence, 2003–15



Note: MLF (Macina Liberation Front), GIA (Armed Islamic Group)
Source: ACLED database 2016, www.acleddata.com

Map 5.31
Market activity and attack sites in northeastern Nigeria (2014–15)

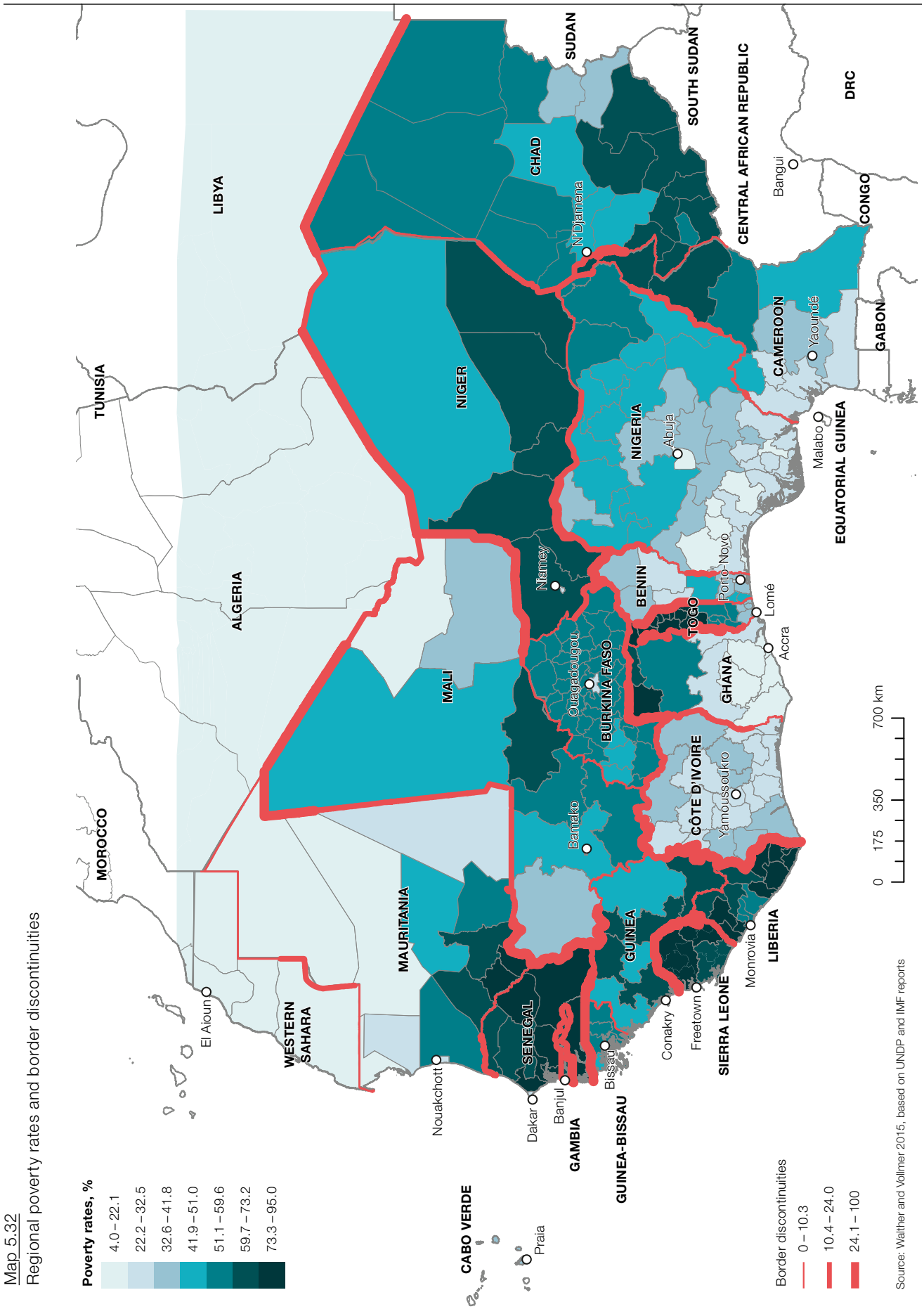


on security. Other initiatives combine governance, security and development, like the European Union's Strategy for Security and Development in the Sahel (2011), the United Nations Integrated Strategy for the Sahel (2013), the ECOWAS-UEMOA-CILSS Strategy for the Sahel (2014), the African Union's Strategy for the Sahel Region (2014) and the Sahel G5 (2014).

THREE WAYS OF REPRESENTING POVERTY

The average poverty levels in each of West African's regions provide a valuable indicator of the spatial heterogeneity of development in the region. Cross-border co-operation benefits when poverty gaps are average, rather than very high or very low, which can promote synergies between regions. To illustrate the paradoxical relationship between poverty rate differentials and cross-border co-operation potential, poverty rates are presented three different ways: a territorial mapping of regional poverty rates, a linear mapping of poverty rate differentials, and a network analysis. Map 5.32 is perhaps the most conventional representation of a territorial indicator, where each border region is represented as a zone to which are assigned a value class and a specific colour. The map confirms the unequal distribution of poverty in West Africa. With a regional poverty rate above 80%, disadvantaged regions in dark

Map 5.32
Regional poverty rates and border discontinuities



blue are particularly numerous in the northern parts of Ghana, Togo, as well as in Niger, Sierra Leone, Liberia and Senegambia. By contrast, low poverty rates are found along the Gulf of Guinea as well as in the Saharan regions of North African countries.

The second way to represent poverty rate differentials is to consider the boundaries themselves. On Map 5.32, the main cross-border discontinuities are indicated by red lines: the thicker the line the greater the gap between two border regions. The sharpest contrasts can be found between North African countries and their Sahelian neighbours. In West Africa itself, large poverty differentials exist between northern Togo, Benin and Ghana; between Côte d'Ivoire and Liberia; and between Mali and Senegal. In contrast, many regions have low poverty differentials, such as between Mali and Burkina Faso, or Guinea and Liberia. The Gulf of Guinea, from western Côte d'Ivoire to Cameroon, is also characterised by low poverty differentials (Table 5.6). The potential for cross-border co-operation is in theory highest when poverty differentials are medium (between 10.4 and 24.0), which is the case between Senegal and Gambia, Senegal and Mali, Côte d'Ivoire and Burkina Faso, Burkina Faso and Benin, in the Hausa Country, in the north of Lake Chad, around most Nigerian borders, and in the southern part of the Ghana-Togo-Benin border.

The third, and probably less common representation, is to consider border regions as nodes and poverty differentials as links between neighbouring regions. While territorial mapping highlights the attributes of regions or their border effect, network analysis focuses on the structure and content of the links between border regions. This approach highlights border potentials and constraints, as border regions are not only influenced by their own attributes or by their immediate neighbours but also by their position within the region. In Figure 5.3, node colours represent countries and link widths represent poverty differentials between regions. The size of the nodes is proportional to the number of connections each region has, a measure known as degree centrality.

The location of the regions on the figure roughly corresponds to their geographic location, with Senegal on the left-hand side, Mauritania at the top, and Chad on the right-hand side. The figure clearly shows that some regions such as Donga and Atakora in Benin, or Kidal in Mali, are connected to many others through high border differentials, while other zones such as the ones between Dosso and Diffa on the Niger-Nigeria border, have low poverty differentials. Both clusters share similar levels of poverty across countries.

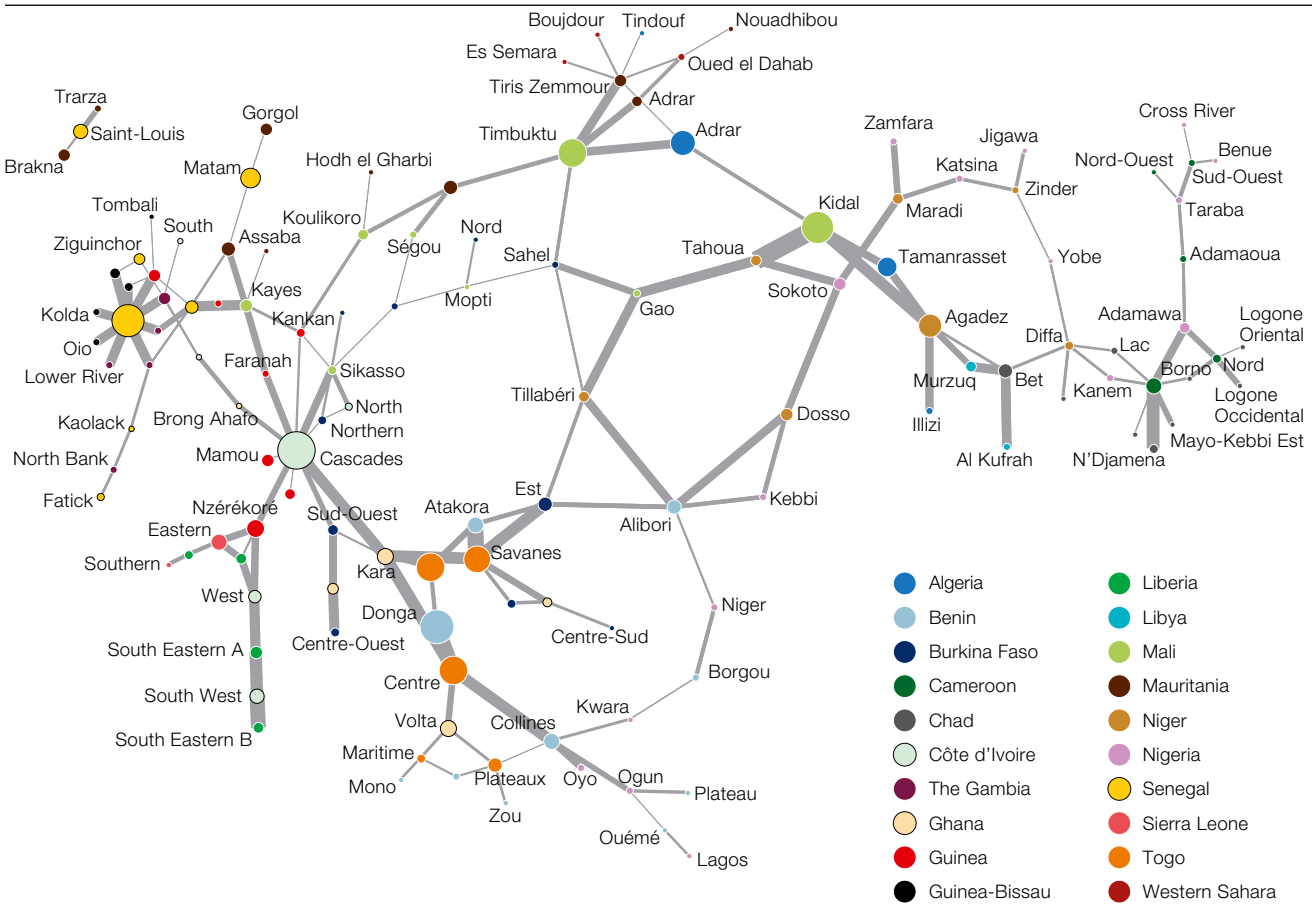
Table 5.6
Top five lowest and highest poverty border differentials in West Africa

Rang	Region (country)	Region (country)	Poverty differential
1	Cascades (BFA)	Sikasso (MLI)	0.0
2	Ouémé (BEN)	Ogun (NGA)	0.2
3	Gorgol (MRT)	Matam (SEN)	0.2
4	Boucle du Mouhoun (BFA)	Sikasso (MLI)	0.6
5	Nord (CMR)	Logone Oriental (TCD)	1.0
162	Donga (BEN)	Tchamba (TGO)	53.7
163	Donga (BEN)	Tchaodjo (TGO)	53.7
164	Volta (GHA)	Centre (TGO)	54.0
165	Atakora (BEN)	Savanes (TGO)	59.0
166	Kidal (MLI)	Tahoua (NER)	65.6

Source: Walther and Vollmer 2015, based on UNDP and IMF reports

The number of neighbours to which each border region is connected also varies greatly across West Africa. Donga (Benin), Kolda (Senegal), Savanes (Togo), Kayes (Mali) and Agadez (Niger) are among the most connected regions. This positioning offers potential advantages as being adjacent to many other regions allows for flexibility in intensifying cross-border co-operation. When developing cross-border projects, border regions with many neighbours can choose which partners present the best accessibility to markets, the most interesting complementarities or the closest institutional frameworks. The potential for collaboration is more limited for those regions that are structurally peripheral and depend on a single neighbour to engage in cross-border co-operation.

Figure 5.3
Network of West African border regions



Note: The size of a node is proportional to the number of connections it has (degree centrality).
Source: Walther and Vollmer 2015, based on UNDP and IMF reports

A REGIONAL VISION OF CROSS-BORDER CO-OPERATION POTENTIAL

In order to understand every region's cross-border co-operation potential, the information contained in each of the seven integration indicators developed for the entire West African region has been summarised (Table 5.7). A number of points are attributed to each border segment according to the intensity – high, medium or low – of the cross-border co-operation potential observed. For example, co-operation potential is considered to be at its maximum if a region has borders that are clearly delineated and demarcated (3 points). If just one of these conditions is met, the potential is considered to be medium (2 points) and borders that are neither delineated nor demarcated are considered to indicate low potential (1 point). In terms of poverty, co-operation potential is at its maximum when inequalities between border regions are neither too wide nor too narrow, and regions are therefore distributed between two categories rather than three as for the other indicators. The attribution of standardised scores for the indicators allows for all border regions in West Africa to be compared, identifying which zones are potentially the most promising for co-operation.

Specific variations in the indicators which measure cross-border co-operation potential (Maps 5.33–5.39) are particularly accentuated in West Africa.

- The regions with the greatest population potential are in southern Senegambia, on the borders of Côte d'Ivoire, between Accra and Lagos, in Hausa country and around Lake Chad, where high population and

border market densities promote border accessibility.

- In terms of water, the combination of shared surface and ground water resources is particularly promising in Senegambia, between Burkina Faso and Mali, between Niger and Nigeria, between Niger and Mali, and around Lake Chad.
- In southern Senegambia, the north of Côte d'Ivoire, the east of the Gulf of Guinea and in Hausa country, the combined presence of major agricultural basins and vast livestock circulation networks may be favourable to cross-border co-operation.
- Because there are no border regions in West Africa where common vernacular, vehicular or colonial languages are absent, the language indicator is not particularly discriminating. It is worth noting, however, that Sahelo-Saharan regions rank particularly highly, as does the north of Côte d'Ivoire.
- Border regions where the border status is most conducive to co-operation are located around Senegal, in the north of Burkina Faso, between Niger and Nigeria and in the Saharan reaches of Mali and Niger due to clear delineation and demarcation.
- Political stability is strongest in the border regions along the Gulf of Guinea, which suffer less from radical Islam than their Sahelo-Saharan neighbours.
- Poverty differentials are especially good for co-operation in a very large number of West African regions, notably between Senegal and its neighbours, to the west of Côte d'Ivoire, in southern Burkina Faso, between Niger and Nigeria, around Lake Chad and along the Gulf of Guinea.

A region's potential for cross-border co-operation cannot, however, be calculated on the basis of a single indicator. It is the result of a combination of social, economic and political factors which, taken together, provide information about the opportunities for developing co-operative relations at a regional level, and all seven of the indicators described above need to be factored into the overall picture of each region's potential.

Mapping the combined cross-border co-operation potential confirms the spatial heterogeneity of the West African region (Map 5.40). At the level of the region itself, the most promising areas, represented by thick lines, are very unevenly distributed through the territory.

- The Sahelo-Saharan zones are, broadly, those with the least potential, especially those struggling with security issues, such as the Mali-Niger zone. This situation owes much to its low population, scarce agricultural resources and political instability, especially in Mali since the beginning of the millennium with the appearance of religious extremists and separatist claims.
- The Sahel is characterised by high co-operation potential, for example, in southern Senegambia, on the borders of Burkina Faso and between Niger and Nigeria. The Sahel boasts the highest scores in the region: the eastern tip of Gambia, the border between Senegal and Guinea, the north of Côte d'Ivoire bordering Burkina Faso, the Koury region in Mali, the north of Togo, the eastern part of the Niger-Nigeria border and the area around N'Djamena. These sectors boast an abundance of border markets with high population potential. They share water, agricultural and pastoral resources, promoting the establishment of cross-border production and commercialisation channels. They are, moreover, relatively homogenous from a linguistic point of view, and generally spared from political instability. Poverty gaps are average, rather than very high or very low, which can promote synergies and movement between countries. From an institutional point of view, the presence of borders recognised by states and demarcated on the ground further assists cross-border co-operation.
- The southern part of the region, on the coast of the Gulf of Guinea, is more heterogeneous. Although many border segments in Sierra Leone, Guinea and Liberia appear rather unfavourable to cross-border co-operation given a low density of border markets, uncertain border statuses and a relative lack of shared resources, other regions score very high marks, such as the boundaries between Ghana, Togo and

Table 5.7
Cross-border co-operation potential

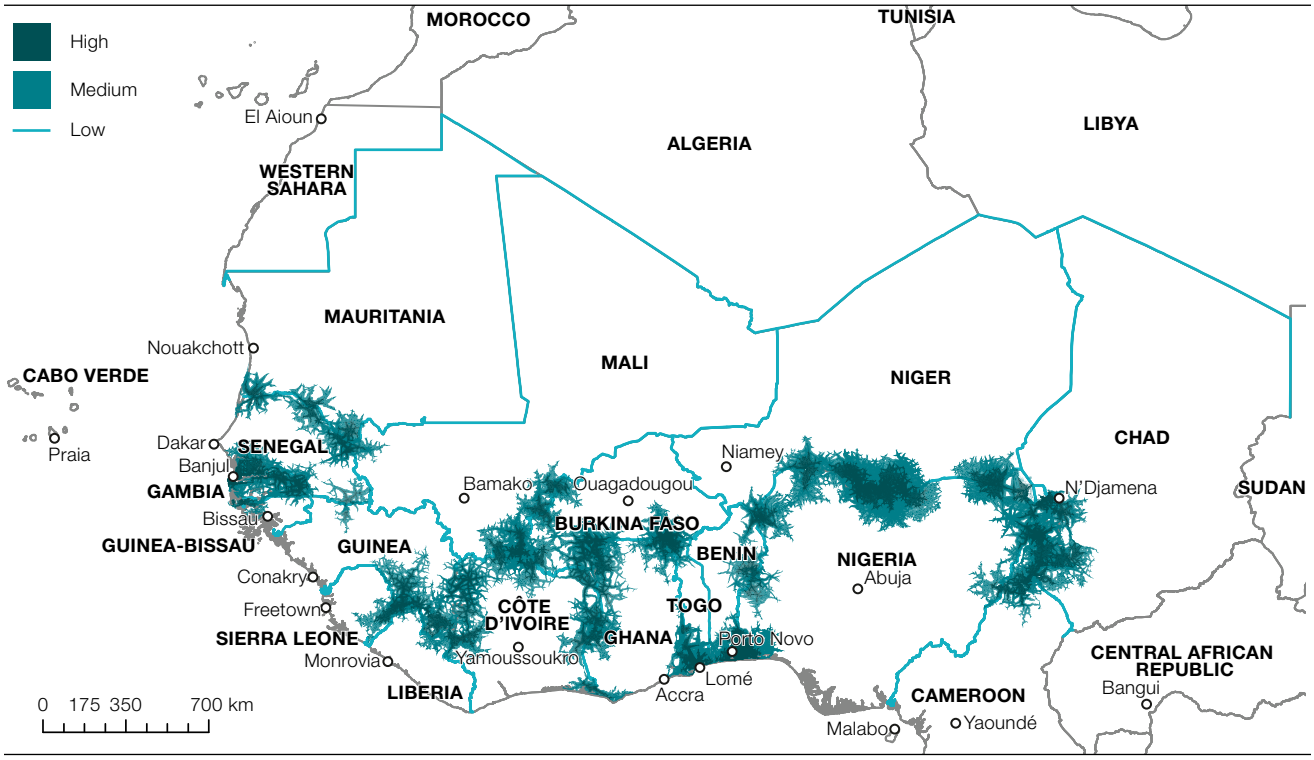
	Potential		
Indicator	***High*** 3 points	***Medium*** 2 points	***Low*** 1 point
Population potential	Number of people who can be reached within 0–120 minutes	Number of people who can be reached within 121–240 minutes	Number of people who can be reached within 240 minutes
Water resources	Shared surface and ground water	Shared surface or ground water	No shared surface or ground water
Agricultural and pastoral resources	Shared agricultural basins and pastoral itineraries	Shared agricultural basins or pastoral itineraries	No shared agricultural basins or pastoral itineraries
Languages	No discontinuities between vernacular, vehicular and colonial languages	Some discontinuities between vernacular, vehicular and colonial languages	Strong discontinuities between vernacular, vehicular and colonial languages
Status of borders	Borders clearly delineated and demarcated	Borders clearly delineated or demarcated	Borders neither delineated nor demarcated
Political stability	No border conflict or trans-national extremist groups	Occasional political instability in border regions	Border conflicts or major transnational extremist groups
Poverty	Limited differential (10.4–24.0)		Very small or very wide differentials (0–10.3 and 24.1–100)

Benin. The Accra-Lagos conurbation, for example, appears to be particularly favourable to cross-border co-operation.

Calculating co-operation potential is a vital first step in studying the geography of cross-border co-operation in West Africa, but it is not entirely sufficient. The intensity of co-operation cannot simply be measured on the basis of the region's potential, which may or may not be leveraged by socio-economic and political players. In order to show how the current borders could nourish the regional integration process, an analysis of the cross-border initiatives that are actually developed in the region (Chapters 6 and 7) and how political decision makers view the regional development of West Africa (Chapter 8), is required.

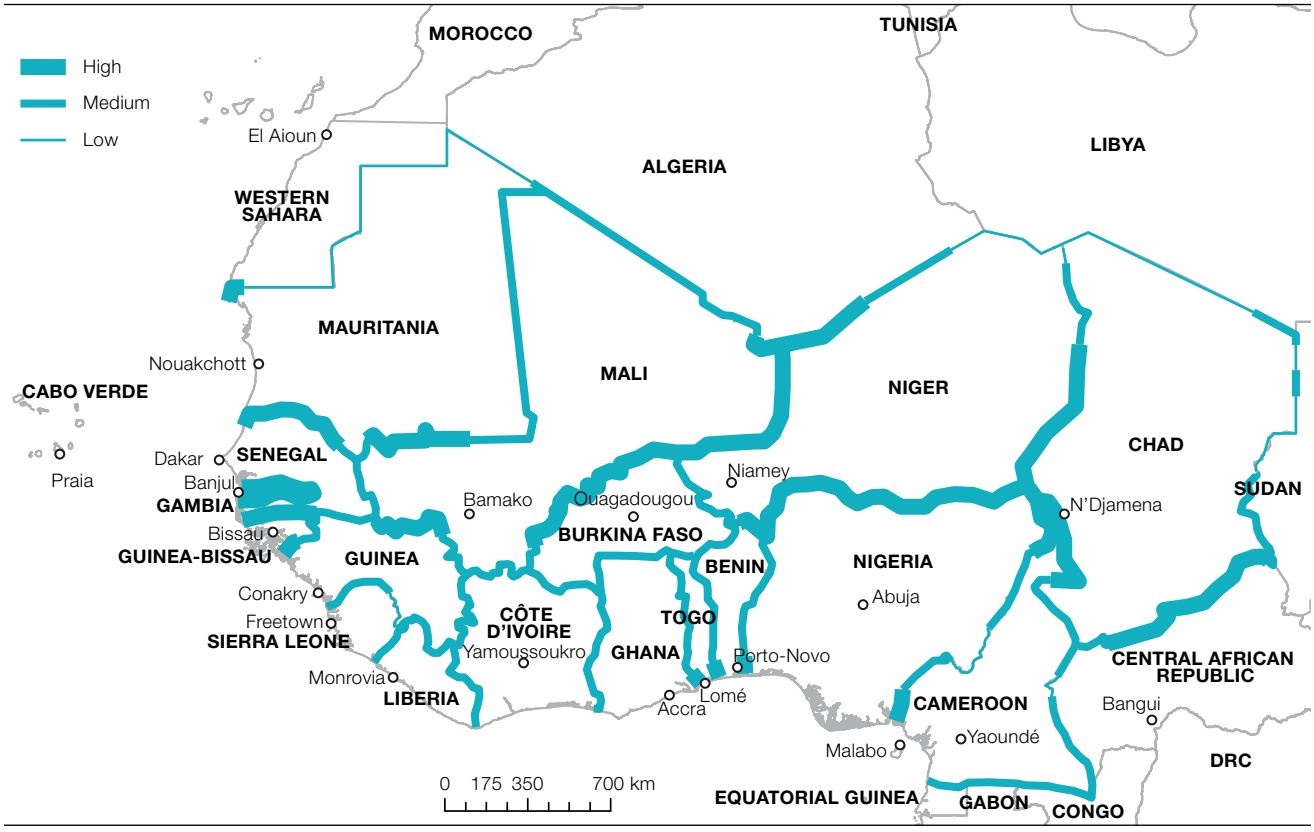
Map 5.33

Cross-border co-operation potential: Population



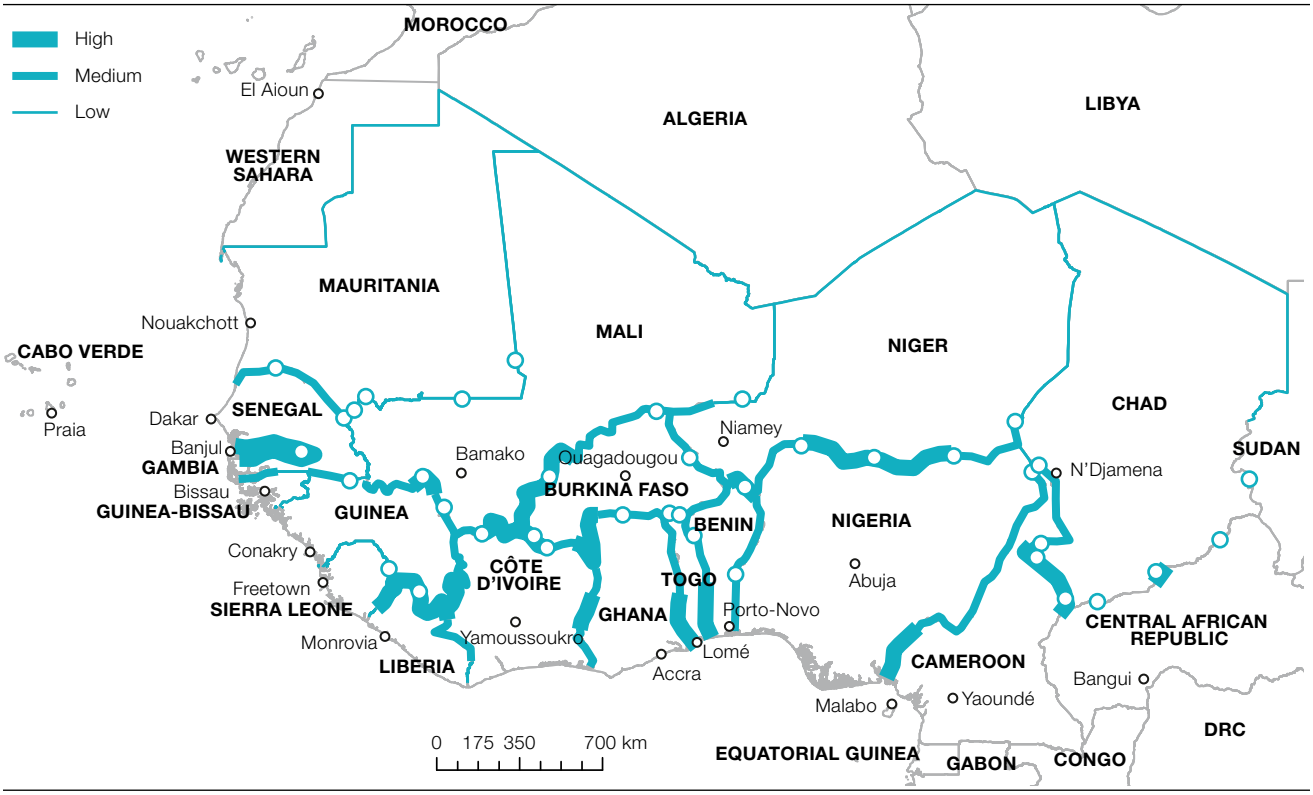
Map 5.34

Cross-border co-operation potential: Water resources



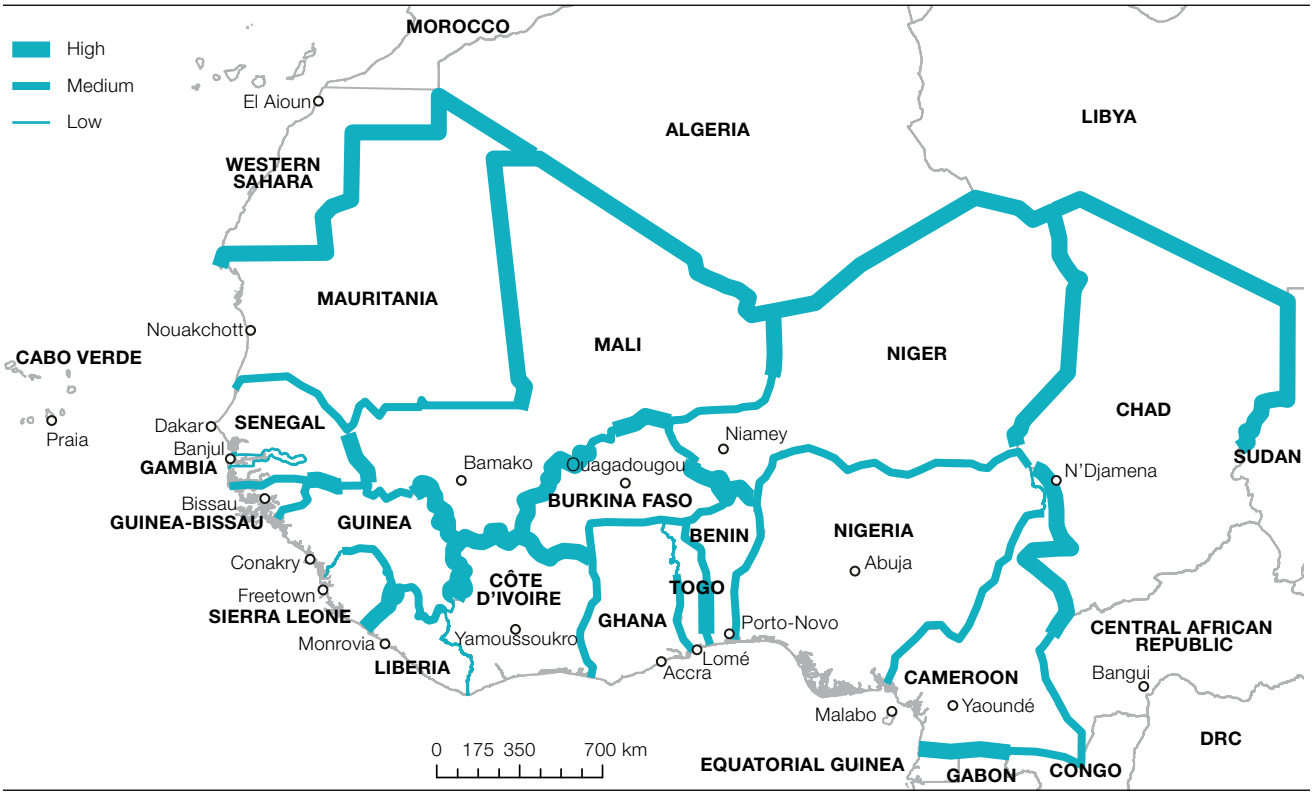
Map 5.35

Cross-border co-operation potential: Agricultural and pastoralism



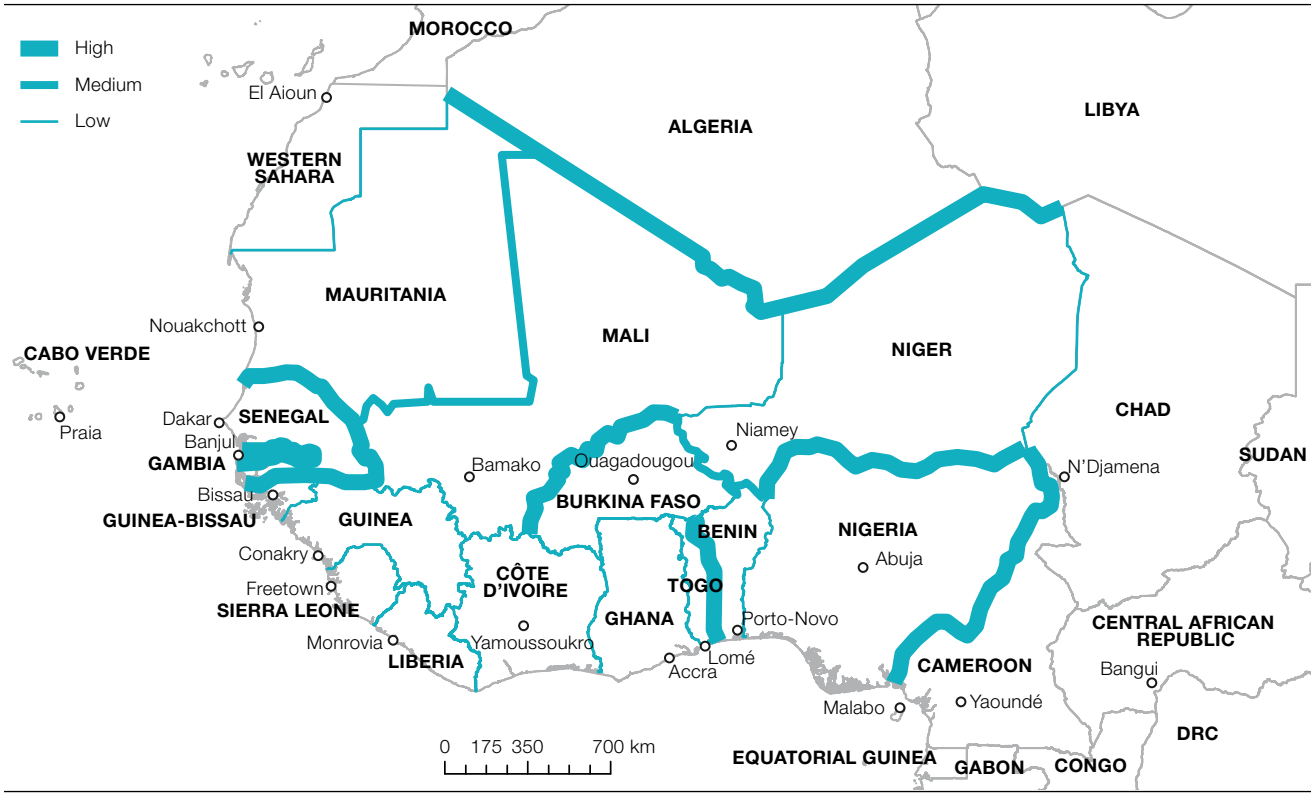
Map 5.36

Cross-border co-operation potential: Languages



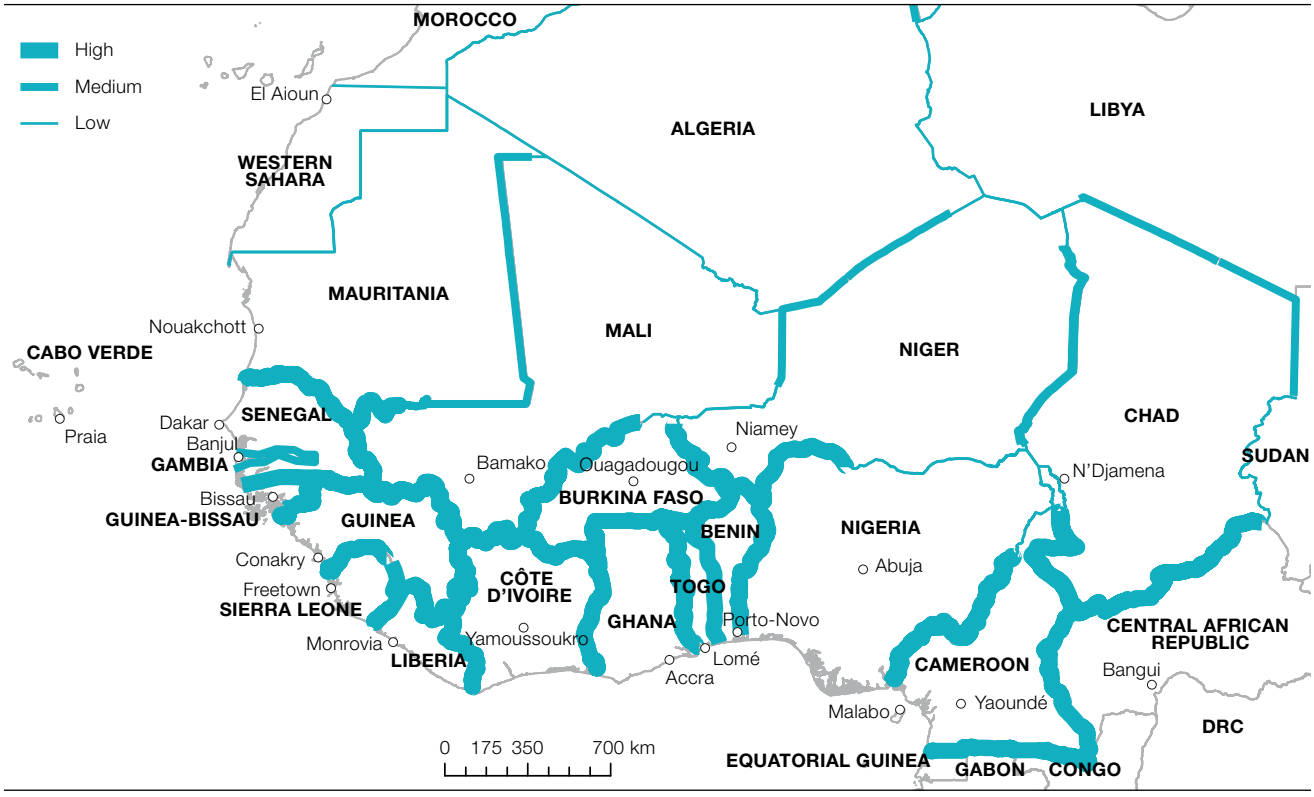
Map 5.37

Cross-border co-operation potential: Status of border



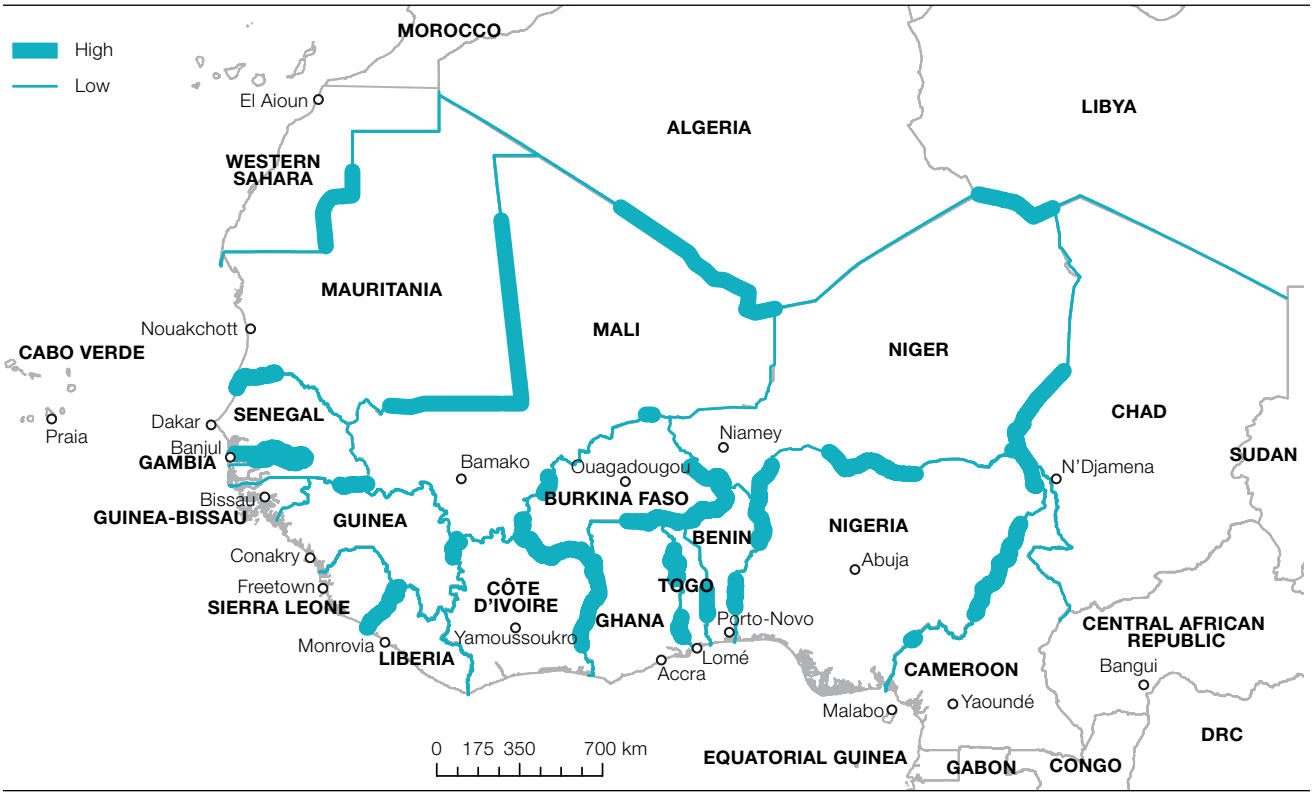
Map 5.38

Cross-border co-operation potential: Political stability



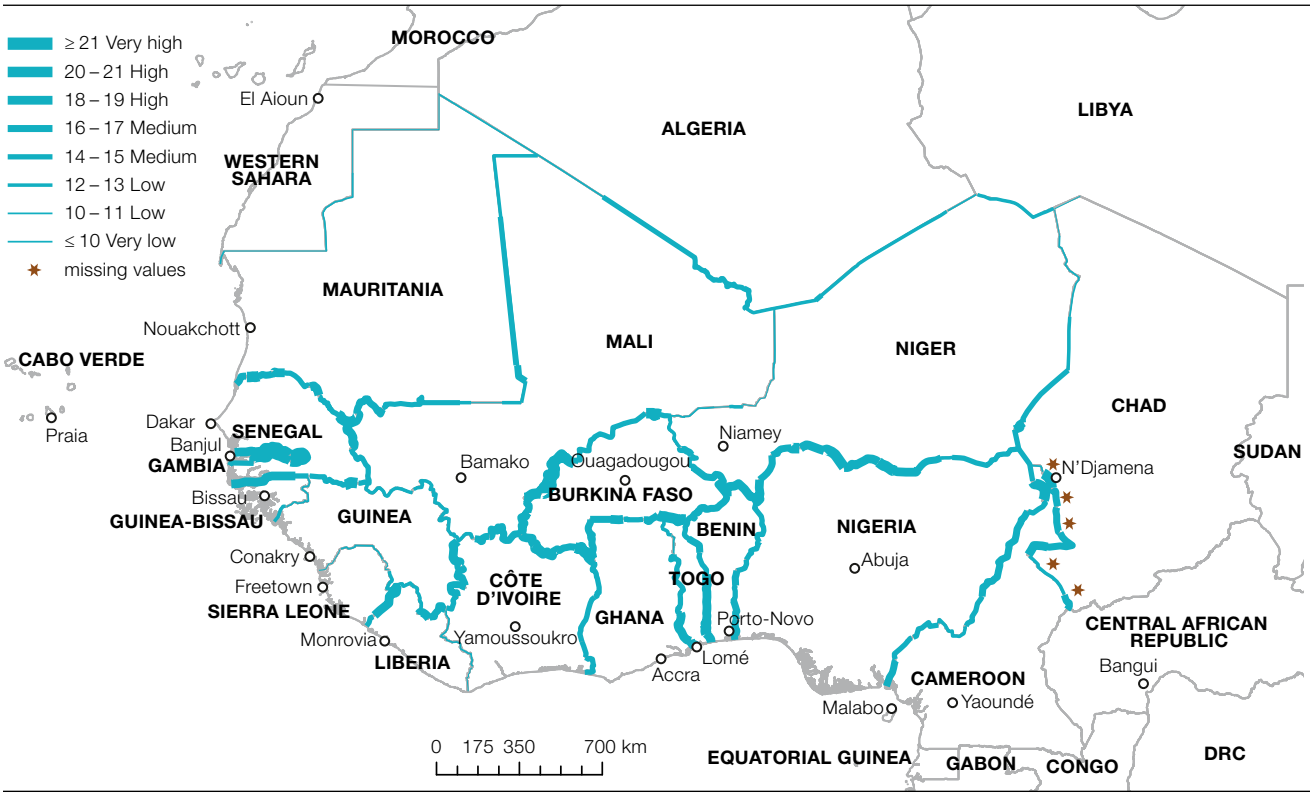
Map 5.39

Cross-border co-operation potential: Poverty



Map 5.40

Cross-border co-operation potential



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Chapter 6

Integration in West Africa: The institutional landscape

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Environmental protection and water management organisations 149
Bilateral and national commissions 153
Uneven outcomes? 154

Focussing on the institutions operating in West Africa, Chapter 6 examines the diversity of organisations involved in regional integration[1]. Analyses of cross-border co-operation networks are performed at both the macro level, covering the 15 countries of ECOWAS as well as Cameroon, Chad and Mauritania, and in three specific micro-regions that share resources. The chapter also highlights the formal and informal relationships that exist between institutions, what structural constraints limit their exchanges of information, what the impact of national borders is on the regional construction process, and how these factors, amongst others, have contributed to the differing levels of regional integration evident across West Africa.

Key messages

- Institutions promoting regional integration in West Africa have traditionally focused on building economic communities, environmental protection and water management, while a number of bilateral and national commissions also exist to support co-operation.
- Regional integration in West Africa is often most successful when institutions target very specific challenges, are strongly supported by their member states and donors, and bring together countries that share the same currency.

REGIONAL ECONOMIC COMMUNITIES AND OTHER REGIONAL ORGANISATIONS

More than 50 years have passed since the Organisation of African Unity (OAU) was created in Addis Ababa. Over this half century, numerous national, supranational, and international organisations have been created to foster integration between newly independent African states. However, despite the many charters signed, progress towards effective regional integration has been slow. Thus far, inter-state agreements that should ensure the free movement of goods have had little effect on business operators, contributing to Africa being one of the most expensive regions in the world to do business (Lesser and Moisé-Leeman, 2009). On a continent divided into 54 independent states, regional integration also suffers from an incomplete elimination of tariff barriers, lack of coherence between development frameworks and divergent macroeconomic policies; three factors that tend to increase the negative impact of market fragmentation (ECA, 2004; World Bank, 2012). The mobility of people within and between regional blocs is another area in which regional integration has been disappointing, often due to a lack of political will but also as a result of systemic constraints.

Between 1967 and 1998, the African continent saw the creation of numerous regional

economic blocs. In the years following the Abuja Treaty of 1991, eight of these blocs were officially recognised as Regional Economic Communities (RECs) by the African Union (AU) (Table 6.1). Despite their common label, RECs are quite diverse in size, pursue different goals and have achieved various degrees of integration.

Free trade areas such as the Common Market for Eastern and Southern Africa (COMESA) were established to further reduce trade barriers. Customs unions, such as the East African Community (EAC) and the Southern African Customs Union (SACU), add another layer of integration by introducing a common tariff on the external borders of the regional bloc. Common markets further extend free trade areas by allowing services, capital and labour to circulate freely across countries, while customs and monetary unions guarantee common external trade tariffs and a single currency. For example, a common external tariff (CET) has existed throughout the Economic Community of West African States (ECOWAS) since January 2015, building on the basis of the West African Economic and Monetary Union's (UEMOA) CET. In Africa, customs and monetary unions are subsets of larger regional bodies: eight ECOWAS members form the West African Economic and Monetary Union (UEMOA) and share the West African CFA franc (XOF), while six countries from the Economic Community of Central African States (ECCAS) form the Economic and Monetary Community of Central Africa (CEMAC) and use the Central African CFA franc (XAF).

The implementation of targeted initiatives designed to promote cross-border co-operation varies greatly between the two RECs that are mainly active in West Africa: ECOWAS and CEN-SAD. Within ECOWAS, cross-border issues are recognised as a fundamental dimension of the regional integration process. In 2005, ECOWAS adopted the Cross-Border Initiatives Programme (CIP) - now the Cross-Border Co-operation Programme (CBCP) - which aims to accelerate the regional integration process by increasing the number of locally initiated cross-border projects. The CBCP was initially based on four pilot projects co-ordinated by field operators working for many years in border development. These are the Municipal Development Partnership (PDM) of the Sikasso-Korhogo-Bobo zone; Enda Diapol for southern Senegambia; the Group for Rural Development Research and Projects (GRDR) for the Karakoro Basin; and the group formed by Fewsnet, the Nigeria-Niger Joint Commission for Co-operation (NNJC) and the OECD Sahel and West Africa Club (SWAC/OECD) for the Kano-Katsina-Maradi zone. These initiatives led

Table 6.1
Regional Economic Communities

Name	Date of creation	Headquarters
East African Community (EAC)	1967, dissolved 1977, re-established 2000	Arusha, Tanzania
Economic Community of West African States (ECOWAS)	1975, revised 1993	Abuja, Nigeria
Southern African Development Community (SADC)	1980 as SADCC, 1992 as SADC	Gaborone, Botswana
Economic Community of Central African States (ECCAS)	1983	Libreville, Gabon
Intergovernmental Authority for Development (IGAD)	1986	Djibouti City, Djibouti
Arab Maghreb Union (AMU)	1989	Rabat, Morocco
Common Market for Eastern and Southern Africa (COMESA)	1993	Lusaka, Zambia
Community of Sahel Saharan States (CEN-SAD)	1998	Tripoli, Libya

to the establishment of the West African Borders and Integration Network (WABI), which aims to promote local initiatives for cross-border co-operation through state-supported political advocacy, dialogue between business operators and institutions, the exchange of southern and northern experiences, and the strong commitment of local populations. Burkina Faso, Gambia, Guinea-Bissau, Mali, Mauritania, Niger, Nigeria and Senegal, officially support these pilot operations.

These initiatives have the backing of regional institutions and, in particular, ECOWAS, for which the free movement of goods and persons is acknowledged as a fundamental right for the inhabitants of member states who may travel without a visa and choose where to live and work within the community in accordance with national legislations. The application of the protocol adopted in 1979 on the free movement of persons, residence and establishment within the ECOWAS area, as well as other legislation, remains nevertheless difficult to enact. These difficulties are evident in the delays that have been experienced in the establishment of a common passport and in the implementation of the right of residence and establishment, phase two and three of the protocol, respectively. The establishment of ECOWAS' free trade area has also suffered from similar issues, and trade restrictive measures have been maintained by many countries. In terms of cross-border development, significant weaknesses exist in the implementation and financing of projects such as the suitability of legislation and obtaining appropriate levels of funding. The subsidiarity principle, which allows cross-border co-operation to be implemented at the relevant level, still remains insufficiently developed.

Within CEN-SAD, cross-border initiatives are less developed. Created in Tripoli in 1998 at the initiative of Muammar Gaddafi, it aims to remove barriers to the free movement of people and goods, to improve road transport infrastructure and to develop sectoral programmes. Economic policies for CEN-SAD have been developed for transport and communications infrastructures, mining, energy, the social sector, agriculture, the environment, water and animal welfare. Given worsening security conditions in the Sahel-Saharan zone, priority is now placed on the implementation of a joint mechanism for dispute settlement. The revision of the treaty in 2013 refocused the organisation's missions on co-operation activities to foster peace, security and sustainable development, and on the fight against desertification and measures to adapt to climate change. CEN-SAD faces numerous political and economic challenges. Its operations are significantly affected by the Libya crisis and the fall of Muammar Gaddafi who provided a large portion of its funding, and the development of its customs union suffers from the overlapping presence of other unions such as ECOWAS.

In addition to the eight organisations officially recognised as RECs by the AU, other supranational organisations play an important role in West African regional integration. This is the case for UEMOA, which introduced cross-border issues into its strategy for regional integration and land development through the *Politique d'aménagement du territoire communautaire* (PATC/UEMOA). Phase four of this initiative focuses on the development of community solidarity and the strengthening of social cohesion, provisioning for the implementation of cross-border and inter-communal co-operation programmes. Their aim is to support, strengthen and encourage decentralisation and local development through the adoption of legal frameworks that facilitate decentralised co-operation. The Council of Local Governments (CCT) was created by the Commission in 2011. Partnerships were also put in place for the implementation of the first phase (2014–18) of a specific Programme for Local Cross-Border Co-operation (PCTL) managed by the CCT. UEMOA is collaborating with the United Nations Capital Development Fund's (UNCDF) Local Cross-Border Initiative (LOBI, 2012–17) alongside ECOWAS, which also has the support of the Government of the Grand Duchy of Luxembourg. Phase one covers Burkina Faso, Côte d'Ivoire, Mali and Niger through the implementation of two pilot areas: Sikasso, Korhogo and Bobo Dioulasso (SKBo) and IIR Sahel around Dori, in the north of Burkina Faso.

In 2014, UEMOA joined forces with the United Nations Economic Commission of Africa (ECA), with support from the German Agency for International Co-operation (GIZ), to encourage economic development in cross-border

areas and experience-sharing between regional organisations. Funding of projects such as the LOBI and the PCTL could be carried out through structural funds managed by local authorities. A subsidy mechanism is also planned to enable easier access to loans from the West African Development Bank (BOAD), the African Development Bank (AfDB) and the ECOWAS Bank for Investment and Development (EBID). However, despite these advances, co-ordination between UEMOA and ECOWAS remains insufficient for the harmonisation of legislation on cross-border co-operation, and the application of the subsidiarity principle remains difficult on several levels. Difficulties also exist between the states and local authorities as central governments are responsible for the vast majority of public spending. Access to funding remains an issue despite the opportunities offered by decentralised co-operation funds and the role of the Council of Local Authorities.

ENVIRONMENTAL PROTECTION AND WATER MANAGEMENT ORGANISATIONS

In addition to RECs and large regional bodies, a number of regional groupings in Africa are focussed on sectorial co-operation issues. In southern Africa, the Lesotho Highlands Development Authority, the Zambezi River Authority, and the Komati Basin Water Authority are primarily concerned with water resources development within the perimeter of the main continental river basins. In West Africa, the Senegal River Basin Development Organisation (OMVS), the Niger Basin Authority (NBA), the Mano River Union (MRU), and the Gambia River Basin Development Organisation (OMVG) pursue similar objectives. Other organisations aim at covering a broader range of activities, including agriculture, infrastructure, fisheries and natural resources. These organisations include the Permanent Inter-State Committee for Drought Control in the Sahel (CILSS), which was created during the Great Western African drought to promote food security and fight against desertification. Other examples include the Lake Chad Basin Commission (LCBC), created to improve land and water management, preserve ecosystems and promote peace building and security; and the Kagera Basin Organisation, which aims to reduce poverty and improve socio-economic development in the Great Lakes region. Environmental issues have also motivated the creation of the Integrated Development Authority of the Liptako-Gourma region (ALG), which brings together three landlocked Sahelian countries with similar problems of land degradation and access to water supply.

The following subsections discuss the origins, functioning and current challenges of these regional bodies, focussing particularly on those working in the three micro-regions considered in this study: OMVS, ALG, and the LCBC (Map 6.1).

Senegal River Basin Development Authority

OMVS, headquartered in Dakar, was created in 1972 between, Mali, Mauritania and Senegal, and was joined by Guinea in 2006. From an institutional perspective, the High Commission of OMVS is the only administrative structure that is common to these riparian zones. Its role focuses on economic policy co-ordination in the Senegal valley and monitoring the effects of hydrological facilities on the environment.

The OMVS programme covers five of the New Partnership for Africa's Development's (NEPAD) ten priority sectors: agriculture, the environment, energy, infra-structure and health. It also draws on the Senegal River Water Charter (2002), a legal instrument with international reach which completes the existing legal framework. The strategic orientation of the OMVS was adopted at the Summit of Heads of State and Government in 2003. The Authority receives support from a wide range of partners including the different agencies belonging to the United Nations and other international and African organisations (the Global Environment Facility [GEF], *Observatoire du Sahara et du Sahel* [OSS], the International Union for Conservation of Nature [IUCN], CILSS), ECOWAS and UEMOA, numerous African and international universities and research centres, as well as

Map 6.1

Regional organisations of the Senegal River, Liptako-Gourma and Lake Chad



co-operation from GIZ, the French Agency for Development (AFD), the Danish International Development Agency (DANIDA) and the United States Agency for International Development (USAID).

The Senegal River valley remains beset by institutional, economic and environmental weaknesses including the fragility of the institutional, legal and technical framework governing the basin; the ability of water resource development activities to generate revenue; the degree of exploitation of hydroelectric potential; and the steady deterioration of water management infrastructure (dams and canals). Before the commissioning of the Manantali hydroelectric power plant in 2001, dams had already significantly altered the environmental conditions in the Senegal River valley. Flow regulation in the river is undermining the traditional economy of the local populations, especially pastoral activities and fishing in a zone with serious land issues, despite the resolution of the 1989 Senegal-Mauritania conflict. Lastly, the prevalent rate of waterborne diseases, such as bilharzia, malaria and Rift Valley fever, is high in the basin.

Integrated Development Authority of the Liptako-Gourma Region

The ALG is a multinational institution created in 1970. Its headquarters are located in Ouagadougou and its members are Burkina Faso, Mali and Niger. Its strategic focus is on a small number of areas of regional importance including mineral resources, energy, water power and agriculture. As the Liptako-Gourma region is semi-arid, the aim of the ALG's programmes is to promote food security and access to regional markets, to reduce the impact of desertification, to open up the region and protect the environment.

The various technical and financial partners contribute to the institutional strengthening of the Authority through a new action plan (2010–15), supported by the AfDB. The ALG's

activities comply with the objectives formulated by NEPAD, as well as the Regional Poverty Reduction Strategy (PRSP) for West Africa prepared jointly by ECOWAS and UEMOA, Mali's PRSP, Burkina Faso's Strategy for Accelerated Growth and Sustainable Development, and Niger's Economic and Social Development Plan (PDES) (ALG, 2015).

Financially, the ALG has focused over 60% of its expenditure over the last 40 years on initiatives in the transport and telecommunications sectors (ALG, 2010). For example, it has launched a programme to open up the region using financing from the BOAD. Feasibility studies backed by the Arab Bank for Economic Development in Africa (BADEA) are currently under way for the modernisation of the Bandiagara-Burkina Faso border road and the Ouahigouya-Mali border road.

As part of UEMOA community solidarity, a programme for integrated development is planned in the Union's disadvantaged cross-border areas. Six cross-border zones (two of which are in the ALG area: Burkina Faso-Mali and Mali-Niger) will benefit from improved roads, infrastructure and socio-economic and cultural facilities; with stronger production, storage and marketing capacity and support. ECOWAS's Regional Agricultural Policy (ECOWAP) includes a pastoral component which is expected to underpin future ALG initiatives, helping it to address the lack of appropriation of its projects by the populations in the Liptako-Gourma region.

As with other organisations, the ALG's aim is to address the lack of co-ordination resulting from a multitude of sustainable land and water resource management initiatives, including the Great Green Wall project (2010–15), the NBA's agricultural development and climate change adaptation programme, and the CILSS project to provide better climate information to help support climate change adaptation in West Africa. To do this, the ALG has formulated an action plan for the reconstruction process of northern Mali (2013), in which it states its intention to position itself "as an instrument of enhanced co-operation for the implementation of the 'border country' approach between the three countries and between transnational initiatives" (ALG, 2013: 9). The Authority tries to revive projects which are waiting for funding, have been put on hold or require consolidation as a result of the economic crisis; and to resume feasibility studies for projects which have received declarations of interest from technical and financial partners. The action plan lays out proposals for a cross-border programme to conserve croplands and restore degraded land as part of a policy of climate change adaptation. This action plan could be associated with the Regional Economic Programme (REP) and the NBA's investment programme, which notably provides support for the management of cross-border transhumance.

Lake Chad Basin Commission

The LCBC is the oldest river basin organisation in Africa. Created in 1964 and extended in 1996, its headquarters are located in N'Djamena and it currently has six members: Cameroon, Central African Republic, Chad, Libya, Niger and Nigeria (Sudan and Egypt hold observer status). The LCBC seeks to promote integrated and sustainable management of the Lake Chad waters and other transboundary water resources, promote economic integration and regional co-operation, and reinforce peace and regional security. It works in areas affected by severe demographic constraints: the population density around the lake is high (over 60 people/km^2) with over three million inhabitants from four neighbouring countries living off the resources and derived services provided by Lake Chad (INBO, 2012). In addition, the extremely variable climate affects seasonal fish and agricultural production and increases tension and conflict over the area and its resources.

The LCBC is a stakeholder in the Programme for Strengthening the Institutions for Transboundary Water Resources Management in Africa (SITWA) financed by the European Union (EU) and implemented since 2011 by the Global Water Partnership (GWP). It is also active in several environmental networks such as the African Network of Basin Organizations (ANBO), and the Convention on Wetlands, called the Ramsar Convention, through the launch of the Chad Wetlands Initiative (CHADWET) in 2003.

Since its creation in the 1960s, the LCBC has been confronted with many institutional challenges, including insufficient co-ordination at the national and regional levels, the very

precarious economic situation of some of its members and sometimes unequal involvement in regional initiatives. The reorganisation carried out in 2009–10 still remains inadequate and weakened by the development of new activities. However, with regard to access to funding, it should be noted that in 2010 the LCBC started working on a strategy for more sustainable use of its financial resources, mainly through subregional funding levers. In April 2015, the Council of Ministers also approved the implementation of draft reforms designed to improve the efficiency and expertise of the LCBC.

Gambia River Basin Development Organisation

The OMVG, founded in 1978 by Gambia and Senegal (later joined by Guinea and Guinea-Bissau), encourages a switch from traditional flood recession farming to an industrial agricultural economy boosted by hydroelectric dams. In addition to the Gambia River basin, it also covers two adjacent basins, Kayanga-Geba and Koliba-Corubal. Following the example of the OMVS, the OMVG aims to promote the economic and social integration of its members by improving water access and quality, hydroelectric power, flood control, food security and infrastructure. However, it is confronted with failing water management systems and insufficient access to quality infrastructure, loans, new technologies and expertise, storage and processing capacities, and marketing. In addition to these constraints, political obstacles hinder the proper movement of trade, especially to and from Senegal. The Regional Transport and Transit Facilitation Project run by ECOWAS and UEMOA may create opportunities for the OMVG by removing non-tariff barriers and reducing the cost of transportation for goods and people.

Mano River Union

Côte d'Ivoire, Guinea, Liberia and Sierra Leone are members of the MRU (created in 1973) whose headquarters are in Freetown. Its mission is to enhance regional integration to promote not only peace and security, but also trade, industry, energy, infrastructure and agriculture. Particularly in the area of security, a tripartite mechanism (MRU, ECOWAS and the United Nations Office for West Africa [UNOWAS]) oversees the cross-border security strategy. The implementation of joint borders posts is now financed. The MRU wishes to create a customs union with its own nomenclature and harmonised taxes, within a relatively small market where regional integration remains limited. The 2014 MRU Summit of Heads of State reaffirmed the need for institutional strengthening of the secretariat and for more effective co-operation with ECOWAS in order to encourage consistency between the ECOWAS framework for peace and security and the MRU's cross-border security strategy. Despite these investments, the Union faces persistent challenges due mainly to institutional and security issues. The stability of the zone remains fragile due to the circulation of arms and the presence of criminal gangs. The closure of the borders as a result of the Ebola outbreak in 2013 also weakened the Union, which is soon expected to launch a post-Ebola recovery project with AfDB funding.

Niger Basin Authority

The NBA is particularly active in cross-border hydroelectric development projects. It operates in the Niger River basin between Mali and Niger; in the Gada-Goulbi, Kamadougou-Yobe, and Maggia-Lamido bassins; in the Tagwai-el Fadama basin between Niger and Nigeria; and in the Mekrou basin between Niger and Benin. Border development initiatives are organised within the framework of the Niger Basin Water Resources Development and Sustainable Ecosystems Management project and the Reversing Land and Water Degradation Trends in the Niger River Basin project. The NBA seeks to address the water infrastructure deficit within a socio-economic context marked by high rates of poverty and a food security situation which is heavily reliant on rainfall and variations in the level of the Niger River. In 2004, the Summit of Heads of State and Government of the NBA resulted in the formulation of a shared vision for the development of the basin (SDAP for 2015), a revitalised role for the Authority, and the implementation of a new framework agreement for co-operation between the NBA and 22 technical partners.

Permanent Inter-State Committee for Drought Control in the Sahel

The CILSS was created in 1973 by Burkina Faso, Cabo Verde, Chad, Gambia, Guinea-Bissau, Mali, Mauritania and Niger. The organisation is now comprised of 13 members including Benin, Côte d'Ivoire, Guinea, Senegal and Togo, in addition to the aforementioned countries. In 2004, it integrated cross-border co-operation into the scope of its activities. CILSS comprises an executive secretariat in Ouagadougou; the *Institut du Sahel* (INSAH) in Bamako, which focuses on agro-socio-economic research; and the Regional Agrometeorological and Hydrological Centre (AGRHYMET) based in Niamey.

CILSS supports the development and implementation of sectoral policies, notably those relative to food security and the fight against desertification. It also co-ordinates the Food Crisis Prevention Network (RPCA) alongside the OECD Sahel and West Africa Club Secretariat (SWAC/OECD) and is responsible for a food security monitoring system designed to forecast harvests, consolidate food balances sheets, monitor prices and markets, identify famine risk areas and provide more general information on measures to deal with different annual scenarios.

Its activities range from research to the implementation of national projects in various areas such as agriculture, property, transhumance, livestock markets and continental fishing. One of the main issues faced by CILSS is related to the spatial and temporal uncertainty which characterises the Sahel. Helping countries to adopt strategies on agricultural adaptation and market simplification are major challenges. Other challenges include co-ordination with other regional organisations and the development of complementarities between regional policies and national institutional frameworks.

BILATERAL AND NATIONAL COMMISSIONS

Many joint commissions exist at the bilateral level, including those between Mali and Algeria, Mali and Niger, Niger and Algeria, Niger and Burkina Faso, Côte d'Ivoire and Ghana, and Chad and Algeria.

Founded in 1971, with its headquarters in Niamey, the NNJC is the only general permanent joint commission between Niger and Nigeria. The NNJC is involved in a wide range of areas including the rehabilitation of border markers, the creation of a Niger-Nigerian consular chamber, border patrol, border communication networks, the fight against trafficking and management of the Niger River. There are specific agreements regarding desertification and conservation of trans-boundary watersheds that were agreed in Abuja and Maiduguri in 1990, the latter being amended in 1998. In terms of cross-border programs, NNJC is particularly involved in the Kano-Katsina-Maradi triangle (K^2M) with support from the World Bank, and is also promoting three new trade corridors between the two countries, between Kebbi-Sokoto-Zamfara and Dosso-Tahoua, Jigawa-Daura and Magaria-Zinder, and Borno-Yobe and Diffa.

The Commission is also involved in the Integrated Ecosystem Management in the Transboundary Areas between Nigeria and Niger, a project of the United Nations Environment Programme (UNEP) that is designed to strengthen legal and institutional frameworks to encourage more participatory management of natural resources. The NNJC's activities also cover trade, health and security. The borders are patrolled by joint units and the demarcation of the boundary between the two countries has been achieved.

The main challenges faced by the NNJC concern security, desertification and water needs. Joint patrols and the presence of the Multinational Joint Task Force (MNJTF) – comprising soldiers from Benin, Cameroon, Chad, Niger and Nigeria) have managed to prevent some attacks by Boko Haram. The increase in cross-border security initiatives may limit the number of enforced border closures during states of emergency, as was the case in the states of Yobe and Borno in 2012 and 2013. The situation had serious repercussions on the economy, on agricultural trade with neighbouring countries, and on prices levels in the Diffa

region of southern Niger and in the north of Nigeria (Maiduguri).

Cross-border co-operation between Niger and Nigeria is even more important given that Niger uses Nigerian ports to ship a large proportion of its exports. Nigeria is committed to retaining a route to the sea for landlocked countries, as demonstrated by an NNJC initiative for the free movement of goods in transit which resulted in the creation of a trade mission for port concession holders and terminal operators. The aim of the mission is to raise the awareness of Nigerian economic actors and to develop trade within a tense security situation.

Because of its leading role in the regional economy, Nigeria is highly concerned by cross-border issues and created the National Boundary Commission (NBC) in 1988 in Abuja. Considered to be a ground-breaking African boundary commission, the NBC works directly under the Presidency of the Federal Republic. The Commission protects the integrity of the common borders and oversees the work of five joint commissions. Since the redefinition of its prerogatives in 2006, the NBC has extended its reach, especially with regard to transboundary development. One of the Commission's main challenges is to remedy problems related to the settlement of boundary disputes, which were previously the responsibility of various ad hoc commissions with no co-ordination mechanism. During the first ten years of its existence, the Commission focused on settling border disputes with neighbouring countries, notably Benin, Cameroon, Niger and the LCBC, before its powers were enhanced following the adoption of the NBC Act in 2006. The NBC may now intervene in the peaceful settlement of boundary disputes, not only with neighbouring countries but also within the Federal Republic when arbitration is required. Accordingly, for the last ten years, the Commission has focused primarily on the settlement of boundary disputes between the federal states, local governments and communities, with over ten successful settlements, notably the disputes between the states of Jigawa/Kano, Kaduna/Kano, Kaduna/Katsina, and Kaduna/Plateau. The NBC's expertise and its ability to co-ordinate the settlement of boundary disputes have given it greater legitimacy. In September 2015, faced with new challenges to cross-border security and the movement of people, the vice president reiterated the need to solve problems related to the co-ordination and coherence of NBC interventions and national agencies such as the Nigerian customs and immigration services. Other challenges to overcome include those related to financing or to the destruction of border markers.

UNEVEN OUTCOMES?

Generally speaking, regional integration in Africa is most successful when institutions target very specific areas, are strongly supported by their member states and donors, and bring together countries that share the same currency. For example, by relying on sectoral co-operation between largely francophone countries, CILSS has addressed some of the most urgent needs of Sahelian countries, including food security and natural resource management. The success of SACU and the CFA Franc Zone organisations also illustrate that a high level of regional integration can be achieved between countries where formal arrangements existed before decolonisation. These successes cannot obscure the fact that progress towards regional integration has been rather unequal (AU/AfDB/UNECA, 2016) and limited since the 1960s (Aryeetey, 2001; AU, 2009, 2013a; ECA/AU/AfDB, 2010, 2011, 2012, 2013). This is particularly evident when comparing the objectives of the Abuja Treaty with its current achievements.

Entered into force in 1994, the Abuja Treaty envisioned the gradual establishment of the African Economic Community in six stages by 2034, at the latest. The first stage which took place from 1994 to 1999, sought to establish economic communities in regions where they do not exist, and was completed with a few exceptions. The second stage, between 1999 and 2007, aimed to remove intra-regional barriers within RECs and harmonise customs duties in relation to third states, has recorded some progress but is not yet completed. The third stage, from 2007 to 2017, in which each

regional economic community should establish a free trade area and a customs union, is far from being achieved, however. The next stages of regional integration should ultimately lead to a pan-African economic and monetary union, central bank and currency, but the extent to which these levels of integration can and will be achieved is unclear.

Regional organisations have also contributed to increased intra-regional trade, albeit marginally. Trade between countries in sub-Saharan Africa represented approximately 12% of official total trade flows in the region in 2015 (AfDB/OECD/UNDP, 2015), but this share is well below the levels of other regions in the world, where intra-regional trade can represent up to 66% of total trade, as in Europe. Indeed, in some parts of the continent, as in southern Africa, infra-regional trade is actually declining and only represented 15% of total trade in 2008 against 22% in 2002 (Mbekeani, 2013), giving rise to calls for additional effort to strengthen regional integration. However, these official statistics vastly underestimate the real size of inter-African trade given the large informal cross-border trade flows. If these informal flows were incorporated into official figures the share of intra-regional trade in sub-Saharan Africa would be substantially re-evaluated. According to recent estimates, unrecorded cross-border trade could represent from 30–40% of total trade for SADC to more than 75% for countries including Benin and Uganda (UNCTAD, 2013). Making a comparison with other continents, the real proportion of intra-African trade is probably similar to that observed in Latin America and the Caribbean (20%).

One of the most frequently cited criticisms regarding the state of regional integration in Africa, concerns the gap between how regional policies are designed by supranational bodies and the concrete application of these policies on the ground. Most regional bodies have thus far struggled to enforce the implementation of the agreements signed between states and to translate them into forces for structural change across African regions and countries. In other words, there is a mismatch between regionalism as it should be and regionalisation as it is experienced on a daily basis. It would be misleading, however, to attribute the disappointing outcomes and slow process of regional integration in Africa to the supranational organisations alone. Nation states and private actors also share part of the responsibility for the lack of practical implementation of integration policies on the continent.

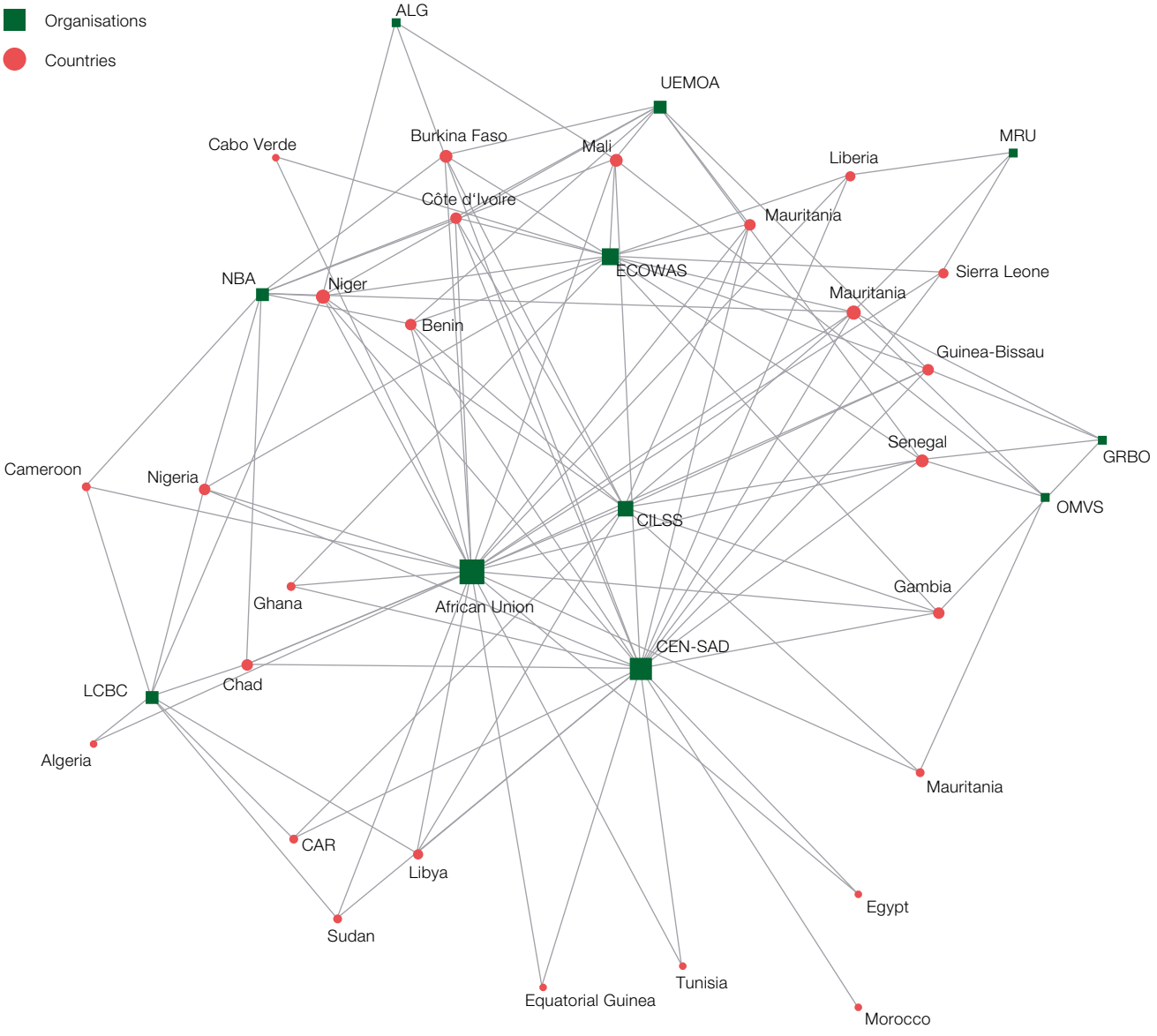
Many countries have had little incentive to engage effectively in deeper institutional integration with their neighbours. In a patrimonial system that nurtures interpersonal relations across society and the state, regional initiatives often go against the very interests of the state and its clients in the private sector for which borders are a resource rather than a constraint. Bach's comment formulated more than 15 years ago that "trans-state integration is stimulated by market distortion, not trade liberalisation" (1999: 13; see Bach 2016) is still true today, despite some progress. In Nigeria, for example, the persistence of informal trade, the partial liberalisation of the market and reform customs have less to do with the protection of national industries than with the profits generated by the illegal re-export trade (Raballand and Mjekiqi, 2010; Golub, 2012). In Benin, the existence of national border differentials has long been a guarantee of state and private revenues because most of what is imported from the world markets is ultimately destined to be sold informally to neighbouring countries (Hoffmann and Melly, 2015).

Regional integration has also been constrained by the large number of organisations that exist with similar or competing purposes. The majority of African states belong to multiple regional groupings, which often have high co-ordination costs, competition between policies, and confusion among international donors (Dirar, 2010; Hartzenberg, 2011). In West Africa, some programmes pursued by ECOWAS and UEMOA coexist with a myriad of functionally oriented regional groupings such as the ALG or the OMVS. In east and southern Africa, overlapping affiliations between COMESA, SADC, SACU and EAC are also particularly numerous.

Co-memberships are particularly apparent when mapping which organisations each country belongs to. This can be represented in a two-mode network visualisation which identifies countries, represented as red circles, and the organisations they belong to, represented as green squares, as illustrated in Figure 6.1.

The analysis builds upon the assumption that belonging to the same regional grouping is an indicator of relationships between state representatives, who can use events and programmes elaborated within each organisation to establish or develop joint activities. This shows that the 18 countries of West Africa considered by this report (ECOWAS plus Mauritania, Cameroun and Chad) are connected by 11 different regional organisations[2]. The network is rather compact and dense with approximately 40% of the possible ties between countries and organisations present in the graph, confirming that co-membership is a widespread practice in the region. The density of ties is particularly high between Francophone West African countries that often belong to several large regional organisations such as ECOWAS and UEMOA and to sectorial, organisations such as the ALG, the Niger Basin Organisation or the OMVS. The size of the nodes is proportional to the number of ties they have, a measure known as degree centrality that provides information about the respective importance of each country and organisation. Niger is the most central country in the region in terms of co-memberships,

Figure 6.1
Network visualisation of membership to regional organisations



followed by other Francophone countries such as Burkina Faso, Guinea, Benin and Côte d'Ivoire. Apart from the AU, to whom all African countries belong except Morocco, CEN-SAD, ECOWAS and CILSS occupy the most central place in the region.

Overlapping memberships and the importance of summitry are also reminders that African regional groupings have been key arenas for conducting international relations since the 1960s, a pattern which mirrors the significance of interpersonal relationships in the conduct of politics and policies. Rather than being seen as redundant, the proliferation of regional institutions with overlapping responsibilities is seen by many African leaders as an opportunity for consolidating state power (Herbst, 2007). The efficiency of regional groupings heavily depends on the state of interpersonal relations between heads of state who often act "as individuals rather than as representatives of a political system" (Bossuyt, 2015: 53). The pre-eminence of interpersonal relations over intergovernmental relations has also been prone to the development of paradiplomacy at the global level. This structure has been used by political elites to promote national interests within international financial institutions, with the EU and other international donors. However, this also contributes to institutional paralysis whenever decisions have to be made, not least with respect to the establishment of customs unions and the harmonisation of incompatible common external tariffs (CETs) (AfDB, 2014: 15).

Regional integration has also been greatly affected by political crises and conflicts. While the number of global conflicts has declined since the end of the Cold War, Africa has experienced an increase in political violence since the 1990s, as many one-party leaders suddenly lost their external support. As a consequence, several regional organisations ceased their activities more or less permanently. The Economic Community of Great Lake Countries (CEPGL), for example, was suspended in 1996 due to the First Congo War and only re-activated in 2010. The MRU experienced a long period of inactivity resulting from the civil wars in Liberia and Sierra Leone before its reactivation in 2004. More recently, IGAD's progress toward regional integration in Eastern Africa has been slowed down by conflicts in Somalia and Sudan. In the northern part of the continent, regional integration in the AMU is slowed by the enduring hostility between Morocco and Algeria related to the status of Western Sahara. The activities of CEN-SAD, originally financed by petrodollars was also brought to a halt by the Libyan crisis since 2011.

NOTES \\\

1 *The list of organisations mentioned is based on the answers of respondents.*

2 *The network diagram includes the eight North and Central African countries which also belong to these organisations.*

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Chapter 7

West African cross-border policy networks

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Chapter 7 seeks to chart the way in which organisations and individuals are connected within cross-border policy networks in West Africa. One of the major challenges for cross-border co-operation is successfully managing to establish principles and pursue initiatives which transcend specific national characteristics. In doing so, cross-border co-operation brings together organisations with very different objectives and individuals with very different profiles, who must nevertheless work together and achieve mutually acceptable consensuses. Based on the results of a field survey carried out across the West African region, and in the areas of the Senegal River valley, Liptako-Gourma, and the Lake Chad region in particular, the report highlights the actors involved in cross-border co-operation, their formal and informal relationships, the structural constraints limiting their exchanges of information and power, and the impact of national borders on the regional construction process.

Key messages

- The network of cross-border co-operation organisations is formed in a core-periphery structure within which the central and peripheral actors prefer to interact with the core of the network.
- Both governmental and intergovernmental organisations play a central role in cross-border governance, and as a result their internal and external relations to the rest of the network are denser than those linking NGOs and the private sector business community.
- In all regions but that of Lake Chad, the low density and decentralised structure of regional and local information networks appear adapted to the flow of information between partners of very diverse statuses and skills.
- The governance of networks in the region is based on a small number of intermediaries called brokers, who connect policy makers in several countries.
- Borders affect the operations of actors involved in local public policies less than those operating at the regional level, for whom over 67% of relationships are maintained between actors from the same continent.
- In the Senegal River and Liptako-Gourma regions, the cross-border co-operation information network is structured around country capitals and a dense scattering of small and medium cities, while in the Lake Chad region, the information network is centred purely on N'Djamena.

THE NETWORK OF REGIONAL ORGANISATIONS

In West Africa, like everywhere else in the world, the organisations involved in cross-border co-operation are particularly diverse in terms of their geographic scope, institutional jurisdiction, objectives and financial resources. Alongside states, which usually feature prominently in cross-border issues, it is not unusual to find multinational and supranational organisations, lenders, non-governmental organisation (NGOs) and private companies, along with the local and regional authorities of every country concerned. These actors are likely to maintain very different relationships with one another, based on their degree of institutional jurisdiction and their financial capacities, for example, which makes policy analysis particularly difficult.

The considerable diversity of actors involved in cross-border co-operation and their complex relationships can be mapped using

social network analysis, which measures the centrality of each organisation depending on its relationships with other structures (Chapter 4). To this end, 16 organisations involved in cross-border co-operation in West Africa were selected on the basis of an inventory of the main institutional structures working in the region (Chapter 6).

They are the African Union Border Programme (AUBP), the New Partnership for Africa's Development (NEPAD), the three economic communities present in the region (the Economic Community of West African States [ECOWAS], the Economic Community of Central African States, [ECCAS], the Community of Sahel-Saharan States, [CEN-SAD]) and the West African Economic and Monetary Union (UEMOA). Sectoral regional organisations were also included: the Permanent Inter-State Committee for Drought Control in the Sahel (CILSS), the Integrated Development Authority of the Liptako-Gourma Region (ALG), the Mano River Union (MRU), the Lake Chad Basin Commission (LCBC), the Senegal River Basin Development Organisation (OMVS), the Niger Basin Authority (NBA) and the Gambia River Basin Development Organisation (OMVG). The list was completed by the Nigeria-Niger Joint Commission for Co-operation (NNJC), the National Boundary Commission (NBC) in Nigeria and the Trans-Saharan Road Liaison Committee (TRLC).

To establish the extent to which these organisations maintain formal relationships with each other, the analysis examined the annual reports and strategy papers published by each organisation over the past five years (2010–15). Insofar as the objective of the analysis is to map as complete a network as possible, the relationships taken into consideration between the organisations may assume a variety of forms provided that they are linked to cross-border co-operation. This includes financial support, institutional support, strategic partnerships and common projects.

Unlike the network linking West African countries to regional organisations (Figure 6.1), the size of the network of organisations involved in cross-border co-operation in West Africa is unknown. All the organisations to which the West African regional organisations are connected are likely to interact with each other and with other organisations world wide, thereby multiplying potential connections. Given that the focus of the analysis is West Africa and its regional organisations, only the direct relationships between the 16 main organisations involved in cross-border co-operation and their partners have been taken into consideration. In this configuration, the network contains 125 organisations, connected by 236 ties. All the organisations in the network are connected to the rest of the network by at least one relationship, and there are no isolated actors or subgroups of actors. This constant, however, conceals the high level of heterogeneity within the network.

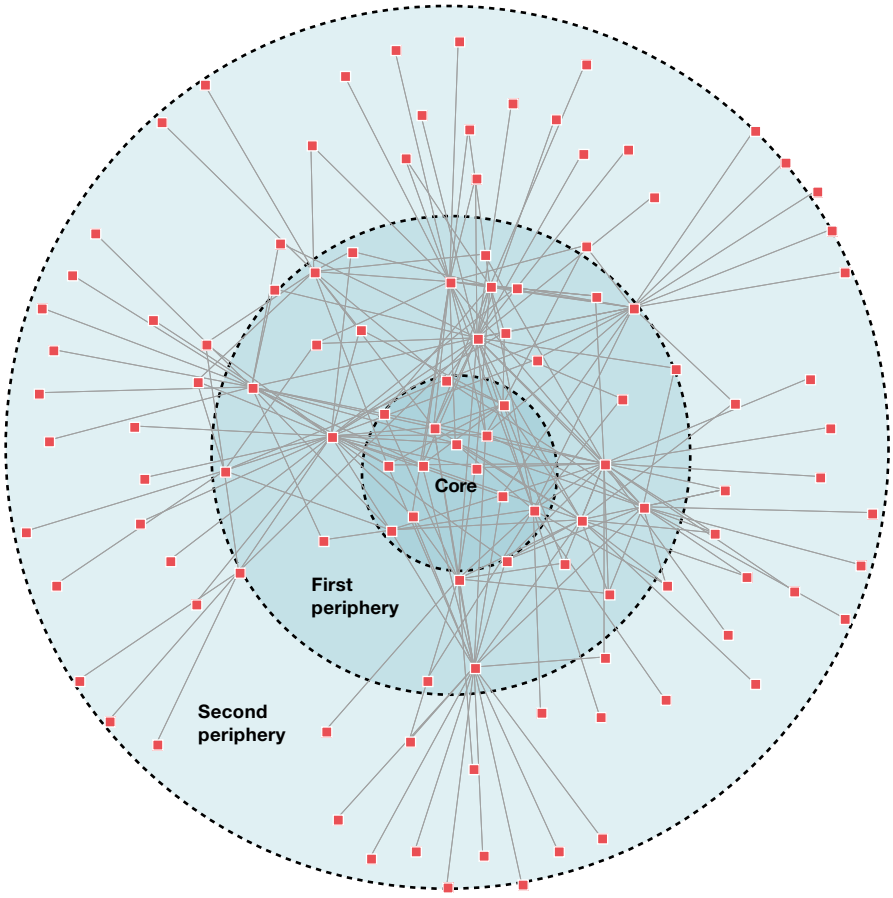
Indeed, the analysis shows that the network of cross-border co-operation organisations closely resembles a core-periphery structure in which the core actors prefer to interact with other core actors, while actors on the periphery do not interact with each other but rather with the core of the network. Given that all the actors in the network tend to interact with the core, the density of interactions is particularly high between core organisations and low between peripheral organisations. This type of structure is not specific to regional organisations in the region. It is also characteristic, for example, of world trade, the interbank market, interactions between scientists, and publications in major academic journals (Borgatti and Everett, 2000). Despite the fact that they create relationships of dependency between the core and the periphery, structures of this type are held to be more effective than more decentralised structures containing a multitude of subgroups with little hierarchy (Csermely et al., 2013).

Core-periphery networks are normally characterised by a clear distinction between the centre of the network and its outer edges, which can even lead to the creation of two distinct sets. Compared to this theoretical pattern, the structure observed in West Africa is made up of an inner core connected to a limited number of organisations which act as intermediaries between the core and even more peripheral organisations (Figure 7.1). The existence of this intermediate layer of organisations can be demonstrated by means of a model which divides the actors into two categories – core and peripheral. It then calculates the correlation between an ideal structure – in which all

organisations would be either at the core or at the periphery of the network – and the structure of the network observed. For the organisations being analysed, the correlation is only 0.55, signifying that it is a dual-periphery network in which the organisations occupying an intermediate position between the core and the periphery are likely to act as mediators between very different types of organisations (Cattani and Ferriani, 2008).

The core of the network is occupied by a small number of supranational organisations (the African Union [AU], ECOWAS, UEMOA, the Central African Economic and Monetary Community [CEMAC]), two large banking institutions (the World Bank, the African Development Bank [AfDB]), the Food and Agriculture Organization (FAO) of the United Nations (Figure 7.2), and finally the German Agency for International Co-operation (GIZ). There are very strong formal interconnections between these organisations and a limited number of regional organisations in the first periphery of the network, including in particular the organisations responsible for cross-border co-operation in the Senegal River valley, Liptako-Gourma and the Lake Chad region. They maintain close connections with very different partners at the international, regional and local levels, as well as with numerous lenders and co-operation agencies. ALG, for example, has formal ties with around 15 other organisations. In addition to ECOWAS, UEMOA and CILSS, ALG is linked to several banks supporting the region's economic, social and environmental development. It is also

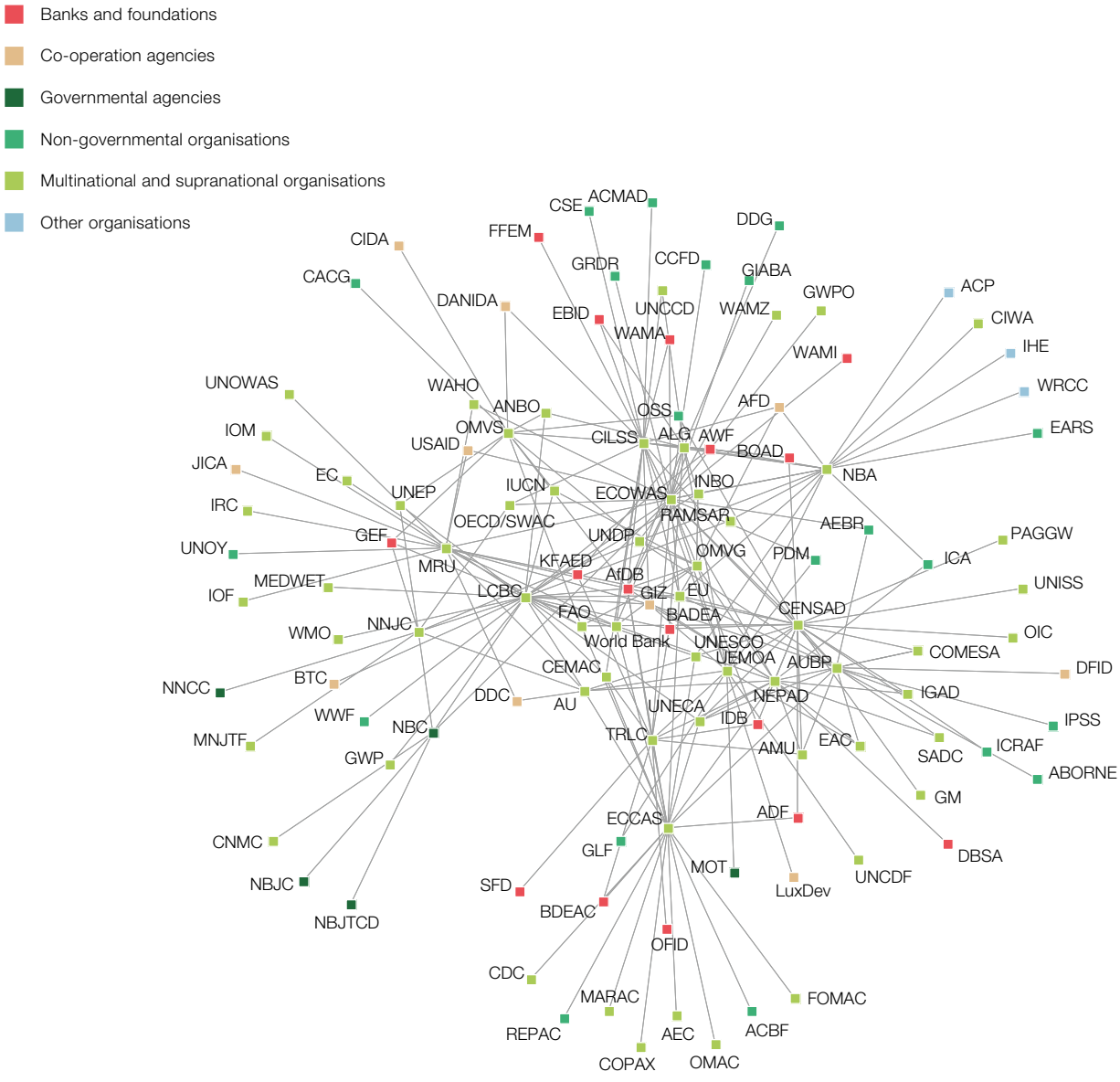
Figure 7.1
Core and peripheries of the network of regional organisations in West Africa



connected to several structures dedicated to water resources, and works with charity organisations engaged in strengthening the capacities for managing the borders between Mali, Burkina Faso and Niger.

The position occupied by each of the organisations active in cross-border co-operation provides a means of assessing their relative importance within the network. The ones with a large number of partners obtain a high score in terms of *degree centrality,* a local metric which does not take into account the global structure of the network but only the immediate connections of each organisation (Table 7.1). This metric can be explored further by calculating the organisation's *power centrality* (called eigenvector centrality or Bonacich's power centrality) which determines whether an organisation is closely connected to other organisations that are equally well connected. It is often more important for an organisation to be well connected to a limited number of other strategic partners rather than to increase ties with as many organisations as possible. In addition to power centrality, *betweenness centrality* evaluates whether an organisation

Figure 7.2
Network of regional organisations in West Africa by type



is acting as an intermediary between other organisations.

ECOWAS, LCBC, CEN-SAD, UEMOA and CILSS are undoubtedly the best connected regional organisations, regardless of the metric used to judge their centrality. There is relatively little change in the order of the ten most central organisations when different metrics are used. In terms of degree centrality, ECOWAS has the most relationships, followed by LCBC. But, on the whole, the centrality of the organisations closest to the core remains low. This observation indicates that the network does not comprise organisations connected to a very large number of other organisations. The eigenvector centrality of ECOWAS (0.618) is particularly high, which shows that it is connected to other core organisations and therefore has a key position in cross-border co-operation in the region.

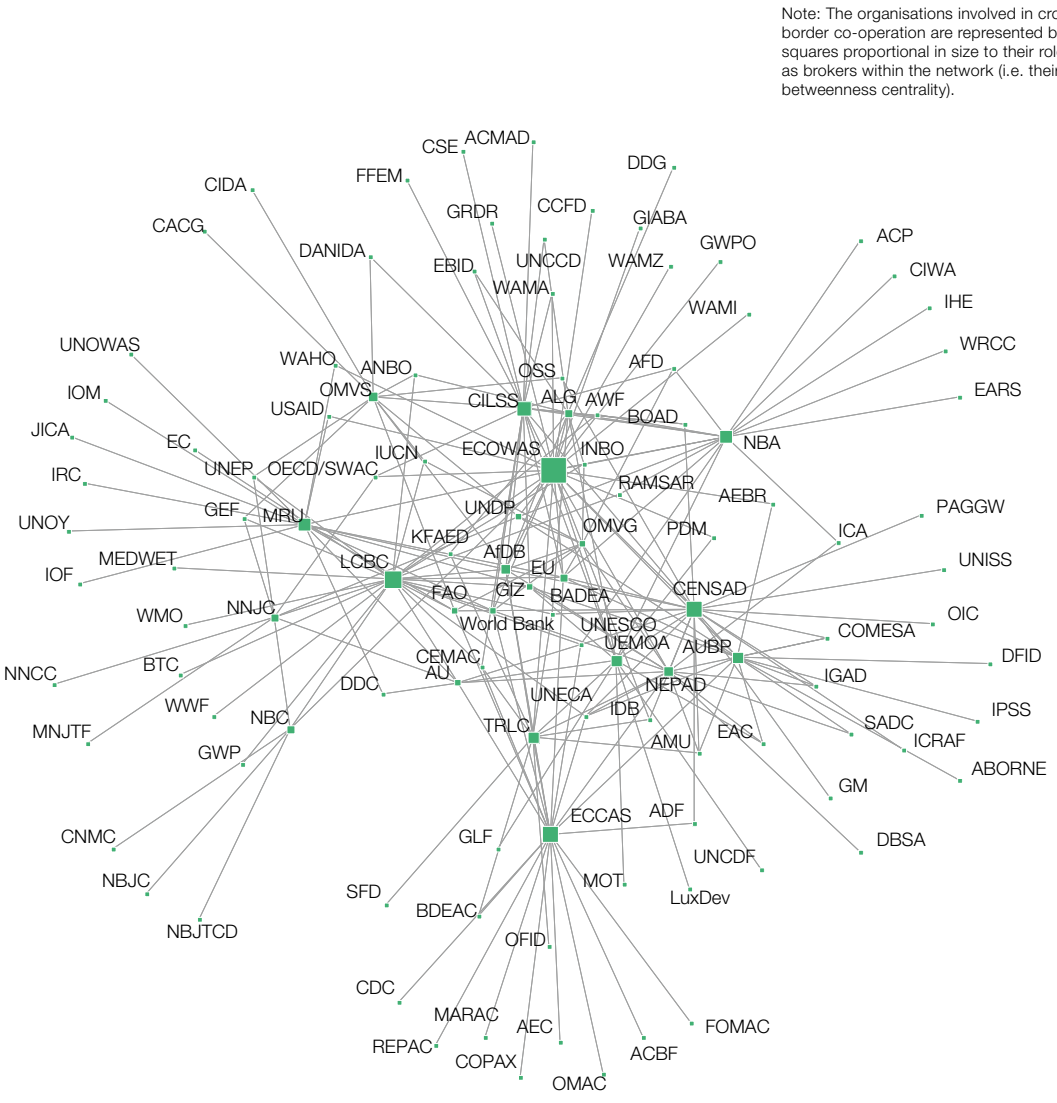
The ability to play an intermediary role is particularly important for the organisations involved in cross-border co-operation in the region. This is because cross-border co-operation is often based on legally non-binding charters and agreements, which encourage efforts to find consensus and negotiated solutions between actors. The organisations which act as gateways for the shortest paths between other organisations thereby become compulsory mediators and can control flows of information and resources within the cross-border policy networks. In West Africa, this particularly advantageous position is occupied by a very small number of regional organisations such as ECOWAS, LCBC, ECCAS, CILSS and CEN-SAD. Their importance is highlighted in Figure 7.3, which represents each actor according to its betweenness centrality. The bigger the symbol, the larger the role played by the organisation as an intermediary or broker.

The analysis of the ties between organisations reveals not only the core-periphery structure of the cross-border co-operation network, but also the interconnection between organisations of a very different nature. This organisational analysis is based on the existence of formal partnerships, which cannot alone provide information on the effective functioning of cross-border co-operation in the region. Indeed, some organisations may be closely connected by agreements but not actually develop any concrete common projects, due

Table 7.1
Centrality of the ten most active cross-border co-operation organisations

Rank	Degree centrality		Eigenvector centrality		Betweenness centrality	
1	ECOWAS	0.129	ECOWAS	0.618	ECOWAS	0.332
2	LCBC	0.109	CEN-SAD	0.368	LCBC	0.207
3	CEN-SAD	0.093	CILSS	0.359	ECCAS	0.158
4	CILSS	0.089	UEMOA	0.349	CEN-SAD	0.157
5	ECCAS	0.085	AfDB	0.318	CILSS	0.156
6	NBA	0.069	NEPAD	0.317	MRU	0.122
7	NEPAD	0.069	LCBC	0.315	NBA	0.116
8	AUBP	0.065	EU	0.278	UEMOA	0.090
9	MRU	0.065	AUBP	0.250	AUBP	0.079
10	UEMOA	0.065	ECCAS	0.247	TLRC	0.073
Average		*0.015*		*0.082*		*0.017*
Standard deviation		*0.023*		*0.097*		*0.044*

Figure 7.3
Brokers in the network of West African regional organisations



to a lack of financial resources or to a change in political conditions, which makes lasting co-operation impossible. If cross-border policy networks are to be examined realistically, it is therefore important to take into consideration the actual functioning of the actors involved in the region. This is only possible by narrowing the scale of analysis and focusing on officials in organisations who are responsible for cross-border co-operation, that is to say politicians, civil servants and other representatives from public and private organisations.

MAPPING POLICY NETWORKS

The analysis of West African cross-border policy networks at an individual level, and not at an organisational level, cannot be based on an inventory of existing literature. It requires a specific type of field survey of the actors involved in cross-border co-operation, be they

representatives of regional organisations, civil society, the business community, territorial authorities or development agencies. In order to cover both the regional and local dynamics of cross-border co-operation, the survey is based on face-to-face interviews carried out at the level of West Africa as a whole and three micro-regions: the Senegal River valley, Liptako-Gourma and the Lake Chad region.

One of the particularities of network analysis is that it cannot be based on a sample population as the random selection of a limited number of individuals would result in a very large number of relationships being overlooked. This means the populations covered in the survey must be as complete as possible (Chapter 4). The actors involved in the networks are, by definition, statistically dependent and therefore cannot be sampled

Table 7.2
Population surveyed and response rate per case study

Case study	Number of persons contacted	Number of persons interviewed	Response rate (%)
West Africa	64	47	73.4
Liptako-Gourma micro-region	31	27	87.1
Senegal River micro-region	40	35	87.5
Lake Chad micro-region	33	28	84.8
Total	**168**	**137**	**81.5**

Box 7.1
The challenge of interviewing policy makers

Interviewing 137 policy makers potentially located in more than 20 countries proved challenging. Because structural analysis considers the ties rather than the attributes of the actors, as its main unit of analysis, face-to-face interviews had to be conducted with at least 80% of the identified actors. A missing actor simply cannot be replaced with another one – as in traditional econometric studies.

Identifying who should be interviewed. The first challenge was to identify which representatives of regional organisations should be part of the first wave of interviews. The selection of the first wave of interviewees is critical to the survey, as these individuals will strongly determine the structure of the entire network. For each case study, experts from various institutions in West Africa and Europe were asked to nominate who they believed should be interviewed first. A list was then compiled based on the various names suggested by the experts.

Obtaining e-mail or phone contacts. There have been difficulties with obtaining working contact details because many of the interview targets use personal and not institutional e-mail addresses. To tackle this issue, it was decided to contact as many potential interviewees as possible during large international events, such as the SWAC Forum held at Expo Milano in October 2015.

Wide distribution of interview targets. The distribution of interview targets across West Africa and Europe meant it was challenging to arrange for face-to-face interviews – which have remained the focus – in a manner that was time and cost-efficient. Given the issues of cost and the wide distribution of interview targets, as well as their high mobility (i.e. mission trips), it was decided to pursue a limited number of phone interviews where they were easier to arrange.

Resistance to answering. Some interviews did not yield responses because of objections at listing names of individuals instead of organisations without prior permission from the individuals. Assurances of confidentiality and the imperative nature of this information failed to change the apprehension in some rare cases.

at random. In addition, the most centrally placed actors, such as ministers for co-operation and commissioners for regional integration, are generally unique and cannot be replaced by others if unavailable. These constraints require targeted interviews in order to trigger a snowball effect in which a first wave of actors is identified and subsequent interviews are conducted with the individuals mentioned by this first group until the limits of the policy network are reached.

For the purposes of this survey, two rounds of face-to-face interviews were necessary to reach the actors involved in cross-border co-operation. Anyone mentioned at least three times by the first wave of respondents was retained for the second round, in order to take into account the respective popularity of the many contacts mentioned by those interviewed. A total of 137 interviews were carried out between March and October 2015, with a response rate of almost 75% at the level of West Africa and in excess of 80% in the three selected micro-regions (Table 7.2). Given the constraints of collecting information at the subcontinental level (Box 7.1), these figures meant the policy network analysis could be carried out without the proportion of missing actors having a negative impact on the survey of the ties which unite them.

The interviews with actors involved in co-operation in West Africa led to a map of the relations maintained between 738 actors in 40 countries (Table 7.3). The majority of these actors live in West Africa (82.2%, or 607 actors), with the others based in Europe (7.7%, 57 actors), the rest of Africa (7.0%, 52 actors) and a minority in North America (1.6%, 12 actors) and the rest of the world (1.4%, 10 actors).

The network analysis focused on ties rather than the attributes of the actors interviewed. Rather than attempting to create a representative sample of the total population and gathering as much information as possible on each person surveyed, the aim was to discover the connections of each person linked to the network. To this end, three main questions were asked during the interviews:

- The actors interviewed were first asked to name the individuals with whom they had exchanged information on cross-border co-operation over the past two years (2013–15). This helped establish an *information network* of cross-border co-operation actors. For the purpose of the survey, the exchange of information included personal interactions, telephone calls, e-mails, social media and documents sent to a specific person or office. In order to focus on information aimed at specific individuals, collective e-mails and memos for general distribution were excluded.
- The actors interviewed were then asked to name the actors whom they considered to be the most important in the field of cross-border co-operation in West Africa or in each of the three micro-regions in question. This information was used to create a *power network* connecting cross-border co-operation actors over the last two years (2013–15). The assumption being that the probability of an individual being considered by his peers to be especially important in the region would be an indication of his/her power in the network.
- Lastly, a series of open questions on the main progress in, and challenges to, co-operation provided information on the development of cross-border co-operation over time. Quantitative network analysis can be used to map the existence of ties between individuals, but it cannot explain the creation and the intensity of the interactions connecting cross-border co-operation actors. The purpose of the open questions was to provide interpretive guidance to complete the quantitative analysis.

The information collected during the survey was collated into a double-entry table, or matrix, containing in the rows and columns the anonymised names of all the persons mentioned during the interviews. This matrix was then transformed into a social network, with the nodes representing cross-border co-operation actors and the ties representing exchanges of information or power (Figure 7.4). Information flows between actors are symmetrical, meaning that if actors 1, 2 and 3 in Figure 7.4 all mention that they have a relationship with actor 4, then actor 4 also has a relationship with them. However, these symmetrical ties are not valid in the power network, where it is important to take into consideration the direction of the ties,

Table 7.3
Geographic location of actors covered by the survey

Country	Number of actors	Country	Number of actors
Austria	1	Morocco	1
Belgium	17	Mauritania	21
Benin	9	Mexico	1
Burkina Faso	103	Niger	94
Cabo Verde	1	Nigeria	80
Cameroon	27	Netherlands	1
Canada	2	Rwanda	2
Central African Republic	5	Saudi Arabia	2
Chad	46	Senegal	78
Côte d'Ivoire	15	Sierra Leone	1
Democratic Republic of the Congo	4	South Africa	8
Ethiopia	19	Spain	2
France	27	Sudan	1
Gabon	1	Swaziland	1
Gambia	1	Switzerland	1
Germany	6	Tunisia	1
Ghana	9	Uganda	4
Guinea	9	United Kingdom	2
Kenya	3	United States	9
Libya	2	Unknown	8
Mali	113	**Total**	**738**

which favour the actors who are the most often mentioned by their peers.

Once the social network has been mapped, it is possible to measure the centrality of each actor in relation to the other actors, identify the most central actors in terms of information exchange and power and assess the impact of borders on the general structure of the network.

EXCHANGE OF INFORMATION AND CROSS-BORDER CO-OPERATION

All around the world, information flows decline significantly over distance, meaning that the most frequent and intense exchanges generally occur between persons in geographic

proximity, which is also known to increase the density of social networks. Individuals who are geographically close to each other therefore tend to develop common values (Hipp et al., 2011), while individuals with similar values tend to gather together geographically (McPherson, Smith-Lovin and Cook, 2001). In particular, geographic proximity encourages informal contact and the sharing of so-called tacit information, that is to say information that is not readily codifiable. As a result, face-to-face communication remains vitally important in social networks, despite lower transport costs and new information technologies, which basically encourage the exchange of codifiable information (Mok et al., 2010; Onnela et al., 2011). These general principles apply to the cross-border co-operation policy networks in West Africa, which require numerous discussions between partners who are markedly different in nature.

The analysis of the internal composition of the networks and the relationships between major types of actors reveals a certain diversity between the case studies (Figure 7.5). At the level of West Africa, intergovernmental organisations (IGOs) such as the AU, ECOWAS, UEMOA and CILSS represent over half (55%) of the actors. It is within such organisations that relationships are the most frequent, accounting for over one-third of cross-border co-operation ties in the regional network. Governmental organisations such as national border directorates and commissions, and co-operation agencies represent 22% of actors, while NGOs like the Group for Rural Development Research and Projects (GRDR) and the Network of Farmers' Organisations and Agricultural Producers of West Africa (ROPPA) represent 17% of actors. The relationships between these two types of actor are low density (12% of ties), and the proportion of representatives of the business

Figure 7.4
Transformation of a matrix into a network

	Actor 1	Actor 2	Actor 3	Actor 4
Actor 1	0	0	0	1
Actor 2	1	0	0	1
Actor 3	0	1	0	1
Actor 4	0	0	0	0

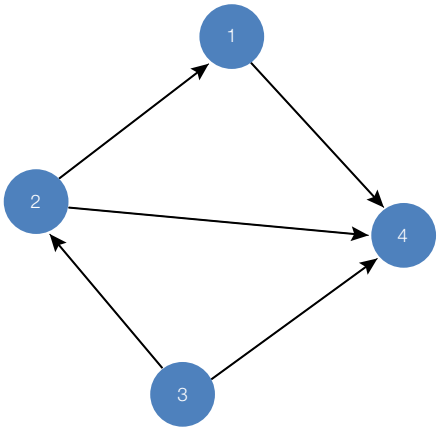
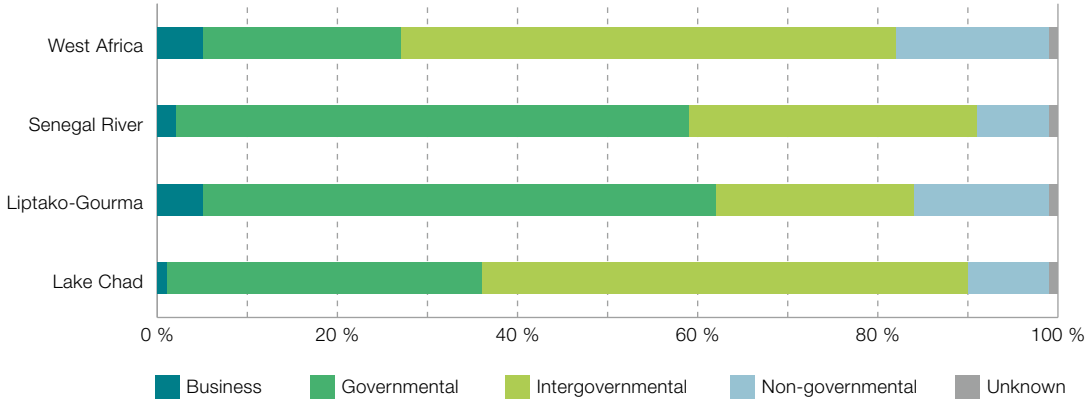


Figure 7.5
Composition of information networks, by type



community is negligible (5%). At the level of the three micro-regions in question, there are marked differences. Governmental organisations represent almost 60% of the actors in the Senegal River valley and Liptako-Gourma, while IGOs clearly dominate the Lake Chad region, with over 50% of the actors. In the Senegal River valley, one-quarter of the relationships in the network are between IGOs, and one-quarter of the relationships are between governmental organisations and IGOs. In Liptako-Gourma, internal relationships within governmental organisations are predominant (29%), whereas around Lake Chad governmental organisations and IGOs are particularly well connected (25% of ties).

These initial results provide a valuable insight into the form of governance which may potentially regulate interactions between cross-border co-operation actors at the regional level and in each of the micro-regions. In Africa, as with elsewhere in the world, governance systems, which had long relied on central governments and central administrations, are becoming institutionally more diverse. The dispersal of power downwards to local and regional governments, upwards towards supranational organisations, and outwards towards non-governmental actors results in a multi-level governance system in which several levels of authority are intertwined. The concept of multi-level governance, initially developed to describe the increasingly networked organisation of power within the EU, has progressively lost its EU-centric focus and evolved to encompass other forms of governance in the world (Hooghe and Marks, 2003). It is now used as a general framework to understand network forms of governance around the world based on a detailed analysis of interactions between policy makers themselves (Curry, 2015).

As such, the analysis of West Africa shows that the co-operation networks linking the representatives of large regional organisations are structurally identical to the networks linking the representatives of local sectoral structures in the Senegal River valley, Liptako-Gourma and the Lake Chad region. These networks have a loose structure, as shown by the metrics in

Table 7.4
Leading indicators for the information networks

Metric	West Africa	Senegal River	Liptako-Gourma	Lake Chad
Number of nodes	164	165	175	114
Number of ties	222	303	223	159
Embeddedness and brokerage				
Density	0.02	0.02	0.01	0.03
Network fragmentation	0.20	0.00	0.22	0.58
Average number of ties	2.62	3.61	2.44	2.83
Characteristic path length	4.21	4.05	4.73	4.97
Clustering coefficient	0.05	0.15	0.12	0.00
Centralisation				
Degree centralisation	0.09	0.05	0.17	0.13
Closeness centralisation	0.01	0.24	0.01	0.01
Eigenvector centralisation	0.45	0.43	0.51	0.23
Betweenness centralisation	0.23	0.39	0.32	0.13

the top part of Table 7.4, which help determine whether the network is made up of embedded actors or brokers. The networks' density is particularly low, as fewer than 5% of probable ties actually exist in the network.

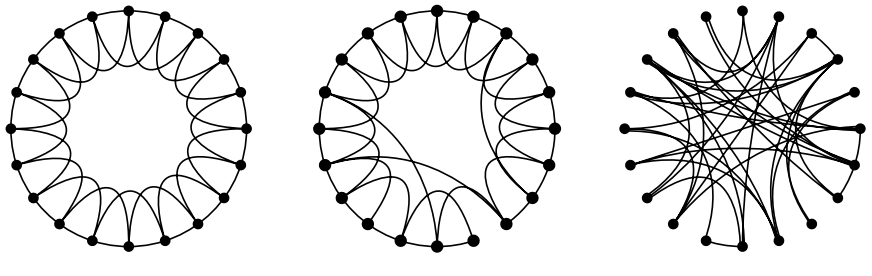
With the exception of the Lake Chad region, these information networks are not very fragmented. There are few actors who are either isolated or in small subgroups. The actors in these networks generally have a limited number of partners, fewer than three, except in the Senegal River valley, where the average number of partners is slightly higher (3.61). The actors form long chains of relationships rather than small and very cohesive groups. An average of four stages are required to connect one actor to another. These are the typical properties of "cosmopolitan" networks (Everton, 2013), which favour betweenness. This type of network is the exact opposite of a "provincial" network of actors sharing very dense relationships, such as groups of close friends, for example, in which everybody knows everybody else.

The combined presence of a low clustering coefficient and long path lengths between actors is a further sign the networks resemble relatively uncrowded sets of links. This structure is different to both a random network, in which both values are low, and to a regular network, in which both values are high. It also differs from a small-world network with a high clustering coefficient and in which all the actors can be connected in only a few stages (Figure 7.6). This combined presence reflects the complexity of the information processes linking policy makers and their partners. For example, a representative of ECOWAS explained how exchanges resulting in new regional regulations are carried out:

> We start by a survey or a study. Then we make a recommendation, and based on that we start to initiate the regulation. When we have the draft regulation, we pass it through a task force meeting composed of national resource persons. When the task force gives feedback on the document we have developed, we bring it to a group of experts, who provide their own views. This is too long a process. For example, it took five years to pass the seed regulation. A lot of consultation and meetings take place, and a lot of money is spent.

The information networks also contain few atypical actors in terms of centrality, as the centralisation metrics at the bottom of Table 7.4 confirm. The metrics illustrate the degree of disparity between actors in the network. They vary between 0, where no one actor is more central than any other actor, and 1, where the centrality of one actor is higher than the centrality of all the other actors. An example is when an individual occupies the centre spot in a star network. In terms of exchange of information, the scores for degree of centralisation are low, which means the average number of

Figure 7.6
Network topology according to path length and clustering coefficient



	Regular	Small-world	Random
Average shortest path length	Large	Small	Small
Clustering coefficient	High	High	Low

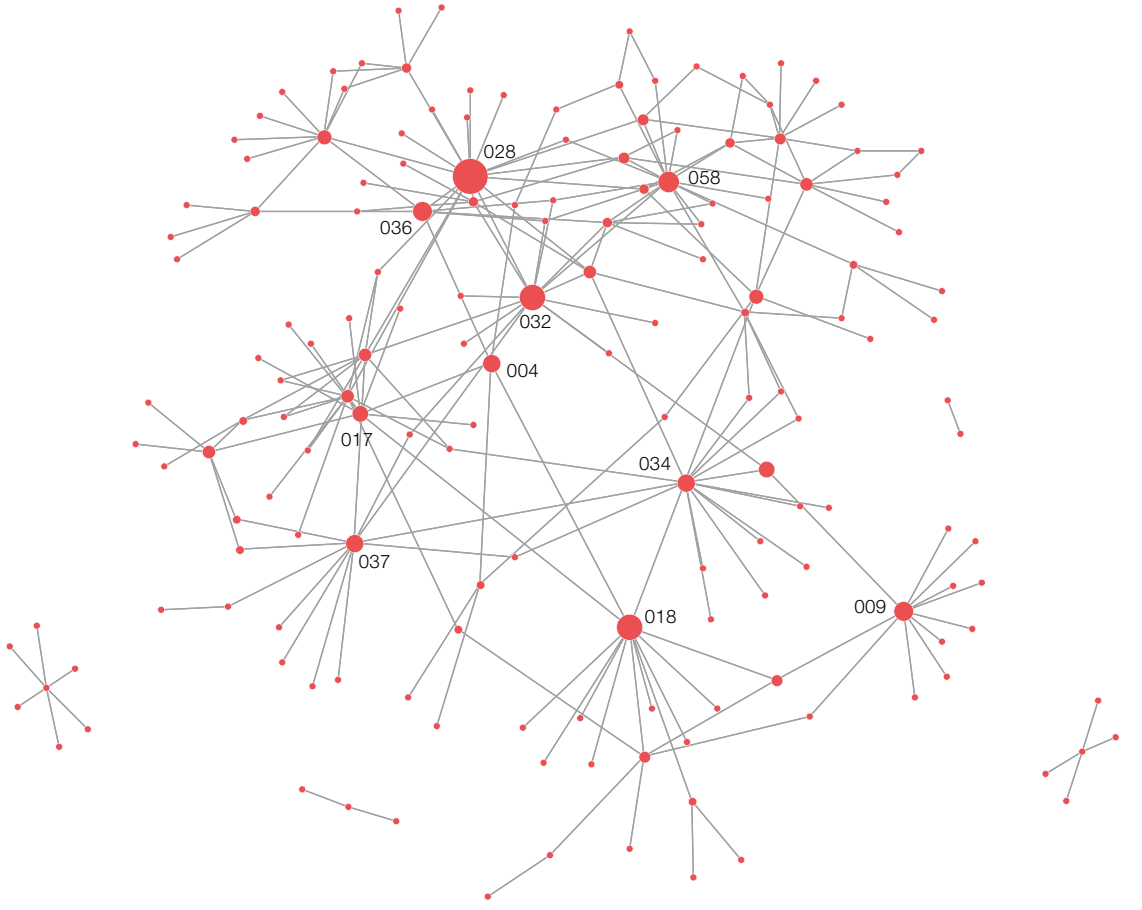
Source: Adapted from Watts and Strogatz 1998

relationships does not vary substantially within the network and there are no highly connected individuals. Closeness centralisation, which identifies whether certain actors are particularly close, is low except in the Senegal River valley, where a very dense group of actors is to be expected. The high values for power centrality observed everywhere except for the Lake Chad region suggest that certain actors manage to be connected to other very central actors despite a limited number of connections, in particular in Liptako-Gourma. The values for betweenness centrality suggest the presence of important brokers in the network, especially in the Senegal River valley.

The role of the brokers in the West African information network is particularly visible in Figure 7.7, which represents each individual actor in proportion to their betweenness centrality. The most important brokers are to be found in ECOWAS, with four of the institution's representatives featuring in the ten most centrally placed actors in the network (Table 7.5). The centrality of one of the representatives of ECOWAS responsible for cross-border co-operation (028) is, from this point of view, quite remarkable in that this actor is at the meeting point of several subgroups of actors who would remain disconnected were it not for their presence. There are also important brokers in CILSS, the AU, UEMOA and the NGOs GRDR and the Global Local Forum (GLF).

On this matter, it should be noted that the way in which brokers are defined in network analysis is different from the usual definition found in Africanist literature, which considers

Figure 7.7
Brokers in the West African information network



Note: Only the codes of the ten most central actors are represented. The actors involved in cross-border co-operation are represented by circles proportionate in size to their role as a broker within the network.

brokers to be actors formally recognised in this capacity through their professional expertise. Numerous studies therefore demonstrate the importance of brokers in market transactions in Africa, be it for livestock markets or in long-distance relationships between hosts and tradesmen (Little, 1992; Brooks, 1993). In the literature on social networks, brokers are mainly defined by their position in relation to other actors, which allows them to leverage particularly low-density areas of networks (Burt, 2005). Brokers therefore occupy a structural position – regardless of their professional activity – which may vary depending on the type of resources circulating within the network and which can only be identified once the network as a whole has been mapped. Actors are often unaware that they occupy this position; they act as brokers without necessarily being aware they are doing so.

The cross-border co-operation network in the Senegal River valley has a bipolar structure (Figure 7.8). On one side there is a very dense subgroup of OMVS representatives (027, 010, 017, 028), situated to the right in this figure and on the other side a looser group comprising governmental actors from Senegal, Mali and Mauritania (020, 006), co-operation agencies (002, 019) and non-governmental organisations (029). The bipolar nature of this network means that the actors at the interface between the two subgroups play a particularly important role as brokers. The most central broker (020) is a representative of the National Borders Directorate of Mali in Bamako, who is in contact with both experts from the OMVS, governmental agencies and lenders present in the region.

The structure of the network of cross-border co-operation actors in Liptako-Gourma is a long chain interspersed by major brokers (Figure 7.9). The position of the mayor (023) of one of the region's border towns is particularly beneficial in terms of information flows, as it allows this individual to link two subgroups which have

Table 7.5
Betweenness centrality for top-scoring actors in West Africa and the Senegal River micro-region

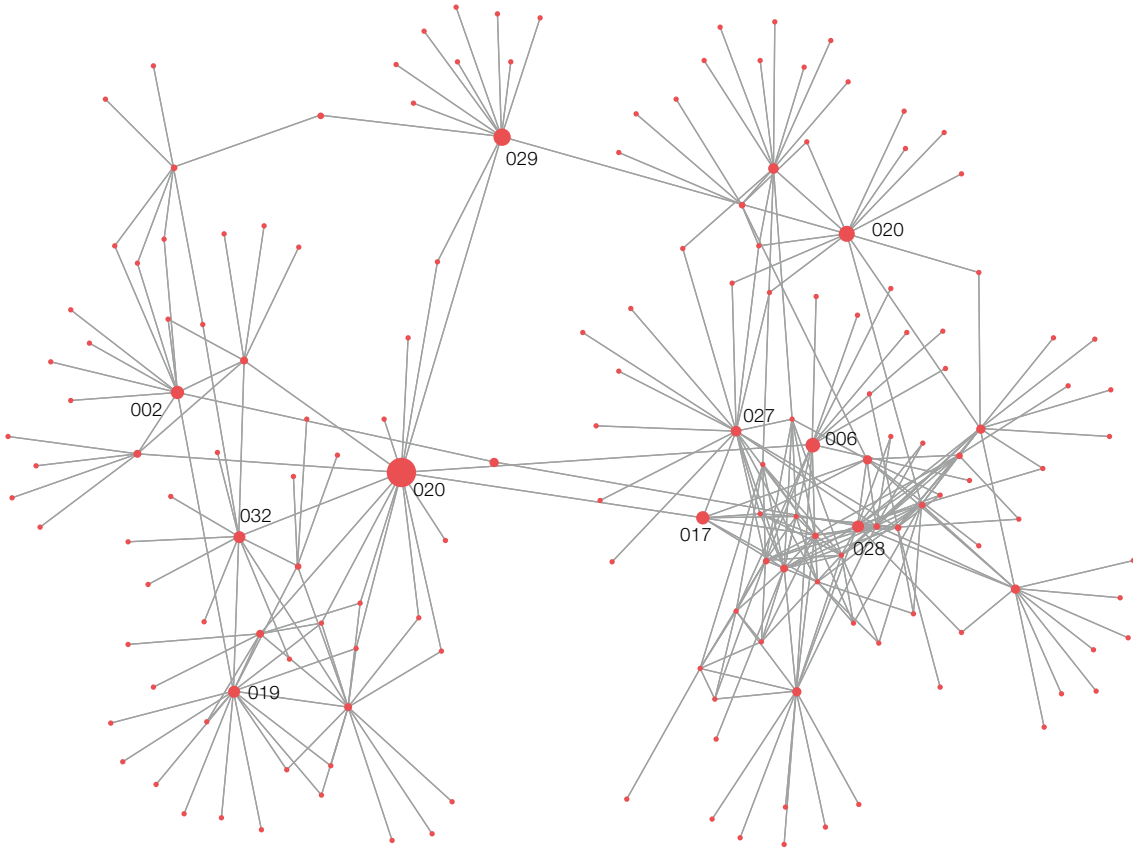
	West Africa			Senegal River		
	Actor	*Score*	*Organisation*	*Actor*	*Score*	*Organisation*
1	028	0.24	ECOWAS	020	0.40	Government of Mali
2	018	0.17	CILSS	029	0.21	GRDR
3	032	0.17	AEBR	010	0.18	OMVS
4	058	0.13	AU	006	0.16	Government of Mauritania
5	036	0.12	ECOWAS	002	0.14	SDC
6	009	0.11	ECOWAS	017	0.14	OMVS
7	004	0.11	ECOWAS	032	0.13	Government of Mali
8	034	0.10	GRDR	028	0.13	OMVS
9	037	0.10	GLF	019	0.12	GIZ
10	017	0.09	UEMOA	027	0.10	OMVS
Mean	*0.02*			*0.02*		
Standard deviation	*0.04*			*0.05*		

Note: AEBR represents the Association of European Border Regions, while SDC is the acronym for the Swiss Agency for Development and Co-operation.

very few direct relationships: the representatives of breeders within the Billital Maroobe Network (RBM) (016, 024), along with the Association for the Revitalisation of Livestock in Niger (AREN) (008), situated on the left-hand side of the diagram, and the representatives of governmental and intergovernmental agencies (001, 003, 011), situated on the right.

The local border authorities in the region develop frameworks for consultation at the local level, which supplement the initiatives put in place by regional organisations. One example of this is the inter-communal cross-border policy on transhumance between Burkina Faso, Niger and Mali. In 2011, the communes of Dori, Djibo, Gorom-Gorom and Sebba in Burkina Faso; the urban communes of Tera and Tillaberi in Niger; the regional council of Timbuktu and the communes of Gao and Timbuktu in Mali, joined together to form the Decentralised Cross-Border Co-operation Unit of Sahel Local Authorities (C3SAHEL). This initiative, which owes much to the former mayor of Dori, the late Hama Arba Diallo, led the local authorities to put together a joint investment programme called the Sahel regional integration initiative (IIRSAHEL, LOBI/UEMOA). The existence of a framework for inter-communal cross-border consultation between Niger and Burkina Faso also reflects this form of bottom-up integration. The implementation of collaboration agreements between communities of breeders on both sides of the border encourages mutual aid during transhumance. Other initiatives have been launched on both sides of the border by local actors, such as the municipal authorities of Tera (Niger) and Dori (Burkina Faso), with support from technical and financial partners.

Figure 7.8
Brokers in the Senegal River valley micro-region information network



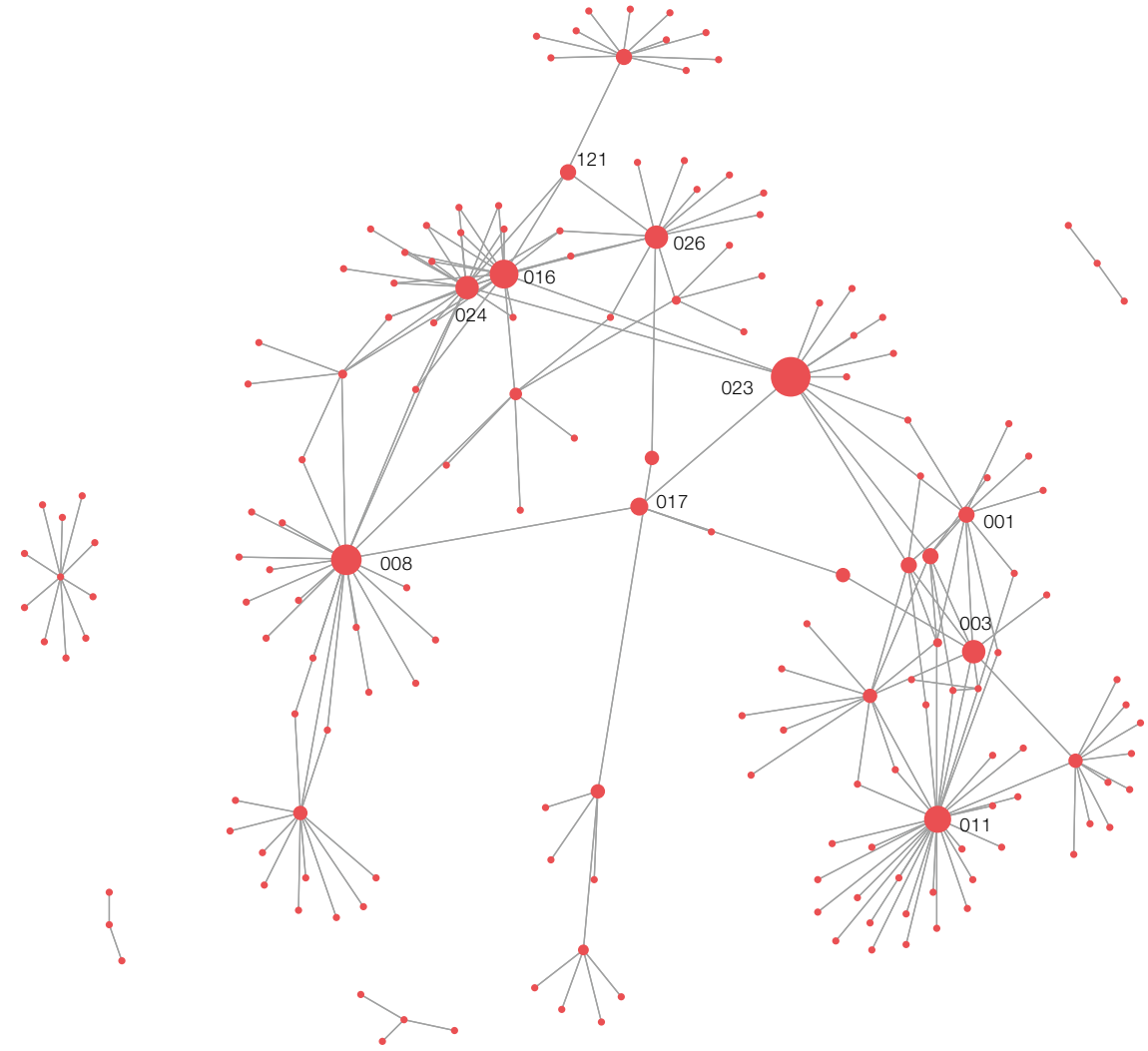
Note: Only the codes of the ten most central actors are represented. The actors involved in cross-border co-operation are represented by circles proportionate in size to their role as a broker within the network.

This is the case, for example, on the Dori-Tera road, for a cross-border production unit for animal feed financed by the United Nations Capital Development Fund (UNCDF).

In the Lake Chad region, the information network is clearly more fragmented than in the other regions in this study (Figure 7.10). This particularity is due to the fact that the representatives of LCBC form a subgroup of actors which is very dense but which has relatively few connections to the other cross-border co-operation actors in the region. The network contains a principal component, in which all the LCBC representatives and their partners are present, along with six other subgroups. Only the actors connected to the principal component of the network have a significant role as brokers, as the others are cut off from the main information flows. There are six LCBC representatives in the top brokers. Nevertheless, the betweenness scores remain low for these actors owing to the fragmented structure of the network, which limits possibilities in terms of establishing connections between groups (Table 7.6).

The analysis shows that there is no significant difference in the properties of cross-border

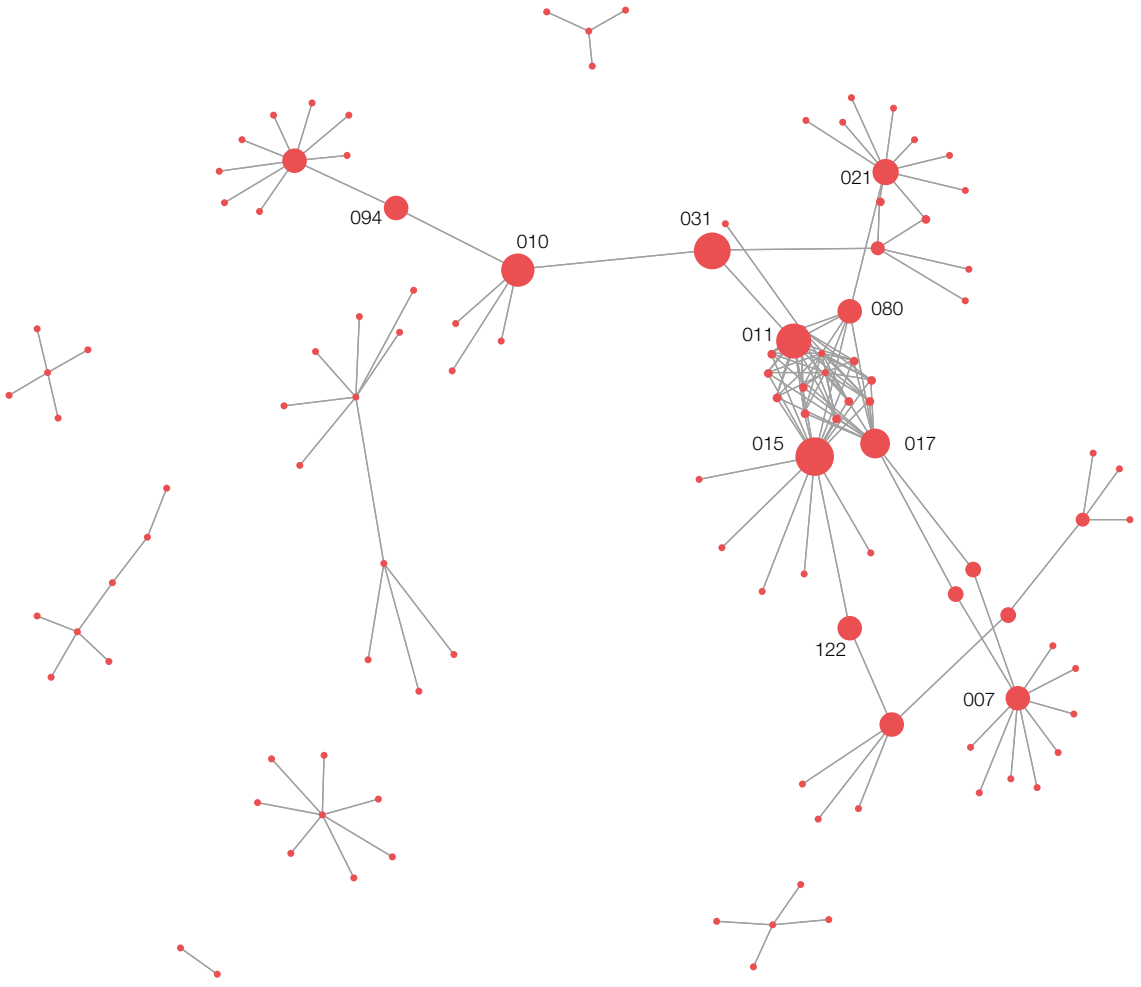
Figure 7.9
Brokers in the Liptako-Gourma micro-region information network



Note: Only the codes of the ten most central actors are represented. The actors involved in cross-border co-operation are represented by circles proportionate in size to their role as a broker within the network.

co-operation policy networks depending on their scale. Local differences can be observed, especially in the Lake Chad region but, generally speaking, the architecture enabling the exchange of information at the regional level resembles the architecture put in place by the local actors in the three micro-regions in question. The low density and relatively decentralised "cosmopolitan" structure of the networks seems suited to the circulation of information between partners with very different levels of status and expertise, except of course when the networks comprise several disjoint subsections as is the case in the Lake Chad region. In terms of cross-border governance, these results indicate that the governmental and intergovernmental organisations play a central role, as the relationships with and between these organisations are denser than the relationships linking the representatives of NGOs and the business community to the rest of the network.

Figure 7.10
Brokers in the Lake Chad micro-region information network



Note: Only the codes of the ten most central actors are represented. The actors involved in cross-border co-operation are represented by circles proportionate in size to their role as a broker within the network.

Table 7.6
Betweenness centrality for top-scoring actors in the Liptako-Gourma and Lake Chad micro-regions

	Liptako-Gourma			Lake Chad region		
	Actor	*Score*	*Organisation*	*Actor*	*Score*	*Organisation*
1	023	0.33	Municipality of Tera	015	0.15	LCBC
2	008	0.24	AREN	031	0.15	Government of Niger
3	016	0.23	RBM	011	0.13	LCBC
4	011	0.21	Government of Mali	010	0.12	LCBC
5	024	0.17	RBM	017	0.11	LCBC
6	003	0.17	ALG	021	0.09	LCBC
7	026	0.17	Government of Niger	080	0.09	Region of Maroua
8	017	0.11	AFD	094	0.09	PDRI CL
9	121	0.11	AFD	122	0.09	GIZ
10	001	0.10	UN	007	0.08	LCBC
Mean	*0.02*			*0.02*		
Standard deviation	*0.05*			*0.03*		

Note: AFD refers to the French Development Agency and PDRI-CL to Projet de Développment Rural Intégré Chari Logone.

POWER AND CROSS-BORDER CO-OPERATION

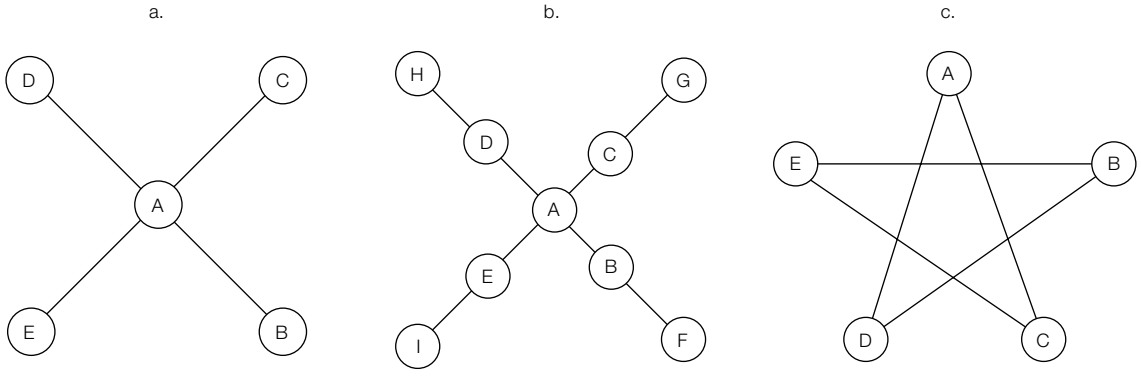
Power is often defined as an intrinsic property of policy makers. Some actors are considered to be powerful because they possess supposedly innate leadership qualities, come from a prestigious family, work for a recognised organisation, live in a big city or have a large fortune. Without neglecting these individual attributes, social network analysis takes a slightly different view. By focusing on the actors' relationships rather than their attributes, it presupposes that the power of social actors is determined by their inclusion in a set of ties. Under this definition, power becomes a relational property, which only exists inasmuch as the social actors are in relationships. In other words, while social actors may exert a power relationship over other actors who benefit less from being members of the same network structure, they do not actually hold any power individually.

If five actors are connected in a star network (Figure 7.11 a), it is clear that actor A in the centre is better positioned to exert power over the others given that he is involved in all the flows. The introduction of new actors, as seen in Figure 7.11 b, complicates the power relationships. Actor A in the centre is still in an advantageous position in comparison with the rest of the network, provided that the relationships with the first periphery (B, C, D and E) are positive. If these first periphery actors connect with the actors in the second periphery (F, G, H, I) to form a coalition against the central actor, the result is a significant decline in the power which the latter can exert. A large part of the power of central actors lies in the fact that the peripheral actors only communicate with each other through their broker. The creation of ties between all the actors, as seen in c) of Figure 7.11, cancels out the power relationships because if all the actors are structurally equivalent then the opportunity to exert power disappears.

In order to show the extent to which social networks provide opportunities to exert power relationships, network analysis has developed several metrics, including eigenvector centrality, which, as described above, is a global metric that takes into account the centrality of actors with whom an actor is linked. Indeed, power is not only determined by the absolute number of ties which can be developed between an actor and his immediate neighbours but also by the manner in which these neighbours are themselves connected. Eigenvector centrality thus captures the extent to which each actor possesses effective connections, which can link them to other central actors.

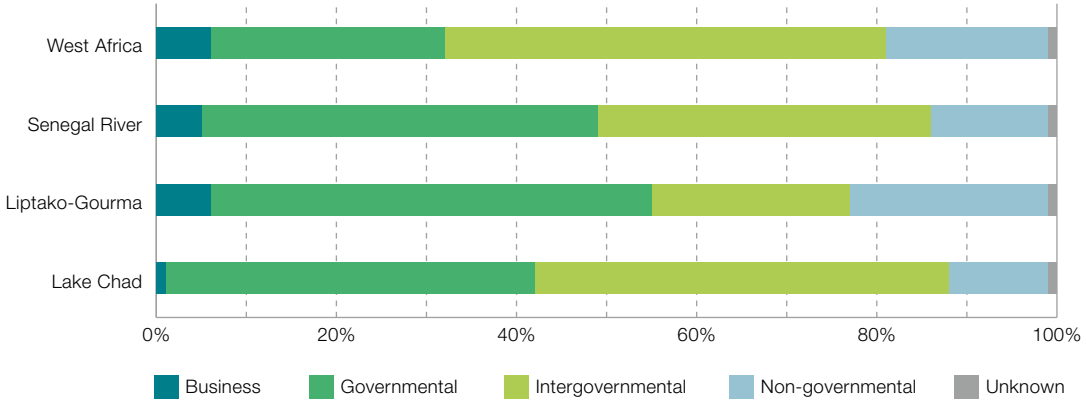
The internal composition of the power networks and the relationships between large types of organisations is not significantly different from the composition of and relationships in the information networks (Figure 7.12). At the regional level, half of the actors work for IGOs, a third for governmental organisations and just under 20% for NGOs. The composition of the networks in the Senegal River and Liptako-Gourma regions are similar, with a high proportion of governmental organisations (around 50%) due to the large number of national directorates involved in water management and environmental and agriculture issues. The proportion of actors from the

Figure 7.11
Actors in a position to exert power



Source: Brass and Krackhardt 2012

Figure 7.12
Composition of power networks, by type



Cross-border Co-operation and Policy Networks in West Africa © OECD 2017

business community is low in all the regions (under 6%). As is the case in the information networks, the power networks are dominated by internal relationships within IGOs, which represent almost one quarter of the ties in the network. The power network in the Senegal River valley is mainly structured by internal relationships within governmental organisations (one-third of ties). In Liptako-Gourma, one-third of relationships are internal to the different governmental organisations involved in cross-border co-operation between Niger, Mali and Burkina Faso. Around Lake Chad, the predominant relationships are internal ties within governmental organisations (27%).

The power networks at the level of West Africa, the Senegal River valley, Liptako-Gourma and the Lake Chad region are not very dense and not very centralised (Table 7.7). Like the information networks described above, these networks are characterised by long chains of actors. As a result, it is necessary to contact around five brokers to reach any part of the network at the level of West Africa (5.23) and in the Senegal River valley (4.93). In addition, each actor in the network has a relatively limited number of partners, somewhere between 2.00 and 3.87 on average. The Lake Chad region stands out by its degree of network fragmentation (0.75), which is visibly higher than for the other regions, indicating that the network comprises numerous disjoint segments. Like the information networks, the power networks in question have very few outstanding actors in terms of number of contacts and proximity, as reflected in the low values for degree centralisation and closeness centralisation. However, these networks contain a high proportion of actors playing a brokerage role, be it in West Africa, the Senegal River valley or Liptako-Gourma. The specificity of these networks is most apparent in their eigenvector centralisation. The West African network has a remarkable proportion (65%) of well-connected actors linked to other well-connected actors. A similar, though less pronounced, situation exists in Liptako-Gourma where the proportion of actors with a superior power position to other

Table 7.7
Leading indicators for the power networks

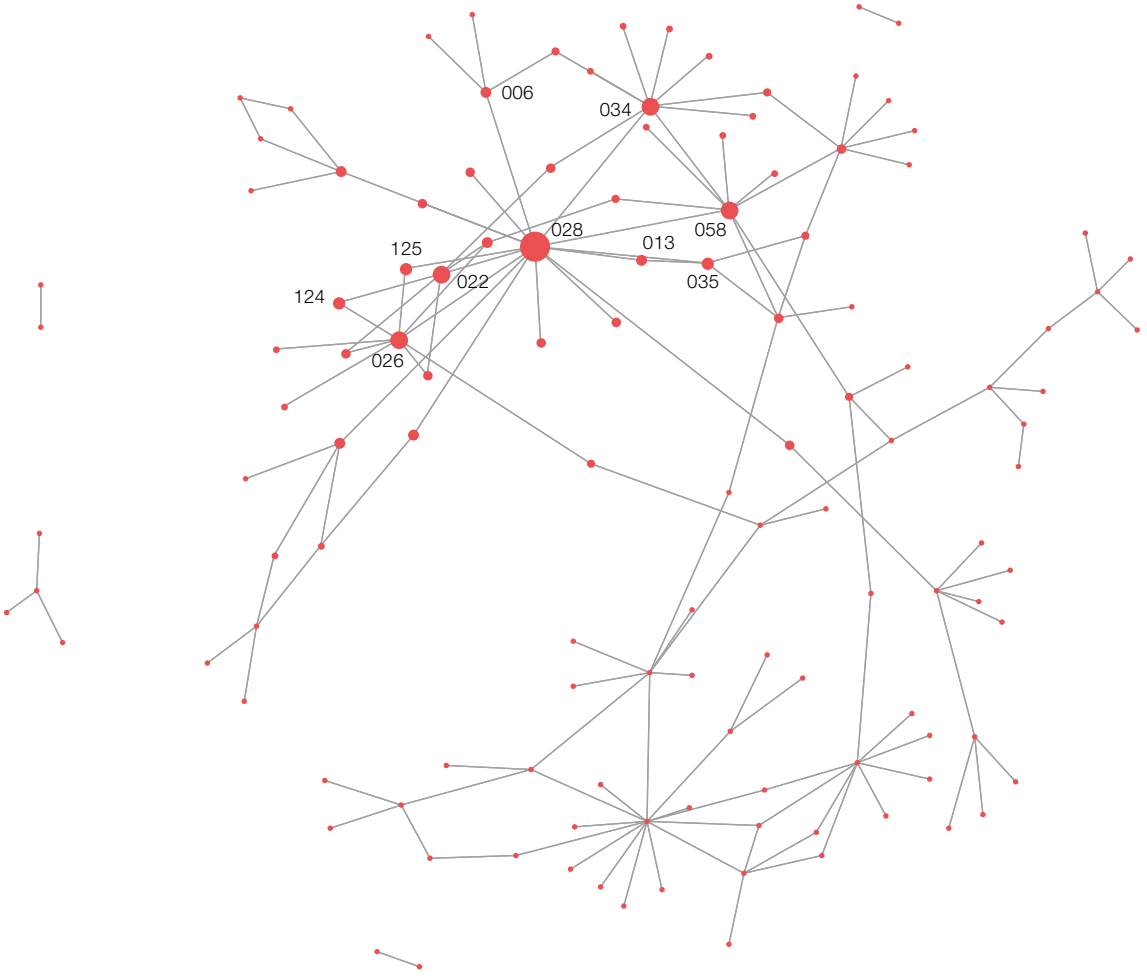
Metrics	West Africa	Senegal River	Liptako-Gourma	Lake Chad
Number of nodes	125	130	101	72
Number of ties	146	239	120	111
Embeddedness and brokerage				
Density	0.02	0.03	0.02	0.04
Network fragmentation	0.15	0.05	0.32	0.75
Average number of ties	2.48	2.00	3.87	2.84
Characteristic path length	5.23	4.93	4.65	2.63
Clustering coefficient	0.03	0.06	0.07	0.00
Centralisation				
Degree centralisation	0.06	0.06	0.10	0.17
Betweenness centralisation	0.40	0.44	0.34	0.06
Closeness centralisation	0.01	0.03	0.01	0.01
Eigenvector centralisation	0.65	0.39	0.46	0.13

actors is 46%. These results suggest there is an uneven distribution of power among the actors in these two networks in particular.

These power imbalances are particularly visible if each actor is represented in proportion to their eigenvector centrality (Figure 7.13). At the level of West Africa, the actors likely to exert the main power relationships come from a very varied range of organisations, encompassing organisations of continental, regional and local scope (AU, ECOWAS, ALG), governmental agencies (*Mission opérationnelle transfrontalière* [MOT]), non-governmental agencies (GRDR), a consultant and a university academic. The score obtained by the most central official in the network (028), who works for ECOWAS, shows an exceptional position of power, which can be explained by the fact that this person is connected to all the other actors with the best connections (in particular 022, 026, 034, 058). This actor combines power and brokerage, as he is also the leading broker in the information network (Figure 7.7). Actors on the periphery of the network, situated at the bottom of Figure 7.13, have limited power relationships due to their distance from the best connected actors.

The imbalance of power is even greater in the Senegal River valley (Figure 7.14), where most of the power relationships are exerted through governmental organisations with direct or indirect links to OMVS (Table 7.8). The relatively high scores obtained by the most central actors

Figure 7.13
The power network in West Africa



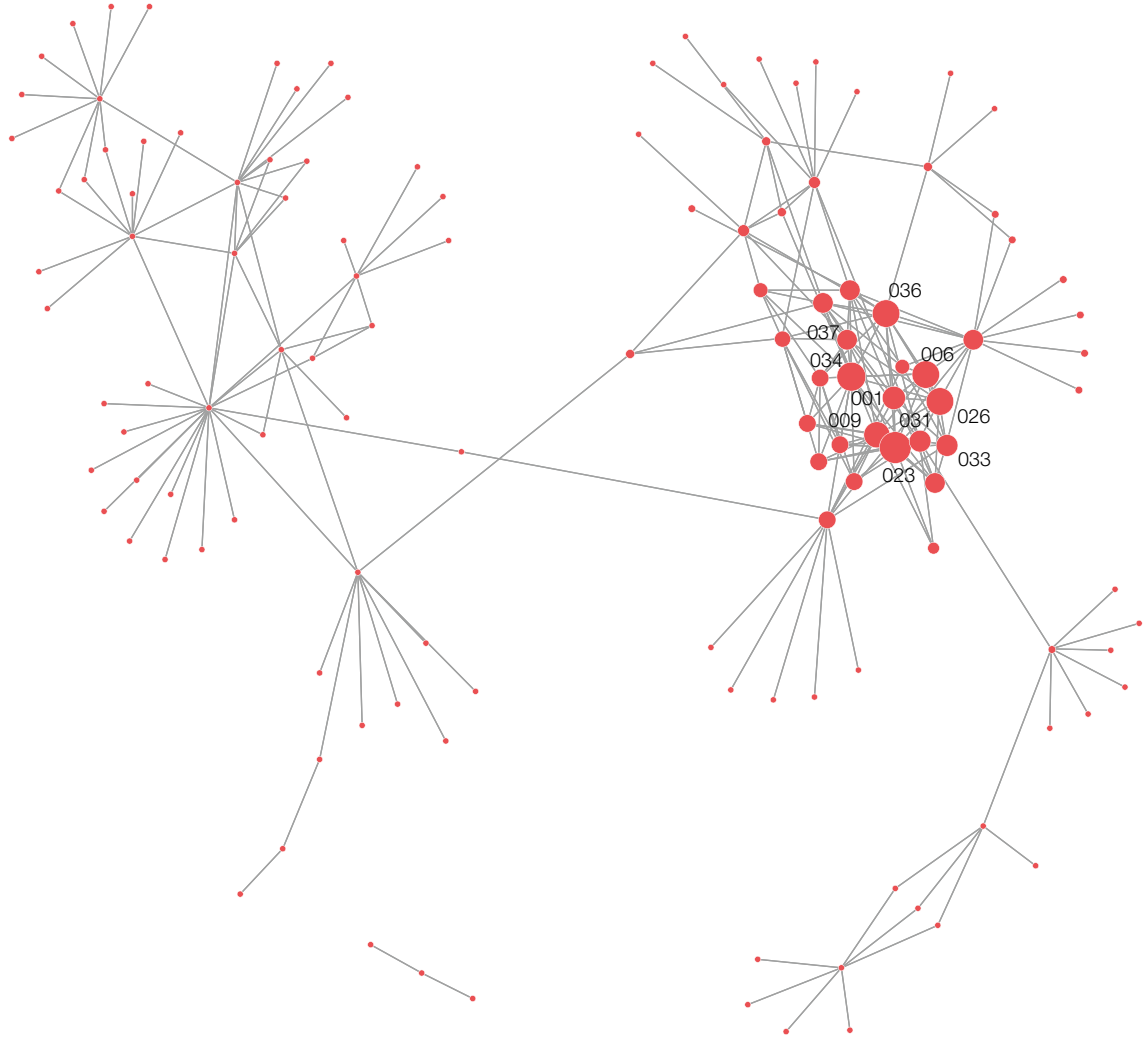
Note: Only the codes of the ten most central actors are represented. The actors involved in cross-border co-operation are represented by circles proportionate in size to their power within the network (eigenvector centrality).

are due to the fact that they form a very dense subgroup with relatively few connections to the rest of the network.

The most evenly balanced power relationships appear to be in Liptako-Gourma (Figure 7.15). The most central actors in terms of eigenvector centrality are present in several subsets of the network and work for a very diverse mix of organisations (Table 7.9). As was the case with the region's information network, these include governmental agencies as well as organisations defending breeders' interests (RBM), the authorities of two border communes and a co-operation agency (SDC). The representatives of the local co-operation structure (ALG) do not necessarily feature among the most central actors. These results suggest that cross-border co-operation in Liptako-Gourma is not dominated by one particular structure or actor.

In the Lake Chad region, however, the distribution of power remains very uneven. (Figure 7.16). For the main part, the most central actors belong to LCBC and then to governmental and regional agencies in the Lake Chad basin. As was the case in the information network, the fragmentation of the power network into several components does not facilitate the cross-border co-operation process, which seems to be channelled through reduced

Figure 7.14
The power network in the Senegal River valley micro-region



Note: Only the codes of the ten most central actors are represented. The actors involved in cross-border co-operation are represented by circles proportionate in size to their power within the network (eigenvector centrality).

Table 7.8
Power centrality for top-scoring actors in West Africa and the Senegal River region

	West Africa			Senegal River		
	Actor	*Score*	*Organisation*	*Actor*	*Score*	*Organisation*
1	028	0.70	ECOWAS	023	0.45	Government of Mali
2	026	0.37	MOT	034	0.41	OMVS
3	034	0.36	GRDR	026	0.38	Government of Senegal
4	058	0.36	AU	006	0.38	Government of Mauritania
5	022	0.36	MOT	036	0.37	OMVS
6	035	0.23	University of Edinburgh	009	0.36	OMVS
7	124	0.22	Consultant	001	0.30	OMVS
8	125	0.22	ALG	031	0.29	SAED
9	013	0.19	ECOWAS	033	0.29	OMVS
10	006	0.18	GRDR	037	0.27	OMVS
Mean	*0.06*			*0.06*		
Standard deviation	*0.10*			*0.11*		

Note: SAED is the National Society for the Development and Exploitation of Senegal's River Delta Lands, River valley and the Falémé River.

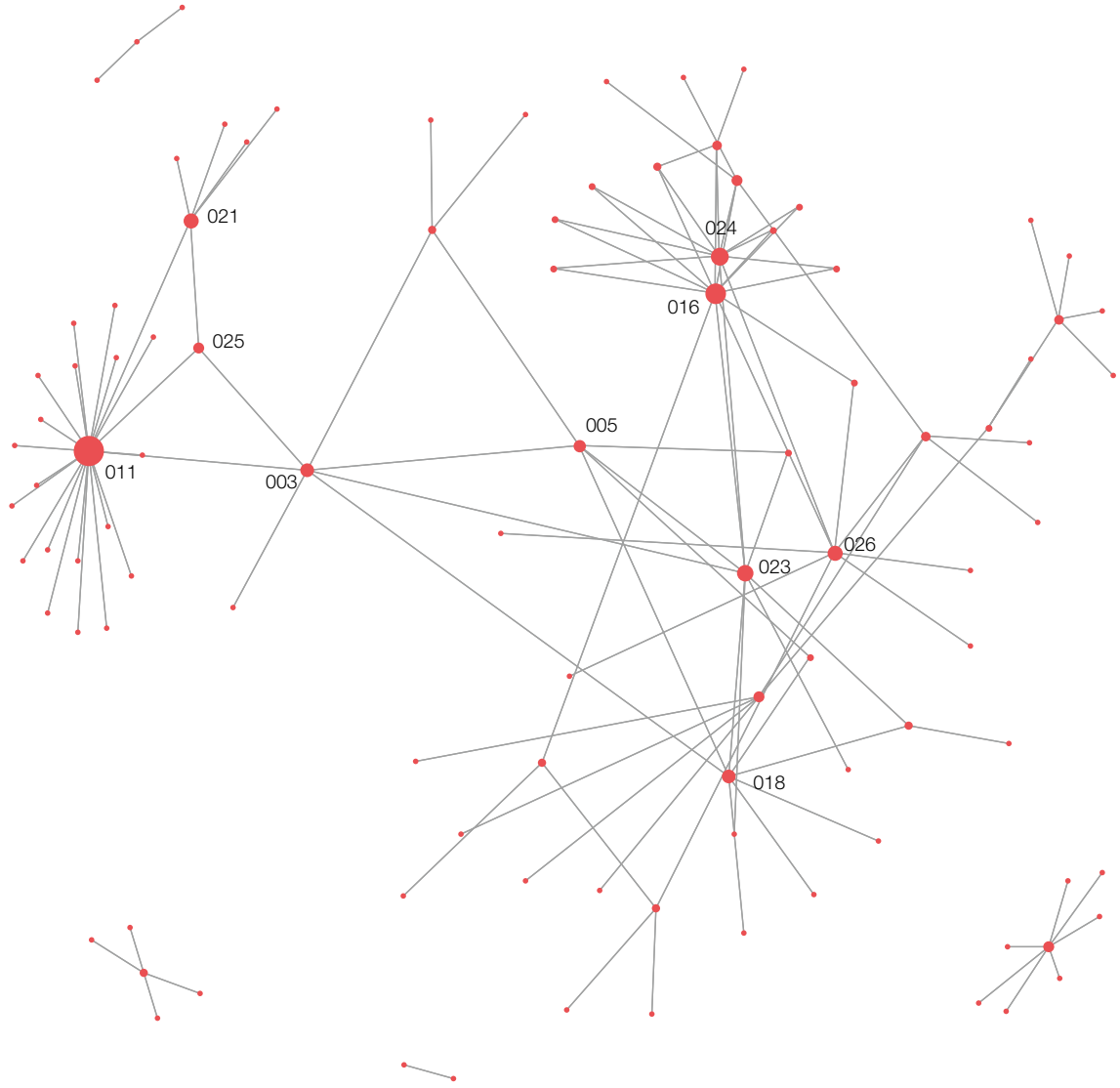
groups of actors with few connections between each other. Generally speaking, this situation results in relatively low eigenvector centrality scores, as the number of potential partners of each subgroup is necessarily limited.

The analysis of the power relationships within cross-border policy networks reveals considerable variations between regions. At the level of West Africa, the network appears to be structured around a limited number of actors of very diverse origin, who maintain strategic relationships with other well-connected actors. In the Senegal River valley and the Lake Chad region, the distribution of power clearly favours the governmental bodies and ad hoc organisations such as OMVS and LCBC, for whom most of the most central actors work. This situation is in strong contrast to the situation in the co-operation network in Liptako-Gourma, which is characterised by a more even distribution of power relationships and a large diversity of governmental and non-governmental organisations. In terms of cross-border governance, these results show that power relationships are particularly dense in IGOs at the level of West Africa. In the micro-regions, the networks are dominated by internal relationships within African and European governmental organisations. The representatives of NGOs and the business community occupy a marginal position, as they do in the information networks.

THE IMPACT OF BORDERS ON POLICY NETWORKS

Borders cause clear distortions in social exchanges (Bartz and Fuchs-Schündeln, 2012), even when the latter are carried out through social media (Lee et al., 2011). This has the effect, when combined with legislative, institutional and cultural differences in national

Figure 7.15
The power network in the Liptako-Gourma micro-region



Note: Only the codes of the ten most central actors are represented. The actors involved in cross-border co-operation are represented by circles proportionate in size to their power within the network (eigenvector centrality).

governance systems, of widening the gap between actors. The result is higher transaction costs at the cross-border level than within national spaces, thereby impeding the implementation of cross-border policies. The purpose of cross-border co-operation is to lessen this barrier effect by, on the one hand, encouraging interactions between partners from different countries, and on the other hand, by strengthening social, economic and political cohesion within cross-border regions. In this way, cross-border co-operation contributes to the regional integration process in the form of increased interaction between actors and a certain amount of convergence between regions (Chapter 5).

The analysis makes it possible here to measure the extent to which the existence of international borders limits exchanges of information and power between the actors involved in cross-border co-operation at the regional level and in each of the three micro-regions in question. It shows that policy networks are affected in different ways by borders. At the

Table 7.9
Power centrality for top-scoring actors in the Liptako-Gourma and Lake Chad micro-region

	Liptako-Gourma			Lake Chad		
	Actor	*Score*	*Organisation*	*Actor*	*Score*	*Organisation*
1	011	0.41	Government of Mali	017	0.20	LCBC
2	016	0.41	RBM	008	0.19	LCBC
3	024	0.37	RBM	006	0.18	LCBC
4	023	0.34	Municipality of Tera	014	0.18	LCBC
5	003	0.29	ALG	019	0.18	LCBC
6	021	0.23	Radio Kurumba	010	0.16	LCBC
7	026	0.23	Government of Niger	009	0.15	LCBC
8	025	0.22	BMCI	029	0.13	Government of Niger
9	018	0.21	Municipality of Dori	080	0.13	Region of Maroua
10	005	0.21	SDC	005	0.12	LCBC
Mean	*0.08*			*0.07*		
Standard deviation	*0.09*			*0.05*		

Note: BMCI is the Burkina Faso-Mali-Côte d'Ivoire Cross-border Economic Interest Group (GIE-BMCI).

regional level, these networks still seem solidly built on national bases. This phenomenon is less pronounced at the level of the three micro-regions in question, where institutional initiatives designed to foster the emergence of cross-border regions result in actors increasing their communication with partners in other countries.

In order to study the persistence of national preferences in the networks, the analysis uses the concept of *homophily,* which presupposes that actors have a tendency to prefer social relationships with other actors who possess common characteristics, such as nationality, for example. When applied to cross-border co-operation, this means that a homophile network is a network in which the number of relationships between actors from the same country is proportionally higher than the number of relationships with foreign actors. A heterophile network, on the other hand, is a structure in which actors exchange significantly more across national borders than within their own continent or country, according to the relevant geographic scale.

Table 7.10
Homophily of West Africa by continent

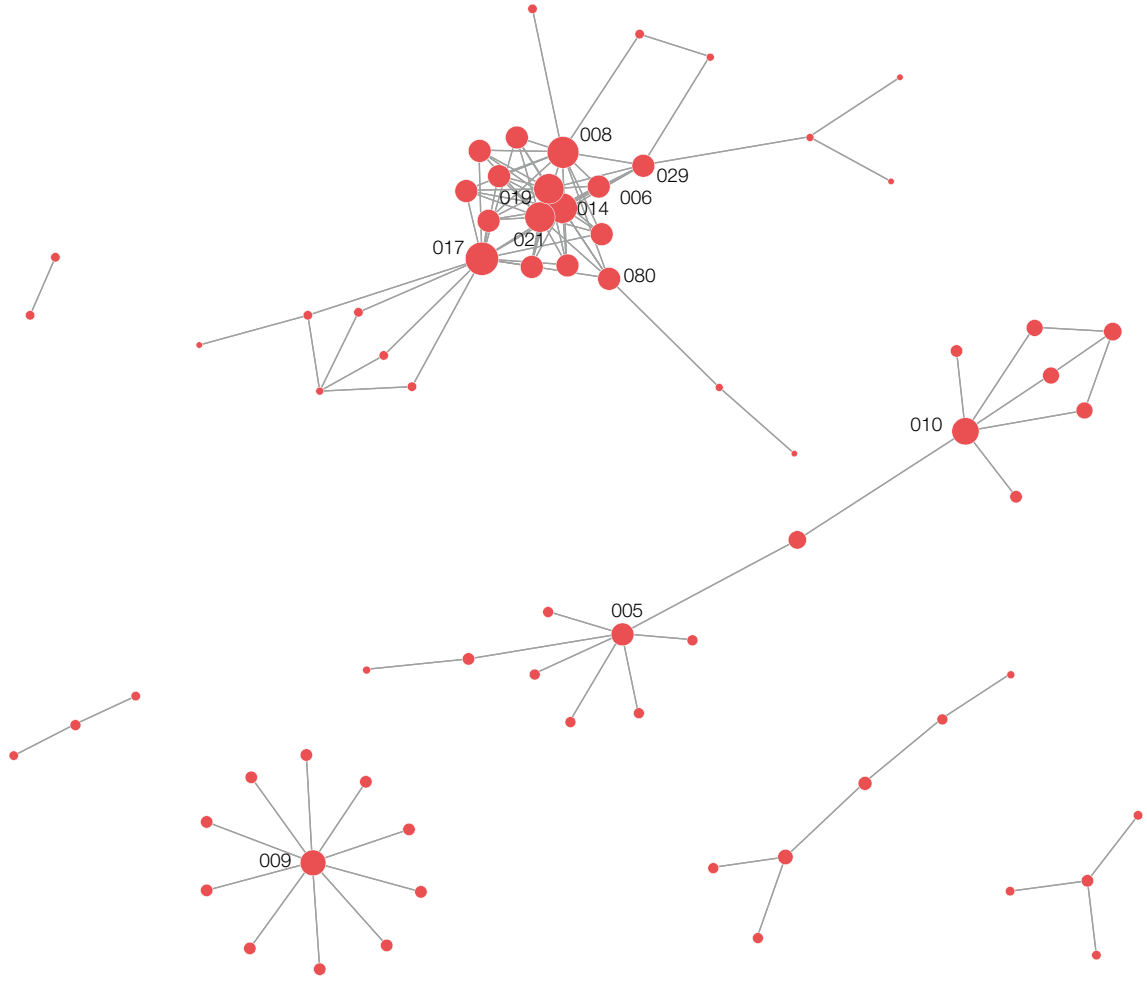
West Africa	Information network		Power network	
	Homo-phily (%)	*E/I Index*	*Homo-phily (%)*	*E/I Index*
Africa	67.5	-0.350	64.3	-0.285
Europe	71.4	-0.429	50.0	0.000
America	66.3	-0.325	90.5	-0.810
Whole network	67.5	-0.350	67.6	-0.352

There is a high rate of homophily in the network of actors involved in regional public policy, with over 67% of the relationships maintained being between actors on the same continent, in both the information network and

the power network (Table 7.10). These results are corroborated by the calculation of the E/I index, which measures the difference between the internal and external relationships in each country or continent, divided by the total number of relationships maintained between the actors in a network. The E/I index varies between 1 and -1, where a high negative value indicates a homophile network, and a high positive value indicates a heterophile network. Values close to zero indicate that the actors have no real national or cross-border preferences and are therefore difficult to interpret. In both networks examined (information and power), the E/I index is clearly negative and relatively high, confirming the general homophily of the West Africa network.

This trend towards giving preference to internal relationships is particularly obvious if the actors are represented by a different colour according to continent (Figure 7.17). The actors based in Africa – regardless of whether they are originally from Africa or from other parts of the world – can be seen to form subsets in which ties are particularly dense. Their colleagues working in Europe also prefer relationships with other European partners, whereas there are far fewer actors located in America and their distribution within the network is more uneven.

Figure 7.16
The power network in the Lake Chad micro-region



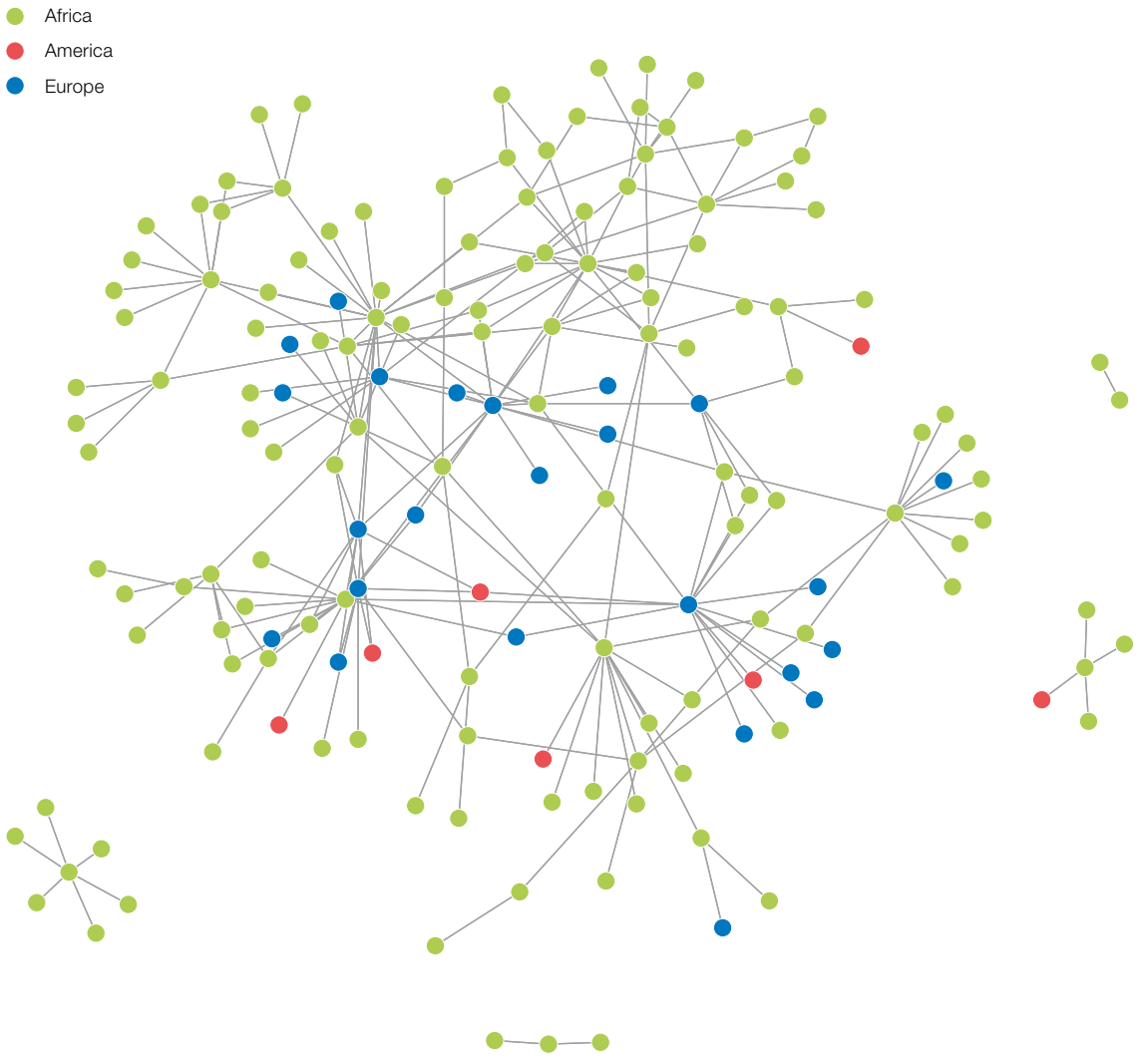
Note: Only the codes of the ten most central actors are represented. The actors involved in cross-border co-operation are represented by circles proportionate in size to their power within the network (eigenvector centrality).

The cross-border co-operation relationships maintained in the Senegal River valley, Liptako-Gourma and the Lake Chad region are in marked contrast to the relationships maintained at the regional level, as homophily is much less developed (Table 7.11). This means that the national origins of border co-operation actors have little importance when it comes to exchanges of information. The same applies to the power networks. This can be deduced by the fact that when asked to name the most important individuals in terms of border co-operation, actors did not give preference to persons from their own countries.

The homophily values for the Senegal River valley and Liptako-Gourma are very similar. At under 50%, they indicate that the actors have a diversified network of partners in several countries and do not systematically favour their own country. The E/I index is slightly positive for most countries in each region, thereby confirming a tendency to exchange information and form power networks which are only marginally influenced by national preferences.

In the Senegal River valley, the relationships maintained between the actors in Senegal, in red, and Mauritania, in brown, are particularly dense and form most of the component on the right of Figure 7.18, comprising representatives of OMVS. The involvement of governmental bodies in OMVS gives it scope to undertake large-scale programmes in

Figure 7.17
The West African information network by continent



different environmental and socio-economic fields, such as the Integrated Water Resources Management and Multiple Uses Development Programme (PGIRE), which runs for a decade (2007–17). As for governmental actors in Mali, who form the core of the second component of the network situated to the left in this figure, they maintain numerous cross-border relationships with their counterparts as well as with partners in other African countries and as far away as Europe (in beige).

Like the Senegal River valley, the actors in Liptako-Gourma form an information network with little segmentation according to national origins, which is a sign of mature cross-border co-operation. For example, the Malian actors (in green) are well connected to actors in Burkina Faso (in blue) (Figure 7.19). Nigerien actors (in brown) also occupy an important position due to their numerous connections and their role as brokers between other actors in the network (in beige).

On average, the least homophile trend is in the Lake Chad region, particularly for actors situated in Niger and Nigeria, who are densely connected to their counterparts in neighbouring countries, regardless of the type of network. In the power network, for example, actors located in N'Djamena in Chad (green) frequently mentioned their counterparts in Niger (brown), Nigeria (light blue) and Cameroon (dark blue), especially in the main component of the network, which contains the most individuals (top of Figure 7.20). The policy network in this region is therefore characterised by actors who exchange across borders but mainly within the scope of their structure, in this case the LCBC. In this respect it differs from the networks in the Senegal River valley and Liptako-Gourma, where cross-border co-operation actors are more comfortable with crossing institutional boundaries.

Table 7.11
Homophily by country and micro-region

	Information network		Power network	
	Homophily (%)	*E/I Index*	*Homophily (%)*	*E/I Index*
Senegal River				
Guinea	35.8	0.285	27.8	0.445
Mali	31.6	0.368	34.9	0.301
Mauritania	30.0	0.399	50.8	-0.015
Senegal	28.6	0.429	38.7	0.227
Other countries	25.9	0.482	31.1	0.378
Whole network	28.8	0.424**	36.4	0.273**
Liptako-Gourma				
Burkina Faso	41.4	0.171	26.6	0.468
Mali	21.2	0.576	33.3	0.335
Niger	36.5	0.270	29.7	0.407
Other countries	33.9	0.323	25.0	0.500
Whole network	34.8	0.303**	29.1	0.419*
Lake Chad				
Cameroon	27.1	0.457	3.7	0.927
Chad	25.4	0.493	22.7	0.546
Niger	12.5	0.750	14.9	0.702
Nigeria	11.1	0.778	24.4	0.511
Other countries	20.3	0.594	31.1	0.378
Whole network	21.0	0.581*	20.0	0.599

Note: Only the main countries involved in the regional organisations of each region (OMVS, ALG and LCBC) are identified individually. The other countries are grouped in a common category. Two stars (**) indicate the E/I index is significant at 5% ($p<0.05$), and one star (*) indicates a significance level of 10% ($p<0.1$).

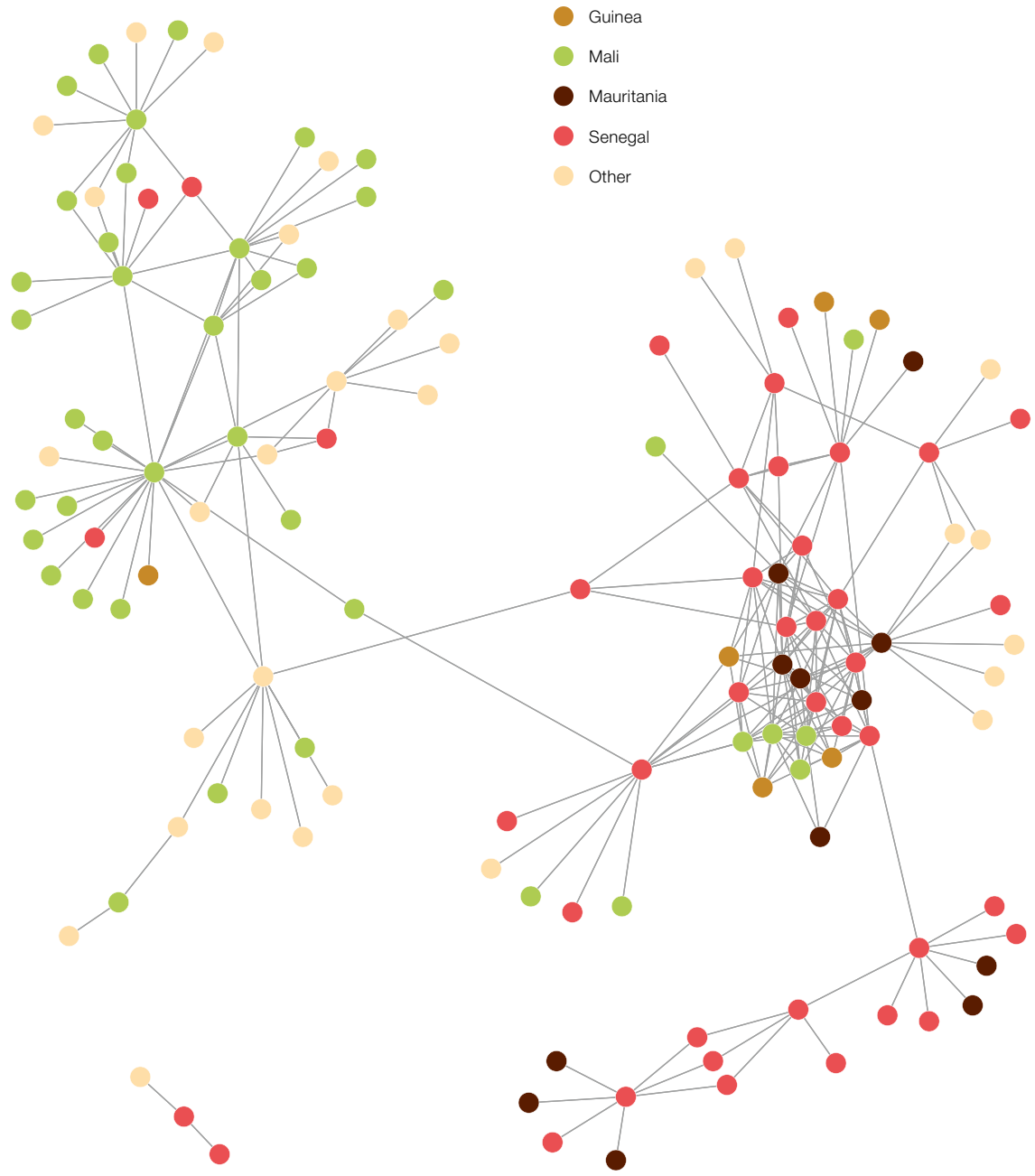
SPATIALISING SOCIAL NETWORKS

The impact of borders is even more apparent if policy networks are spatialised, meaning that each actor is represented according to his geographic location. The centrality of the actors in the networks presented thus far has been represented by social distance, in that the proximity of the actors was based on the extent to which they exchanged information or were considered as having an important role in cross-border co-operation. By using geographic distance rather than social distance to represent

policy actors, it is possible to reveal particular spatial groupings, visualise the cross-border relationships within the network and identify some very long-distance relationships between actors located in West Africa and the rest of the world.[1]

The information network connecting cross-border co-operation actors at the regional level covers a particularly wide geographic scope (Map 7.1). It contains 165 actors linked by 222 relationships in 24 countries. As are to be expected, the densest relationships are maintained in West Africa, in particular between the region's capitals, such as Dakar, Bamako, and Ouagadougou. In the south, this central thread of cross-border co-operation is mainly linked to Cotonou and more peripherally to the other capitals in the Gulf of Guinea region.

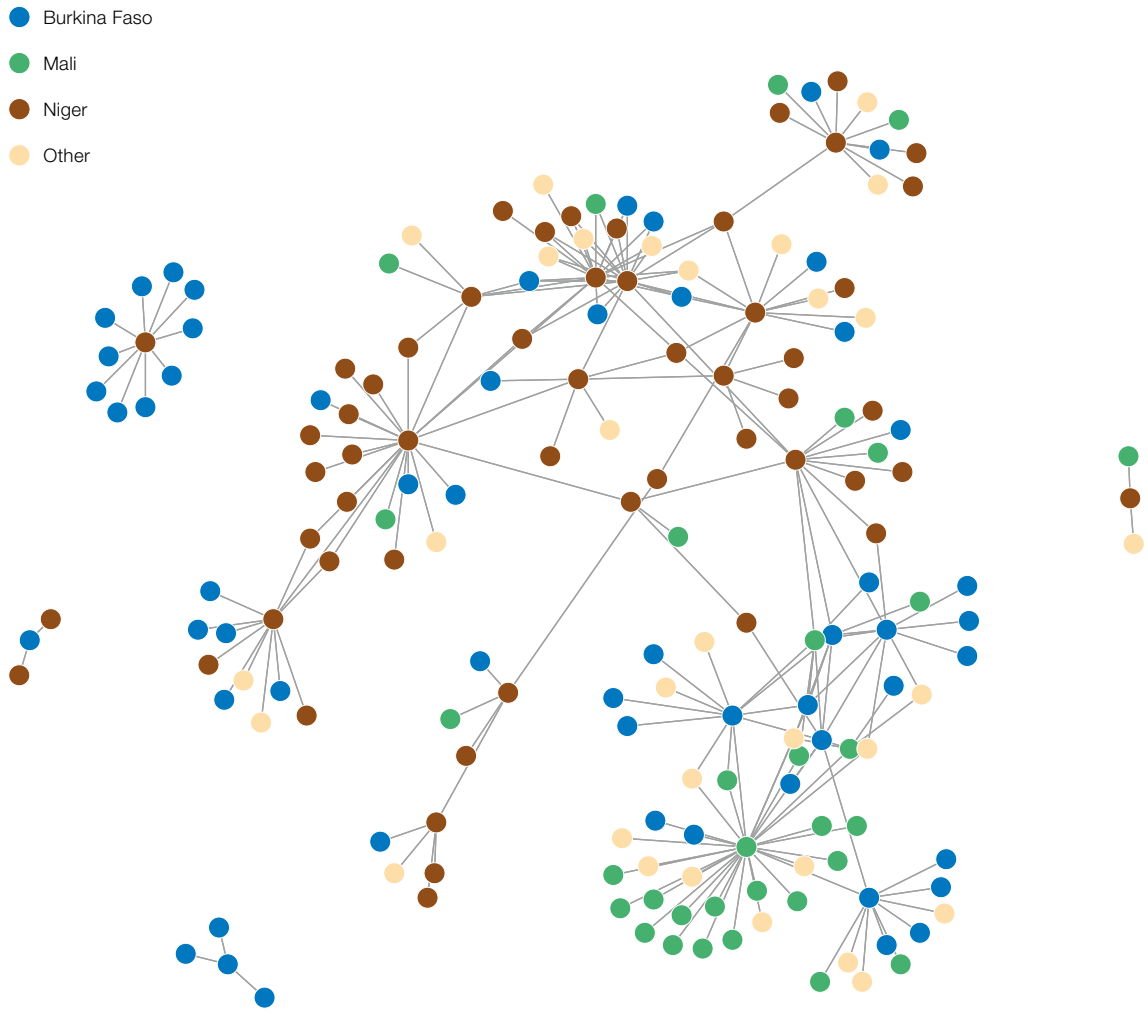
Figure 7.18
Power network in the Senegal River valley micro-region by country



No secondary cities – with the exception of Dori in Burkina Faso – are part of the network. At the level of the African continent, the network reaches far beyond the region, mainly extending towards Addis Ababa in Ethiopia and Johannesburg in South Africa. With 15 actors, Addis Ababa is a focal point for public policies pursued in West Africa, given the presence there of the AU, and its border programme financed by GIZ. The Ethiopian capital is also the headquarters of the United Nations Economic Commission for Africa (UNECA), an organisation which is very involved in issues relating to continental integration. The relationships with Johannesburg in the West African network concern four actors and are due to the presence of NEPAD.

The West African policy network is also densely connected to the rest of the world, primarily with Europe. France, with 16 actors, is the main non-African country involved in the West African network through representatives of its Ministry of Foreign Affairs and International Development, the AFD, MOT, the Sahel and West Africa Club (SWAC) and the GRDR, which are all based in the Paris metropolitan area. Outside the French capital, only Toulouse and Montpellier (French Agricultural Research Centre for International Development [CIRAD]) appear in the network. In Europe, Brussels contains the second highest geographic concentration of actors involved in cross-border co-operation in West Africa, mainly due to the presence of EU institutions. The actors

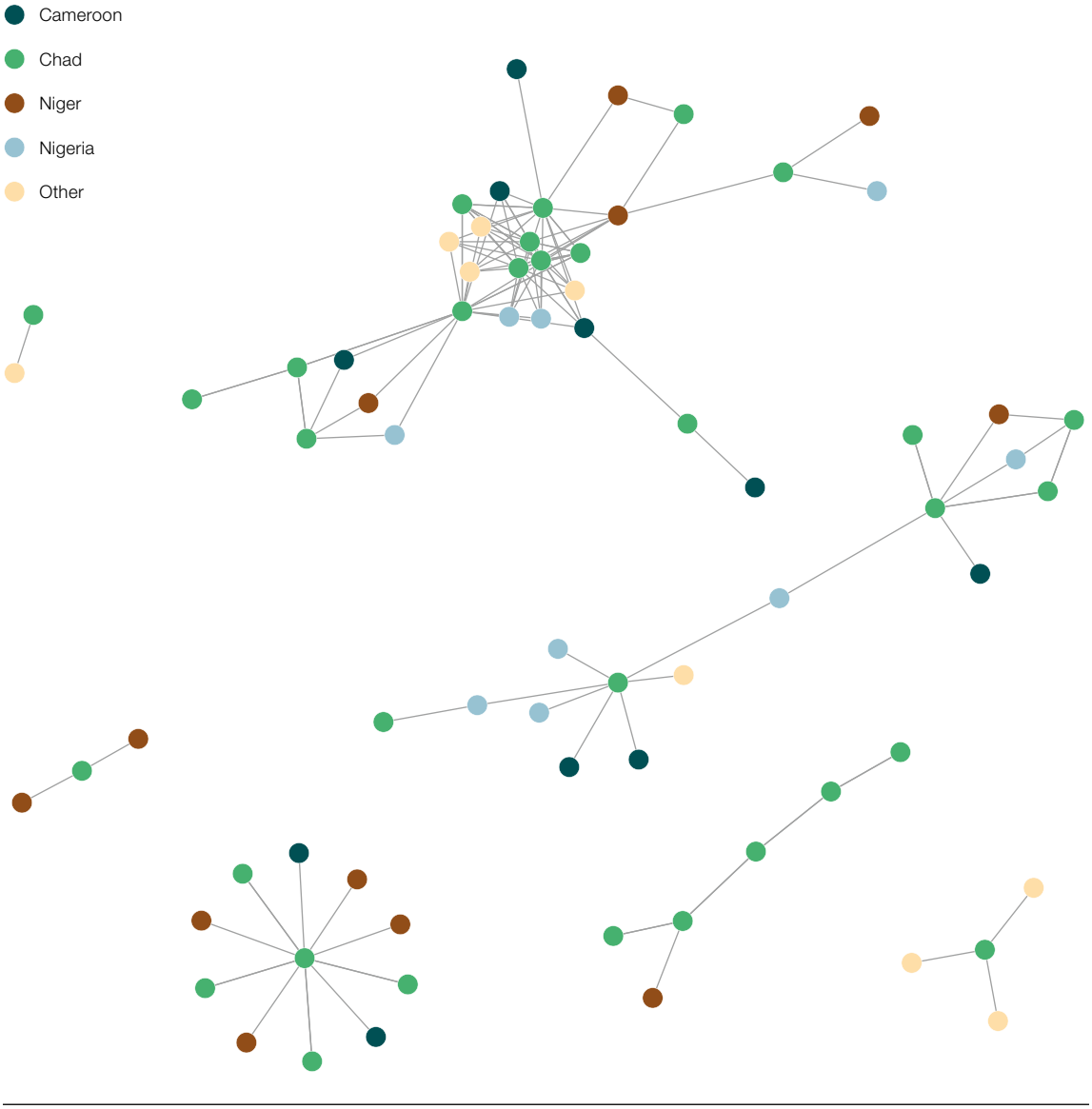
Figure 7.19
The information network of the Liptako-Gourma micro-region by country



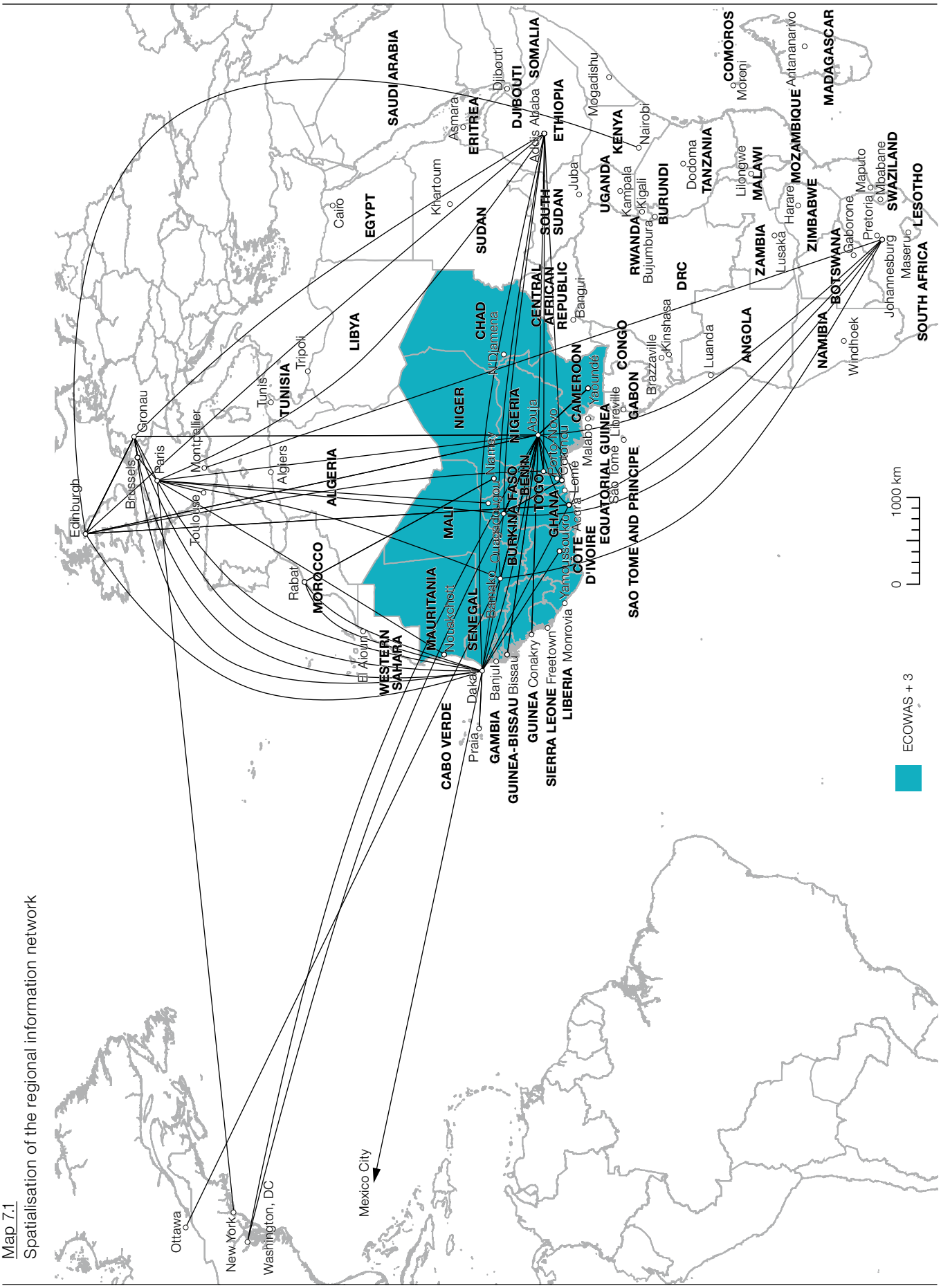
concerned work for the Directorate-General for International Co-operation and Development (DG DEVCO) and the Directorate-General for Regional and Urban Policy (DG REGIO). Brussels also hosts the EU's Special Representative for the Sahel, the UEMOA resident representative, as well as a number of NGOs involved in West Africa. The United Kingdom is connected to the network through the African Borderlands Research Network (ABORNE), an academic structure based in Edinburgh. There are far fewer connections with the Americas, with the exception of New York through the presence of the UNCDF, which runs the Local Cross-Border Initiative programme (LOBI), and Washington, D.C., which is home to the headquarters of the World Bank.

The information network for the Senegal River region has the most ties between actors (303) and the most countries involved (27). The network is particularly dense between the capitals of countries which are part of OMVS, such as Dakar, Nouakchott, Bamako and Conakry. Due to the fact that it is more local in nature than the network described previously, the Senegal River valley network is based on a large number of actors situated in small and medium-sized towns, especially

Figure 7.20
The Power network in the Lake Chad micro-region by country



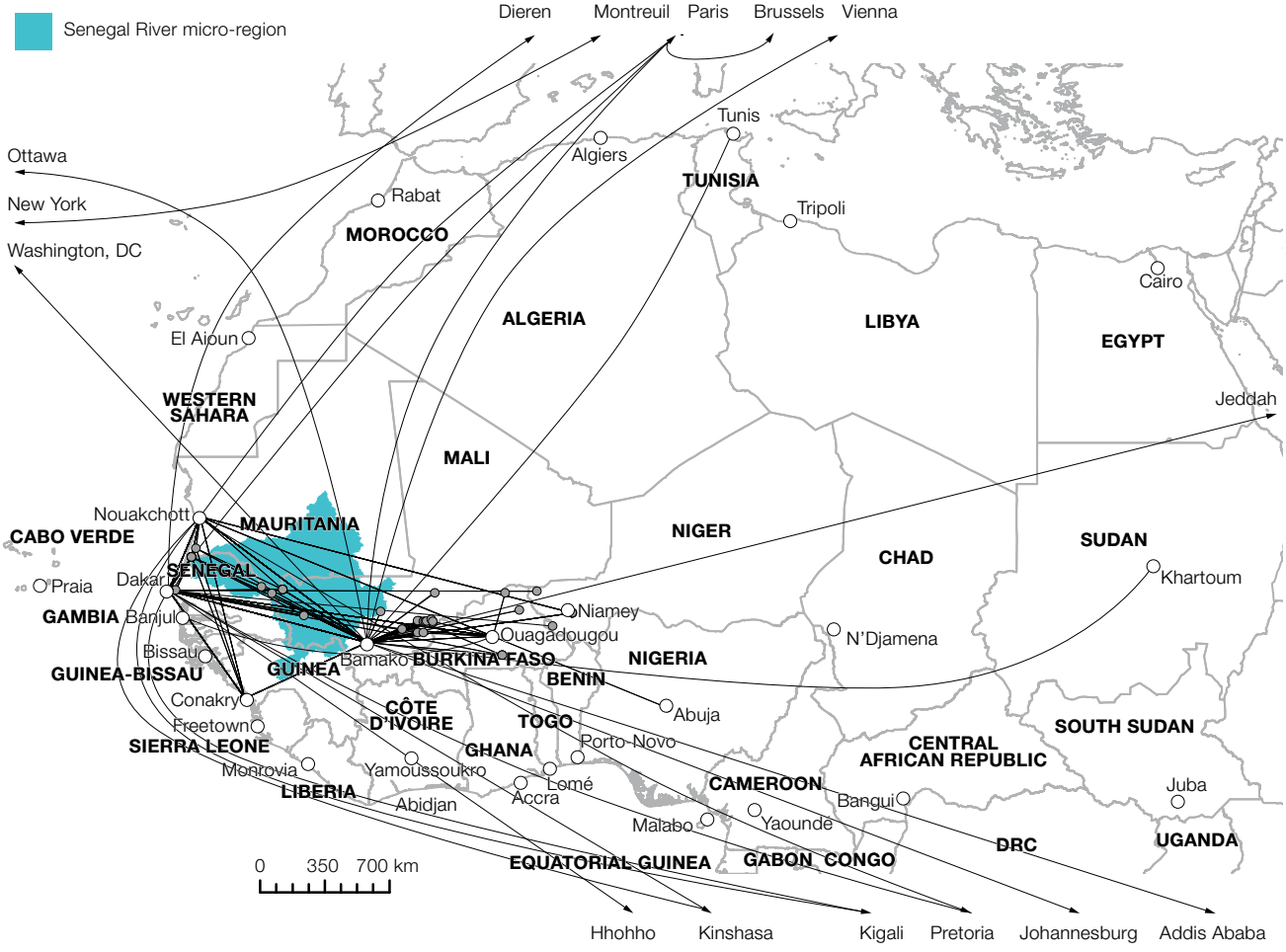
Map 7.1
Spatialisation of the regional information network



between Dakar and Kayes, and between Bamako and Ouagadougou. The capital of Burkina Faso is notably home to representatives of the ALG, the Volta Basin Authority, ECOWAS and UEMOA. Connections with rest of the continent are mainly the result of being part of other river basin management structures, such as the Lake Kivu and Rusizi River Basin Authority (ABAKIR), the International Commission of the Congo-Oubangui-Sangha Basin (CICOS), the Orange-Senqu River Commission (ORASECOM), and the Komati Basin Water Authority (KOBWA). In Europe, the most developed connections are with France, through both governmental organisations such as the Ministry of Foreign Affairs and MOT and non-governmental organisations like the GRDR, which is particularly active in the region. Relationships with North America and the Arabian Peninsula are marginal (Map 7.2).

The cross-border co-operation information network in Liptako-Gourma comprises 175 actors and 223 relationships. It is particularly concentrated in geographic terms, and contains the fewest countries (12). Relationships are very dense between Bamako, Ouagadougou and Niamey, as they are between these three capitals and numerous smaller urban centres such as Sikasso in Mali, Dori in Burkina Faso and Tillaberi in Niger. Although it is not officially part of the Liptako-Gourma institutional area, the Malian capital is an essential component in the network due to the fact that it is home to governmental institutions (the National Borders Directorate and the Directorate-General of Local Authorities), development agencies (Swiss and German co-operation agencies)

Map 7.2
Spatialisation of the information network of the Senegal River region



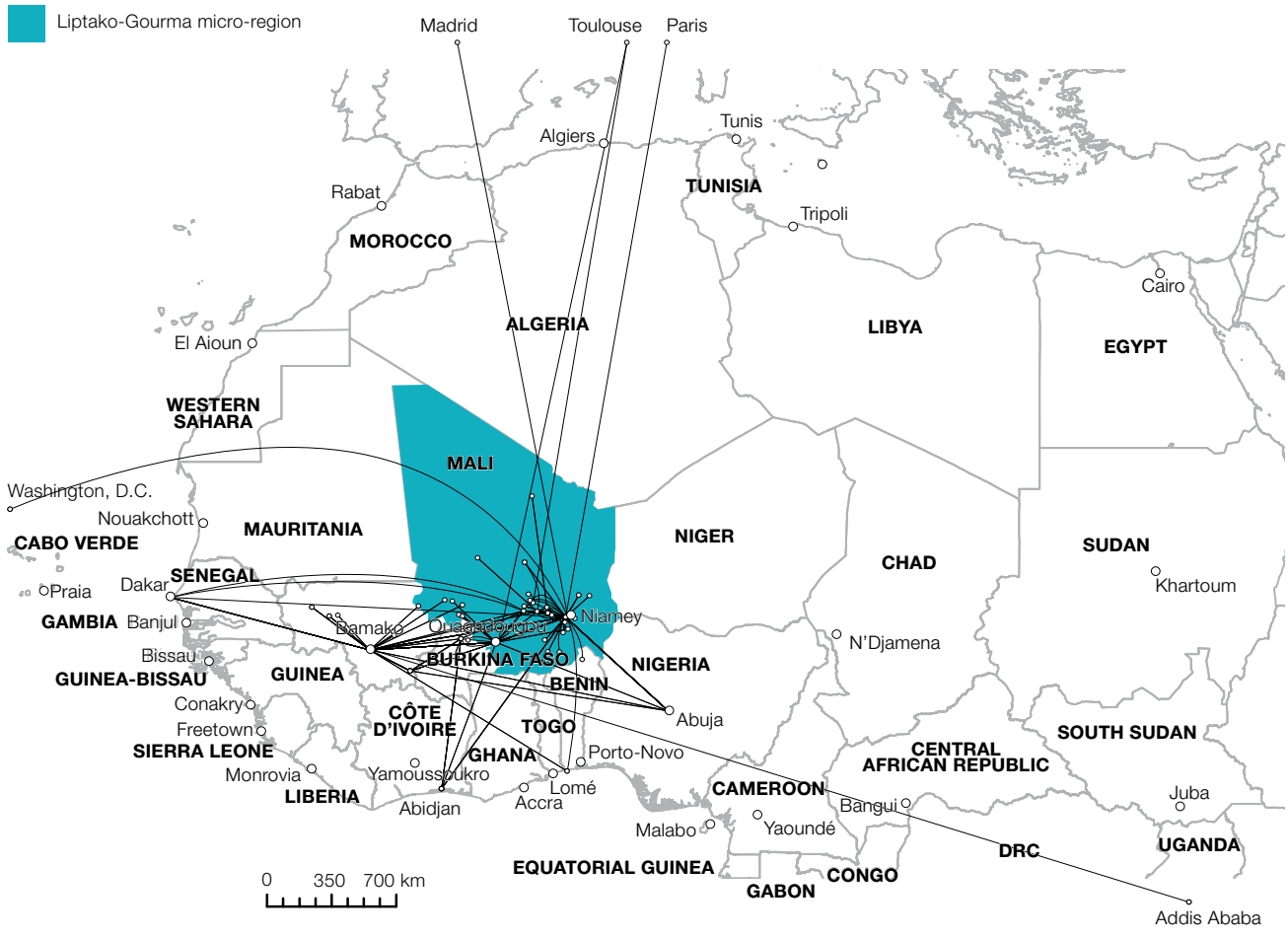
and other non-governmental bodies working on cross-border issues. The network is well connected to Abuja through the presence of ECOWAS but has few connections to the rest of the continent (NGOs), Europe (SWAC) and North America (World Bank). (Map 7.3)

The information network in the Lake Chad region has the fewest actors (114) and the fewest relationships (159). It is typical of a star network in which most of the relationships are concentrated in a central core. Indeed, around one-third (37) of the actors involved in cross-border co-operation are based in N'Djamena, where the LCBC is headquartered. A cluster of relationships links the Chadian capital to the capitals of neighbouring countries (Abuja, Bangui, Niamey and Yaoundé) and to regional centres such as Diffa in Niger, Maiduguri and Nguru in Nigeria, and Maroua in Cameroon. The latter are home to certain decentralised governmental institutions and development projects, such as the Lake Chad Basin Sustainable Development Programme (PRODEBALT), the Chad Basin Development Authority (CBDA), the Nguru Wetlands Demonstration Project North East, and the FMWR-IUCN-NCF Komadugu Yobe Basin Project. The network has few connections with the rest of Africa and the world, with the exception of Germany (GIZ) and Belgium (EU). (Map 7.4)

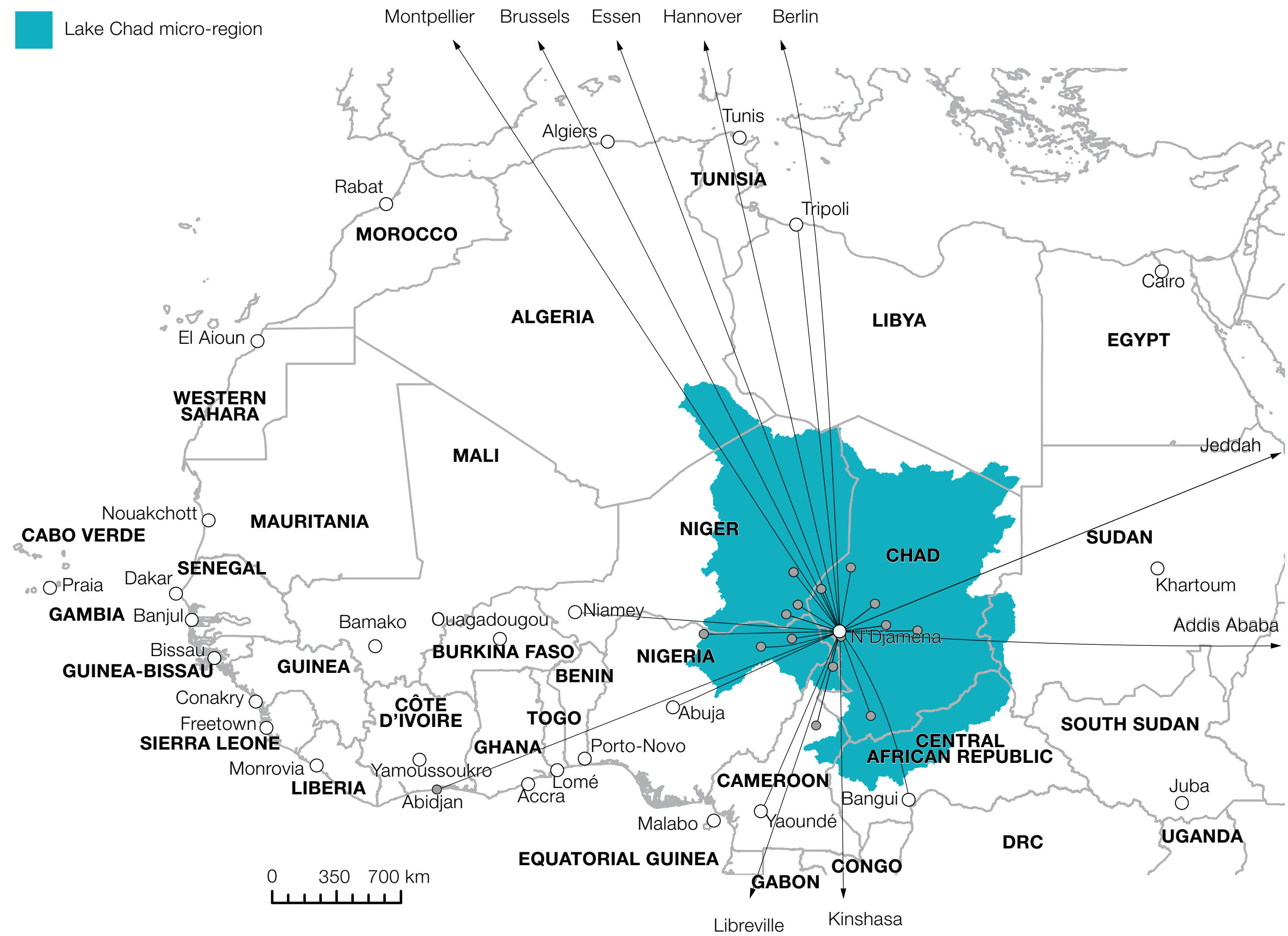
In conclusion, the analysis reveals that the regional information network, despite being centred on West Africa, has dense branches reaching out to Addis Ababa and Johannesburg, which are notably home to the institutions of the AU. Strong connections also link West African actors to the representatives of French governmental organisations in Paris and to

Map 7.3

Spatialisation of the information network in the Liptako-Gourma region



Map 7.4
Spatialisation of the information network in the Lake Chad region



the European Union's regional directorates in Brussels. These results reflect both the continental anchoring of West Africa and the durable ties binding it to Europe. In the Senegal River region and Liptako-Gourma, the cross-border co-operation information network is built around the capitals and a dense scattering of small and medium-sized towns, which act as local relays for initiatives developed by border countries. In the Lake Chad region, however, the information network is clearly focused around the Chadian capital, from which extend comparatively few ties. Generally speaking, the ties between each one of the micro-regions and the rest of the continent are underdeveloped, whereas the connections with Europe reflect financial investment in local cross-border initiatives by government lenders and NGOs.

NOTE \\

1 *Given that the main purpose of this study is to trace the location of the actors, the following analyses relate only to the information networks, and do not cover the power networks.*

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Chapter 8

Spatial representations and cross-border co-operation in West Africa

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Conflating the three dimensions of cross-border co-operation 215

Chapter 8 analyses the spatial representations of the actors involved in cross-border co-operation in West Africa. The first part of the chapter uses mental maps to identify areas recognised as priority regions for cross-border co-operation, the extent to which they vary in size depending on the country in which the actors are located and the locus of the cross-border co-operation's centre of gravity. The second maps the places that are considered as particularly strategic for co-operation between actors within the region itself, while the third section identifies actors which have the potential to be more actively engaged in co-operation activities and discusses the emergence of multi-layered governance in the region. The fourth and concluding section proposes an overview of the co-operation dynamics in place in cross-border areas.

Key messages

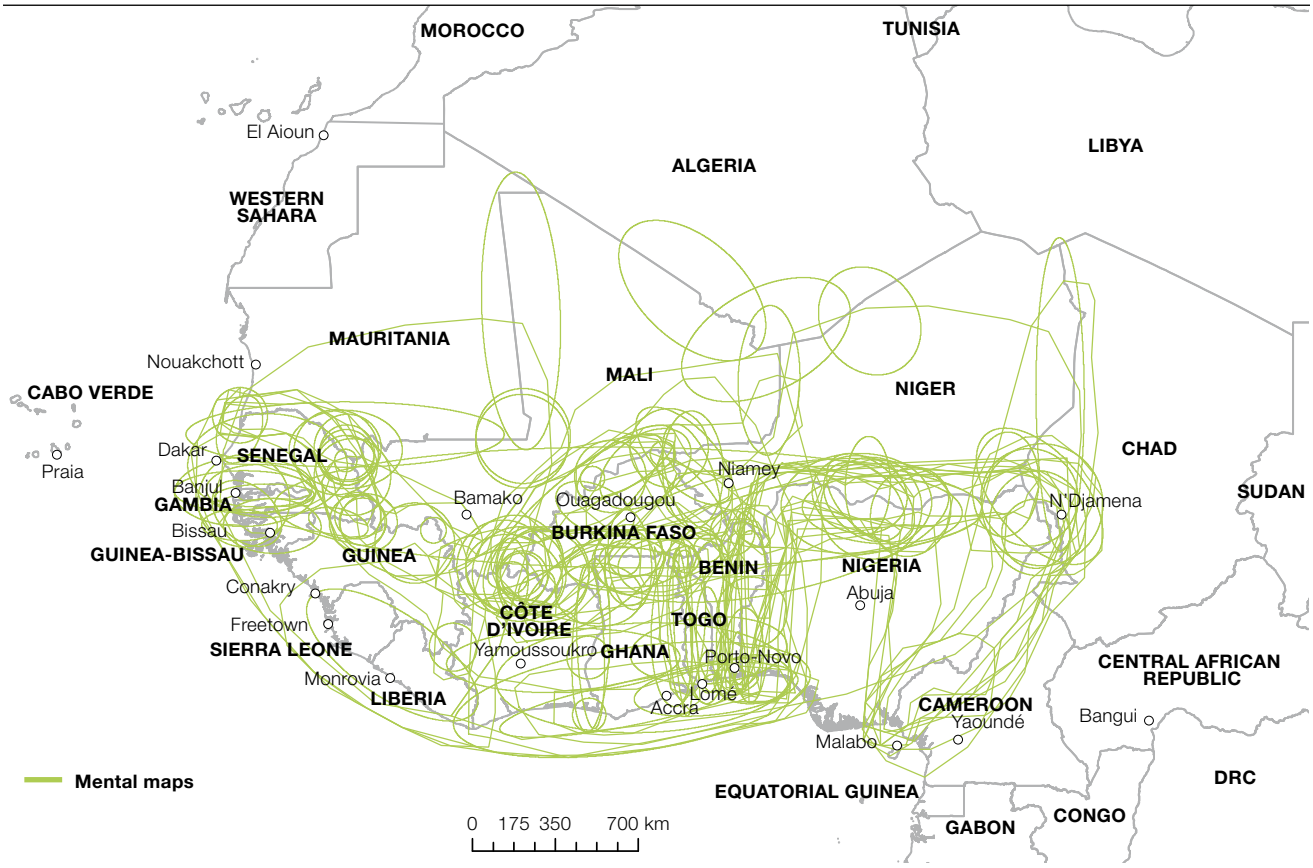
- In all regions, the priority area for cross-border co-operation is far more limited than that over which cross-border co-operation bodies exercise their authority.
- To be fully integrated, cross-border co-operation policies should combine the potential of regions, the structure of the networks linking actors and the political vision underpinning institutional initiatives.
- Place-based policies should leverage untapped co-operation potential in areas which have potentially favourable conditions for co-operation but where local actors are not particularly well connected to governance networks.
- Tighter co-ordination within local and regional governance networks is required to remove institutional blockages in areas where cross-border co-operation is a priority but decentralised networks are currently underdeveloped; this will require greater resources.
- Where political trade-offs have led to the neglect of regions that have potentially favourable conditions for cross-border co-operation, decentralisation and regional investments should be prioritised.

A PRIORITY AREA FOR CROSS-BORDER CO-OPERATION

One of the thorniest questions facing the institutional actors, private sector representatives, civil society and financial partners involved in cross-border public policies is knowing exactly *where* to develop co-operation. Is it preferable to set up border regions that are delineated by the administrative maps of the countries concerned? Would it be better to use physical markers that are harder to contest, such as catchment basins? Or is it better to constitute border regions based upon the shifting contours of the populations that interact and cross borders on a daily basis? Far from being anecdotal, the delimitation of the space selected for targeted cross-border co-operation will often determine the actors represented within governance structures, whether investment is distributed across a wide area or concentrated on a small number of particularly dynamic areas and the relationships between a border region and other levels of authority.

Border regions are socially constructed realities and their geographical extension cannot be based solely on the analysis of socio-economic

Map 8.1
Mental maps of the region



interaction, integration potential or institutional structures. Regional construction is based on spatial representation and on the emergence of a common vision of the cross-border spaces among co-operation partners. The goal is to chart these spatial representations by identifying priority regions for cross-border co-operation in West Africa, in the region around the Senegal River, in Liptako-Gourma and in the Lake Chad basin. This work complements the analyses made in previous chapters that were designed to establish the potential of these regions and the current structure of cross-border governance networks. It draws on a unique analysis of diagrammatic maps known as "mental maps". Introduced in the 1960s to examine the differences in spatial perception between social groups in US cities (Lynch, 1960), mental maps make it possible to depict the way in which social groups view their own spaces (Heft, 2013; Boschmann and Cubbon, 2014; Dörry and Walther, 2015).

The survey is based on a sample of 137 actors involved in cross-border co-operation, identical to that used in the previous analysis. These actors were given a simplified topographical map of their region on which they were asked to draw the boundaries of what they perceived as the space for targeted cross-border co-operation. The assumption is that the size and shape of the mental map is deformed by the perception of each respondent. The presence of a national border is particularly likely to cause major distortions in the maps as respondents will tend, for example, to overestimate the border zones belonging to their country of origin in comparison with those of neighbouring countries. The resulting maps are then superimposed using a geographic information system (GIS). Actors were allowed to draw several mental maps, and a total of 160 maps were analysed at the regional level (Map 8.1). At the local level, the analysis was based on a sample of 43 maps in the Senegal valley, 29 in

Liptako-Gourma and 23 in the region around Lake Chad (Map 8.2).

This method highlights two essential features of border regions (Figure 8.1):

1. Mental maps establish whether a consensus exists on the geographical extent of cross-border co-operation. They show the regions considered as priorities for cross-border co-operation by a majority of respondents and those that are considered to be of lesser significance. The average area of the mental maps drawn by the actors and their density by region are used to evaluate the geographical extent.
2. Mental maps allow for the cross-border co-operation mean centre to be calculated: i.e. the locus with the mean co-ordinates of all of a region's mental maps. From this central point, two metrics are used to assess how far the mental maps are spread across the area: the standard distance, which measures the degree to which features are concentrated or dispersed around the mean centre; and the standard deviational ellipse, which shows whether the maps' distribution follows a particular direction. Similar to the standard deviation used in statistics, the standard distance quantifies the amplitude of the dispersal of a set of spatialised values. The smaller the figure, the more concentrated the distribution of the mental maps, indicating agreement among the respondents as to the centre of gravity of cross-border co-operation. In Figure 8.1 a,the majority (77%) of mental maps, represented by black points, are located within one standard distance of the centre of gravity in what constitutes the area of greatest concentration. Similarly, the smaller the standard

Map 8.2
Mental maps by locality

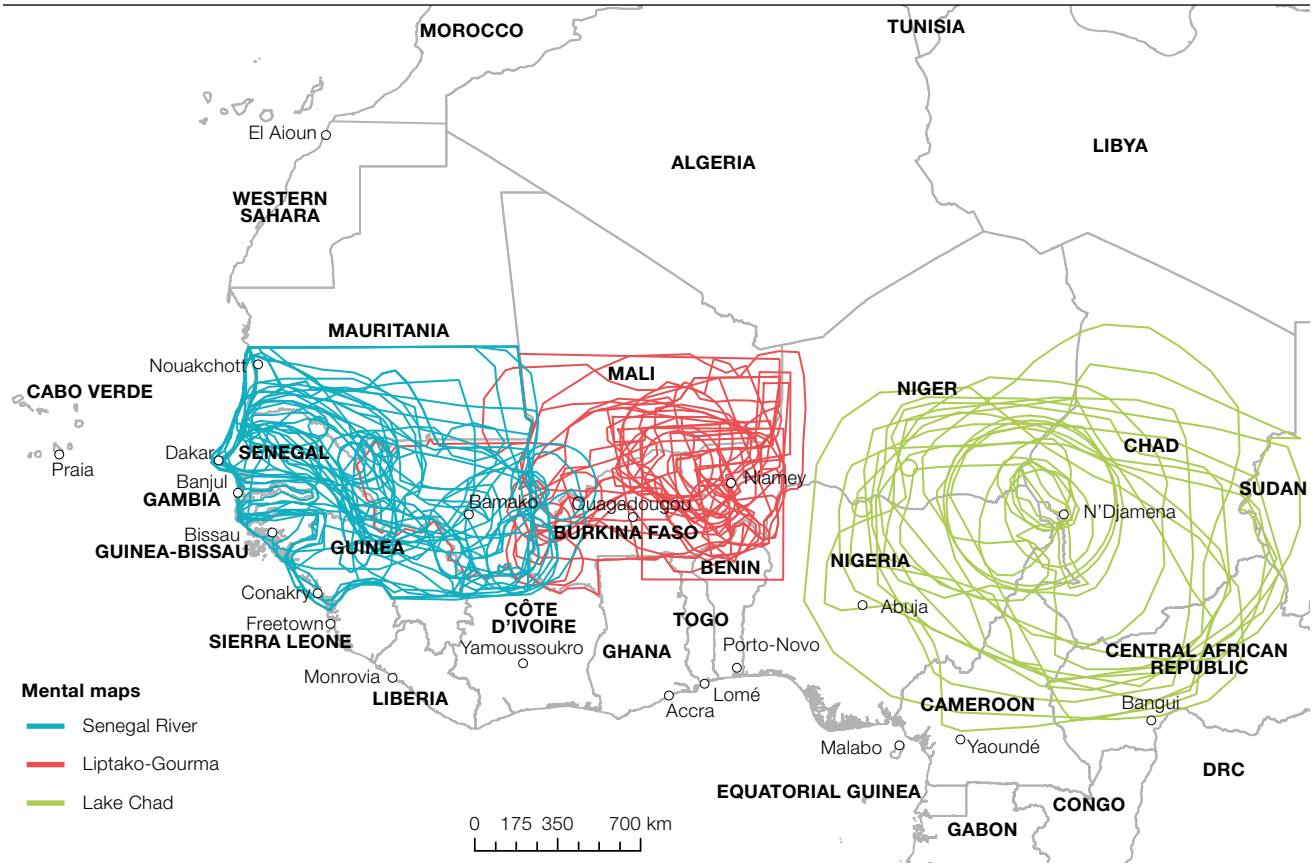
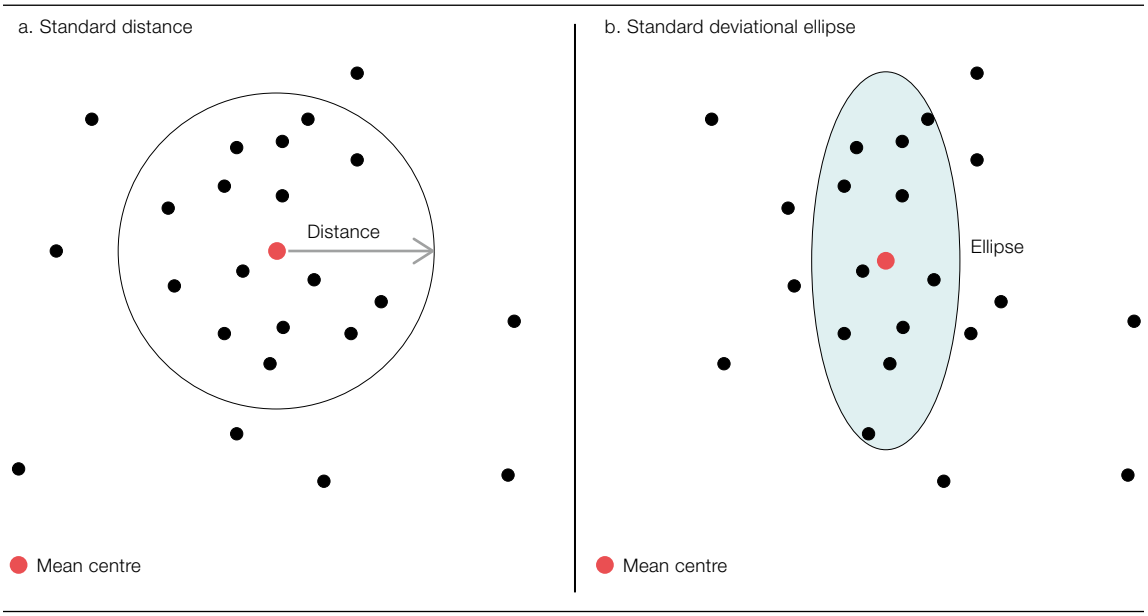


Figure 8.1
Standard distance and standard deviational ellipse



ellipse, the more the respondents agree as to the dispersal and orientation of cross-border co-operation. In Figure 8.1 b, the points representing the mental maps delineate a north-south ellipse, in which the concentration of points is particularly high.

The space considered relevant in terms of cross-border co-operation is 728300 km² on average according to the mental maps of the region, which corresponds approximately to the surface area of Côte d'Ivoire, Burkina Faso and Benin combined. By locality, this surface area is 375000 km² in the Senegal River valley, 246000 km² in Liptako-Gourma and 699000 km² in the Lake Chad region, according to the mental maps drawn by the actors interviewed. These regional variations reflect major divergences between different respondents' representations of cross-border co-operation.

There are also wide internal variations in the different geographic areas or countries in which the respondents are based (Figure 8.2). At a regional level, actors based in eastern, central and southern Africa are those with the broadest perception of the area of West African co-operation, reaching 1.4 million km², an area greater than the country of Niger. This figure contrasts sharply with the space identified by respondents based in Europe, which is less than one-third this size (385000 km²), while West Africans' spatial representation was close to the average, at 617000 km². The reason for these results is that respondents in the rest of Africa are mainly political decision makers active in the region's major organisations, for which the relevant scope of cross-border co-operation is often likened to that of the Economic Community of West African States (ECOWAS) or the West African Economic and Monetary Union (UEMOA), while those based in Europe tend to work at a more local level.

In the Senegal River region, the area of the mental maps drawn by the respondents, with an average of 375000 km², showed little variation across the sample. It was 401000 km² for those working in Mauritania, 399000 km² for those in Senegal and 354000 km² in Mali. In Liptako-Gourma, a certain consensus between respondents in Niger and those in Burkina Faso can be seen over the average area of the border zone (around 250000 km²). The few respondents from Mali tended to draw mental maps that were smaller than the average (182000 km²). In the Lake Chad region, the number of mental maps collected in Nigeria and Cameroon was insufficient to expose national trends.

The calculation of dispersal metrics reveals that the Senegal River valley has the weakest consensus over the location of the centre of

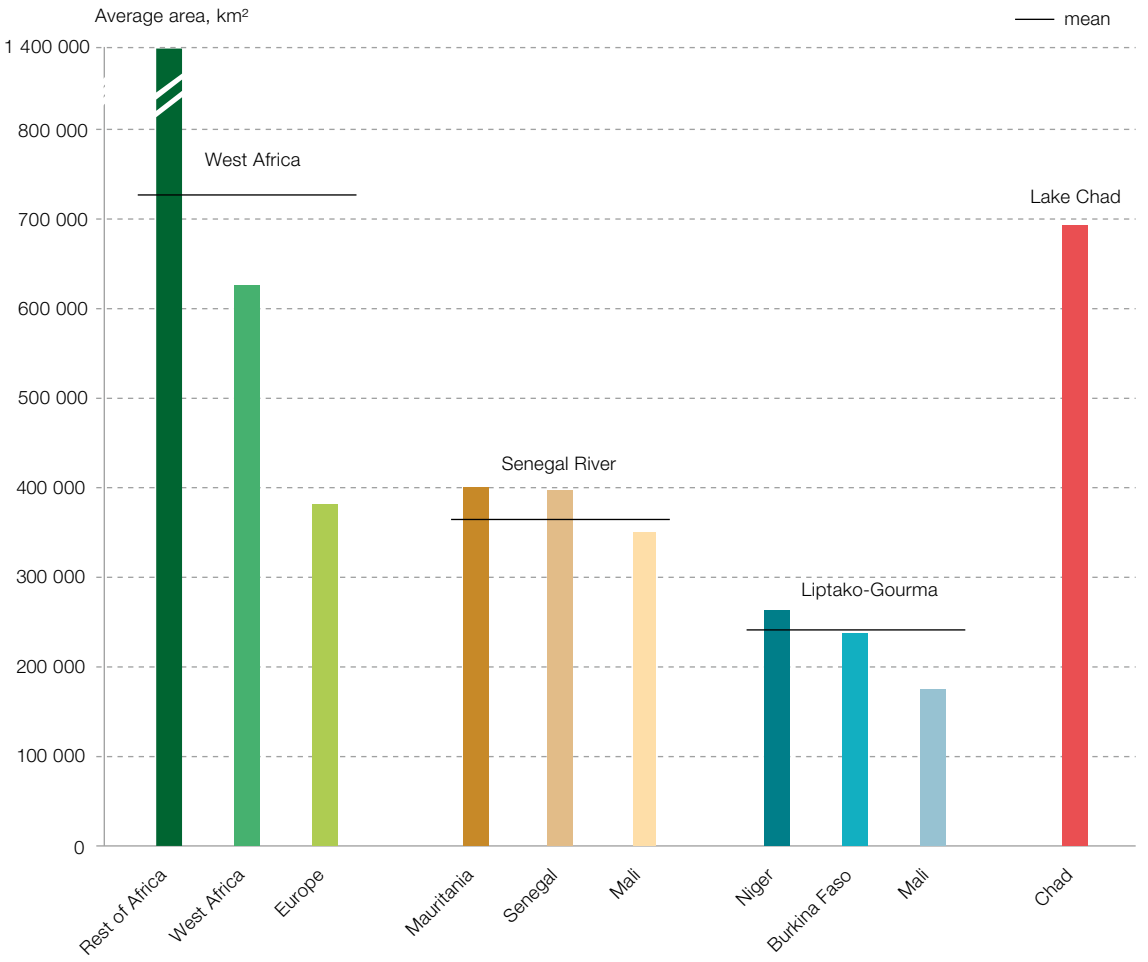
gravity of cross-border co-operation, while Liptako-Gourma has the strongest consensus. The average variation between the mental maps and the centre of gravity is just 222 km in the latter case, suggesting that the scatter of the maps is more concentrated than in the other regions (Table 8.1). Similarly, the area of the standard ellipse is smallest in Liptako-Gourma, which indicates greater geographic concentration. Map 8.3 shows more precisely where the centres of gravity are located and the reach of the standard distances and the standard deviational ellipses in each case.

These regional differences are more visible when mapping the density of mental maps at the level of West Africa and the three micro-regions examined. The darker the colour, the greater the consensus over the zone's importance. In West Africa, the priority zones recognised by a high proportion of respondents are the Lagos-Cotonou conurbation, the Hausaland, Dendi (Gaya-Malanville-Kamba),

Table 8.1
Standard distance and standard deviational ellipse by micro-region

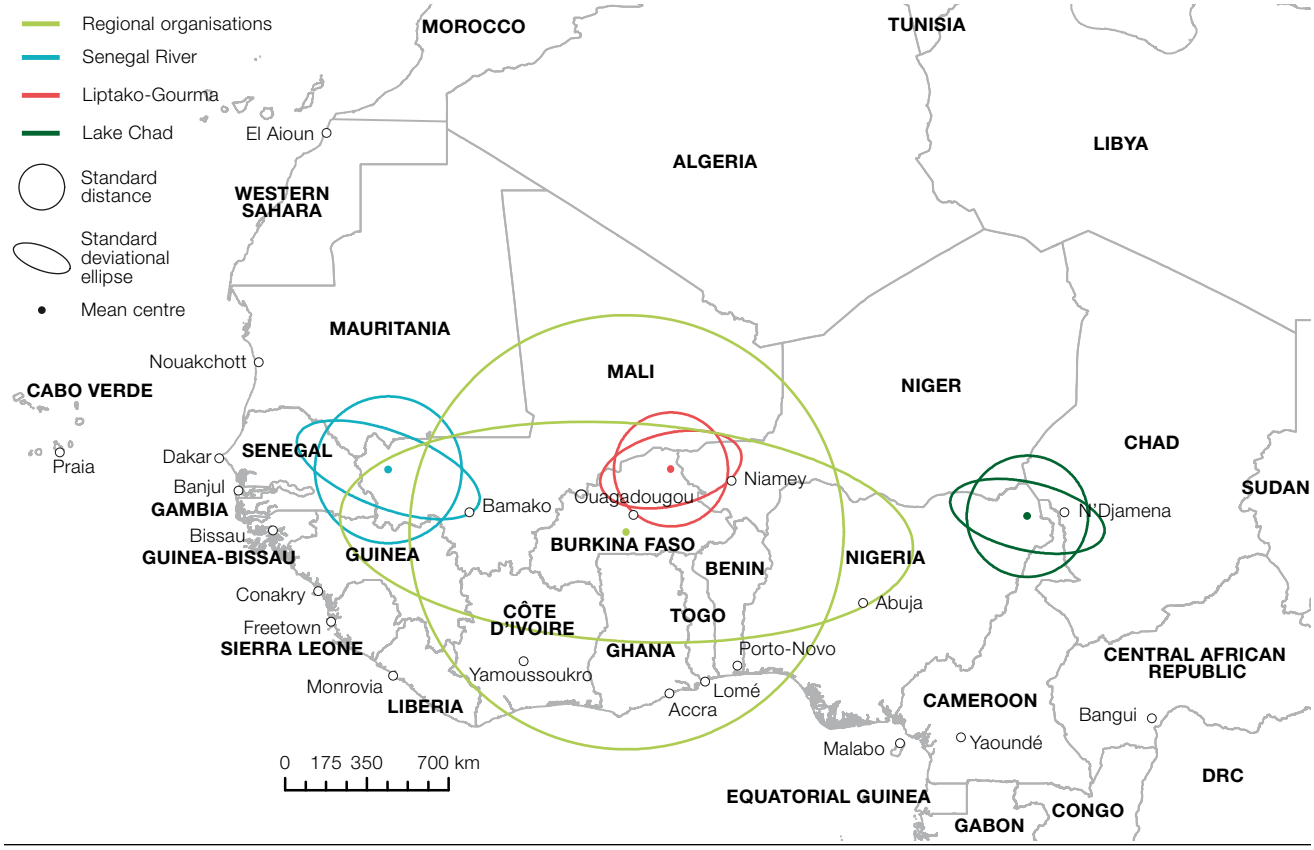
Region	Standard distance (km)	Standard deviational ellipse (km²)
Senegal River valley	286	177 000
Liptako-Gourma	222	125 000
Lake Chad	237	128 000

Figure 8.2
Average area of border zones to be targeted, by respondents' country of origin



Map 8.3

Centre of gravity, standard distance and standard deviational ellipses



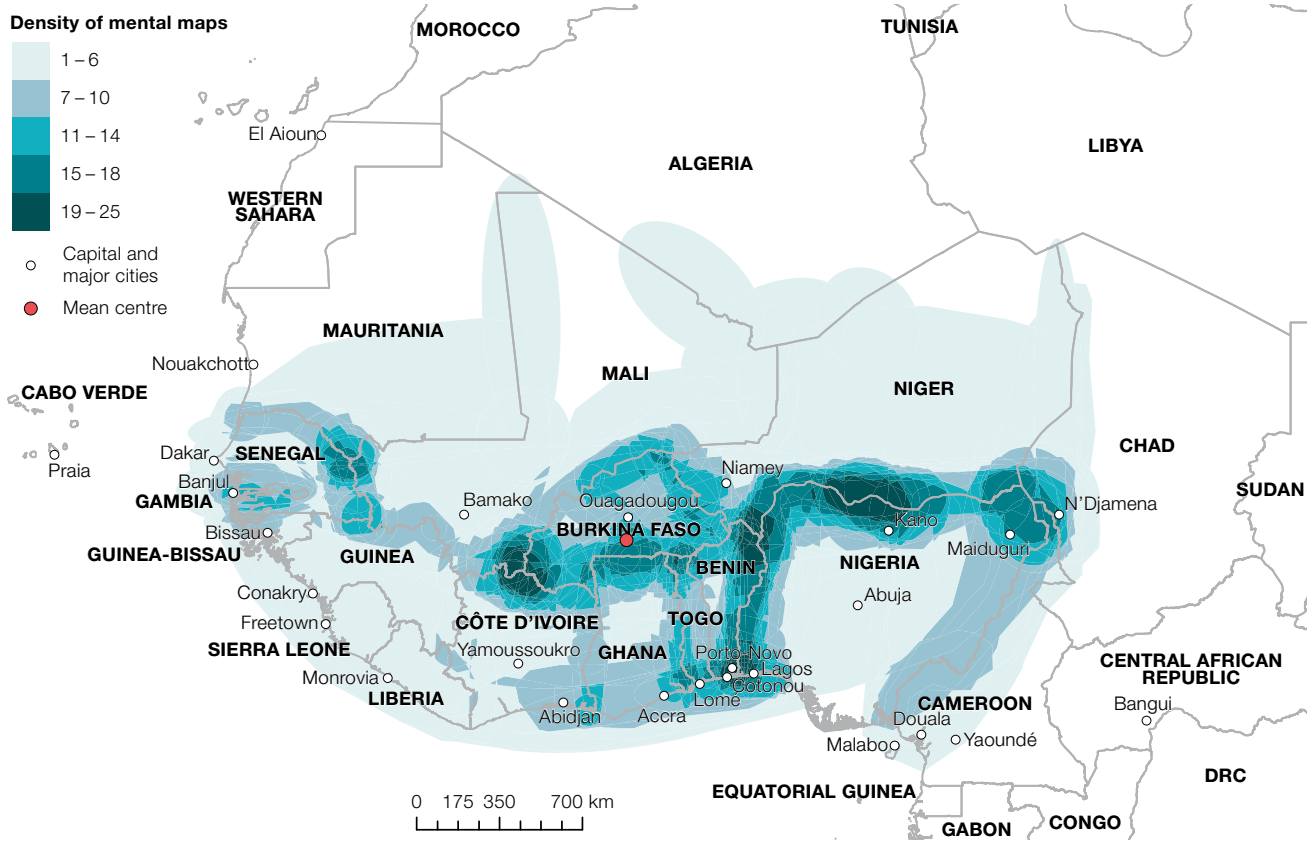
northern Togo (Sinkansé, Burkina Faso) and the Sikasso-Korhogo-Bobo Dioulasso (SKBo) triangle (Map 8.4). Three of these five regions are located around the perimeter of Nigeria. The priority regions do not fall within the zones covered by the Senegal River Basin Development Organisation (OMVS), the Integrated Development Authority of the Liptako-Gourma Region (ALG) and the Lake Chad Basin Commission (LCBC). The second tier of priority regions identified concerns the western and northern sections of Nigeria's borders; Lomé; Lake Chad; the tripoint between Senegal, Mali and Mauritania; and the Burkina Faso-Ghana border, north of which is the centre of gravity of all the mental maps drawn at the regional level. The intermediary strip between the Gulf of Guinea and the Sahel is considered to be of low priority for cross-border co-operation, especially in the west (Guinea, Liberia, Sierra Leone, Côte d'Ivoire), as is the Sahara.

At the local level, priority zones in the region around the Senegal River are distributed along the valley and follow its tributary, the Falémé, along the border with Mali (Map 8.5). From this central axis, the density of the maps diminishes, indicating lessening consensus. The area recognised as a priority stretches along for approximately 100000 km². It is scarcely more than a third of the size of the Senegal River basin (289000 km²) and corresponds to the southern section of the area under the authority of the OMVS, and to a lesser degree the north of Mauritania and the east of Mali. The centre of gravity is located in Mali, to the east of the Bakel-Sélibaby-Kayes triangle. The mental maps steer clear of non-French-speaking countries in the region (Gambia and Guinea-Bissau), suggesting that the perceptions of regional actors are influenced by the different colonial languages.

In Liptako-Gourma, the priority area for cross-border co-operation traces a crescent through the tripoint between Burkina Faso, Niger and Mali and the Niger River valley to Niamey (Map 8.6). Niamey and Lomé are the only capitals in the region to fall within a

Map 8.4

Priority areas for cross-border co-operation in West Africa



priority area for co-operation. This zone of about 50 000 km² roughly corresponds to the heart of the restricted area of the ALG, which itself is almost seven and a half times the size (370 000 km²). The towns of Gao, Dori and Tillabéri are its major regional centres, and the centre of gravity is located halfway between Dori and Tillabéri, in Burkina Faso.

In the Lake Chad region, the priority area for co-operation is confined to the area delimited by N'Djamena, Maiduguri and Diffa. Beyond this, the density of the maps decreases rapidly in concentric circles (Map 8.7). This central zone of 176 000 km² represents only one-sixth of the area known as the Lake Chad basin (967 000 km², excluding Libya), over which the LCBC exercises its authority. The centre of gravity lies between Maiduguri and N'Djamena in Nigeria.

Mental map analysis reveals an emerging vision shared by the actors involved in co-operation (Table 8.2). At the regional level, it is difficult to assume that consensus exists over the territorial extent of co-operation, given the wide variance in size between the respondents' mental maps. At most, the respondents located in West Africa have a more tempered vision of their region than outsiders. Several regions, however, are recognised as centres of gravity for cross-border co-operation, particularly the Lagos-Cotonou conurbation, Dendi, the Hausaland and the Sikasso-Korhogo-Bobo Dioulasso triangle.

In the Senegal valley, consensus exists over the area of cross-border co-operation, which follows the river valley and the border between Senegal and Mali. The centre of gravity of this co-operation is, on the other hand, more variable than in other micro-regions. In Liptako-Gourma, there is consensus over both the extent and the centre of gravity of cross-border co-operation. Mental maps are particularly dense in the crescent that passes through the tripoint between Niger, Burkina

Map 8.5
Priority area for cross-border co-operation in the Senegal River region

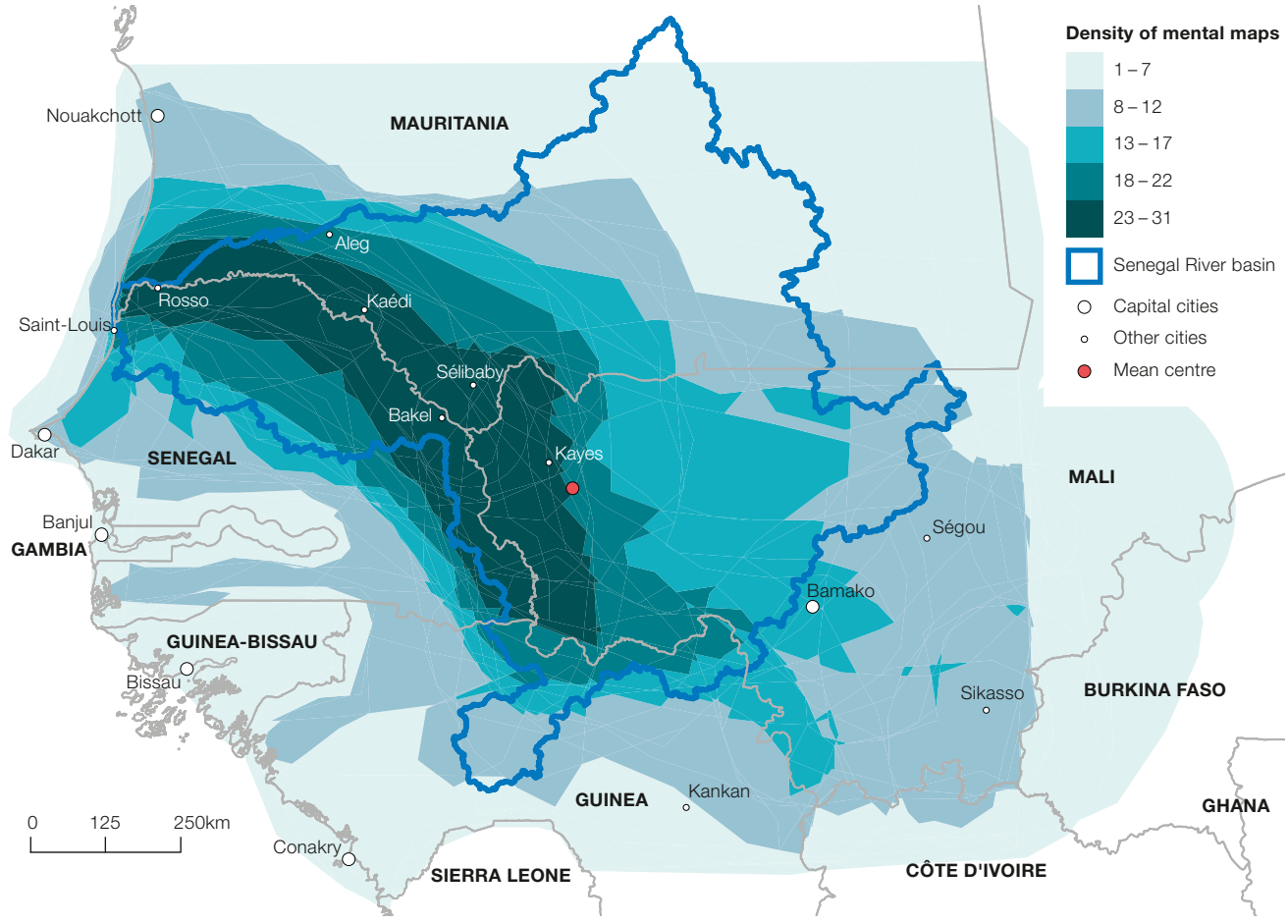


Table 8.2
Consensus over the extent and centre of gravity of cross-border co-operation

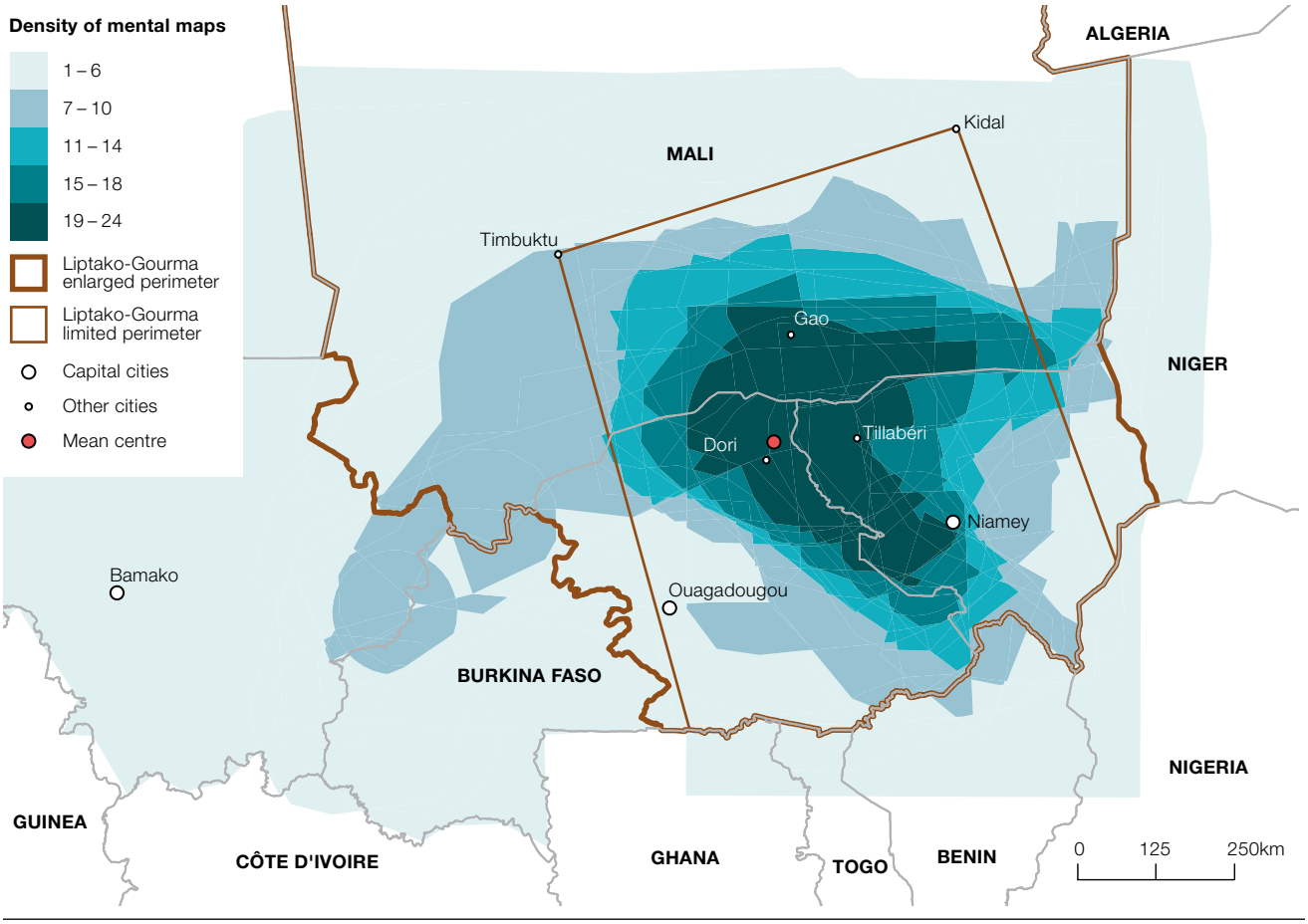
Region	Territorial extent	Centre(s) of gravity
West Africa	No	Yes
Senegal River valley	Yes	No
Liptako-Gourma	Yes	Yes
Lake Chad region	No	Yes

Faso and Mali and the Niger valley down to Niamey. In the Lake Chad basin, respondents agree on the N'Djamena-Maiduguri-Diffa area as the hub for cross-border co-operation, but vary widely over its extent, which reaches as far as the Central African Republic, the south of Chad and the centre of Niger.

In all regions, the priority area for cross-border co-operation is far more limited than that over which organisations such as the OMVS, ALG and LCBC exercise their authority (Table 8.3). The gap is most pronounced in Liptako-Gourma, where the ALG's limited intervention zone is over seven times larger. In the Lake Chad basin it is five times larger, and in the Senegal valley it is three times larger.

The mismatch between the institutions' jurisdictions and the priority areas for co-operation is not specific to West Africa. Comparable situations can be seen in Europe, especially in the area that encompasses Luxembourg and its German, French and Belgian neighbours, where the cross-border metropolitan area of Luxembourg City represents a particularly dense area of socio-economic interaction

Map 8.6
Priority area for cross-border co-operation in Liptako-Gourma

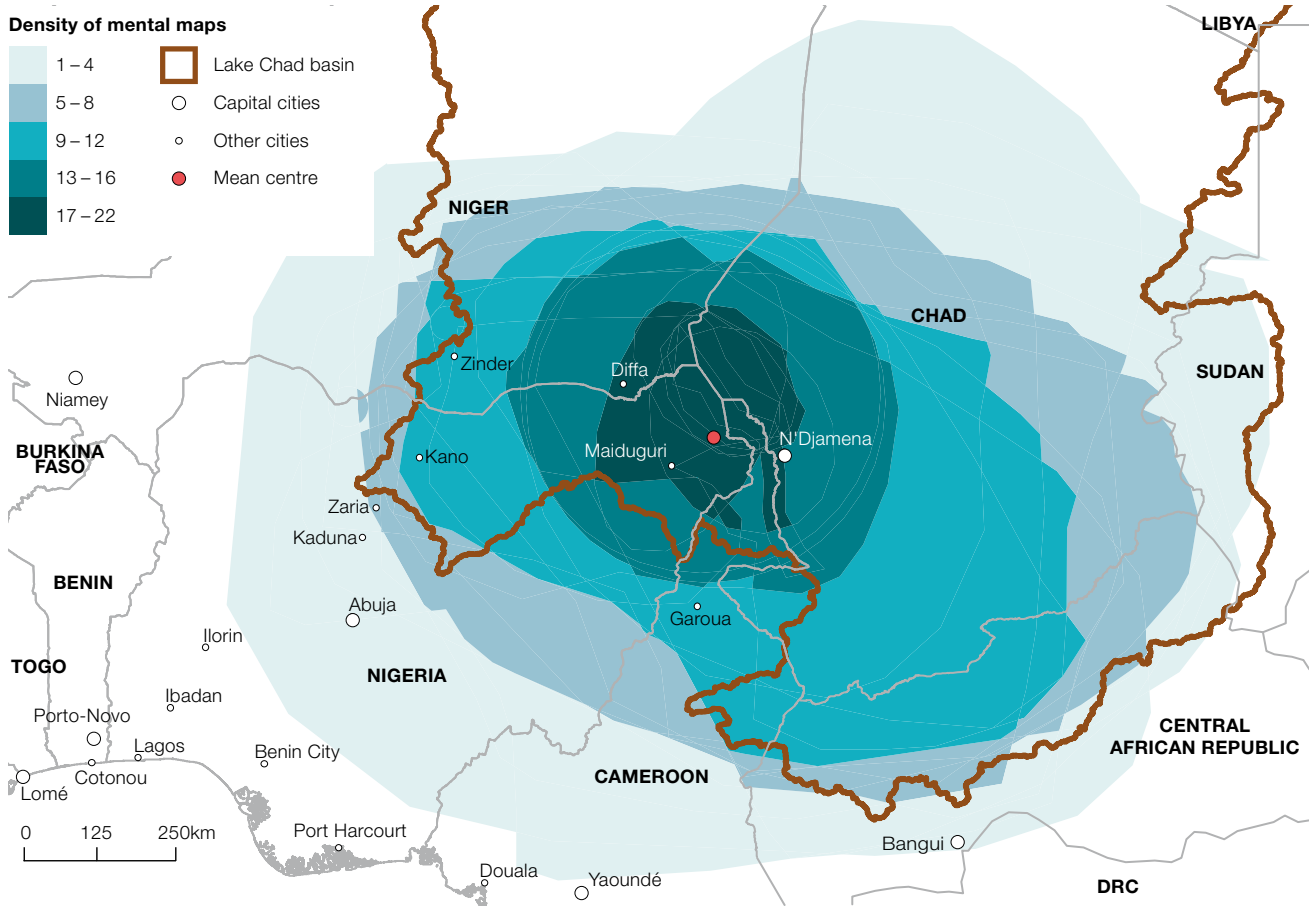


(ESPON, 2010). Far from being a fundamental barrier to the implementation of cross-border initiatives, the large size of West African institutions is the legacy of a time when there was a drive to build regions based on existing administrative bodies. This raises the possibility of smaller-scale cross-border investments in urban centres which are considered to be the most central, such as Kaédi, Sélibaby and Kayes; Dori, Gao and Tillabéri; or N'Djamena, Maiduguri and Diffa.

Table 8.3
Institutional areas and priority areas for cross-border co-operation

Organisation	Area covered by institutions (km²)	Size of priority areas (km²)
OMVS (Senegal River basin)	289 000	100 000
ALG (limited intervention zone)	370 000	50 000
LCBC (Lake Chad basin excluding Libya)	967 000	176 000

Map 8.7
Priority area for cross-border co-operation in the Lake Chad region



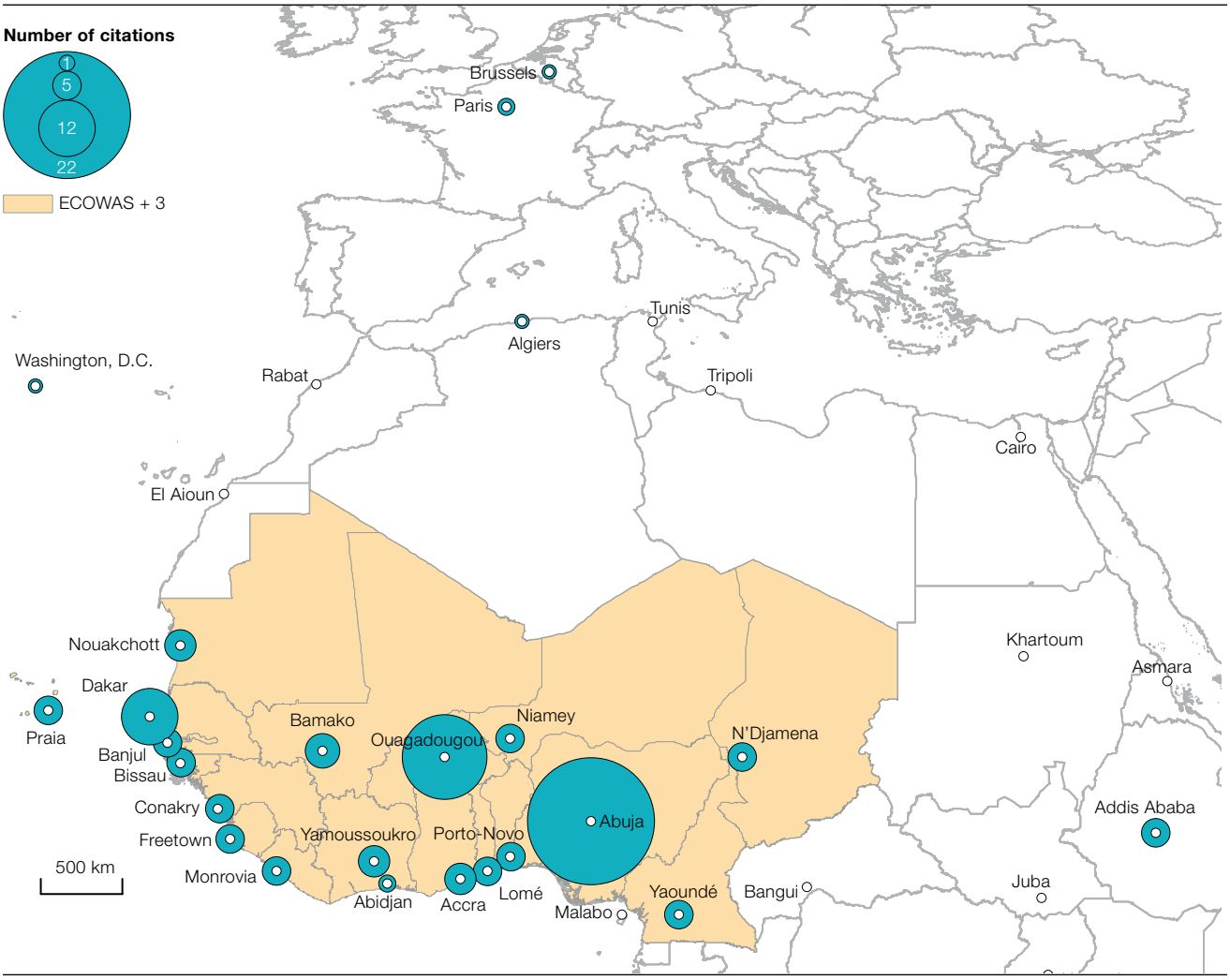
STRATEGIC SITES FOR CROSS-BORDER CO-OPERATION

The negotiation and decision making processes concerning cross-border co-operation take place in a limited number of locations considered to be particularly central by decision makers and their partners. At the regional level, the surveys carried out among those involved in co-operation show that these strategic locations are primarily Abuja in Nigeria, where ECOWAS is headquartered, Ouagadougou in Burkina Faso, home to UEMOA and the Permanent Inter-State Committee for Drought Control in the Sahel (CILSS), and to a lesser extent Dakar in Senegal (Map 8.8). Abuja, Ouagadougou and Dakar represent nearly 40% of the places mentioned at least once as strategic. With the exception of Abidjan, the other places mentioned are all national capitals. Cities outside West Africa are seen as less strategic for cross-border co-operation, including the capitals of some European and North American countries, as well as Addis Ababa, the Ethiopian capital, even though it is the headquarters of the African Union (AU). These spatial representations contrast sharply with the reconstitution of the co-operation networks on a regional level (Map 7.1), which show West Africa as closely connected to Europe and the rest of Africa, both in terms of information exchange and power relationships.

At the local level, the areas considered strategic correspond generally to the capitals, which are home to the sectoral cross-border co-operation organisations (Map 8.9). This is the case for the Senegal River valley, where Dakar, Bamako, Nouakchott and Conakry emerge strongly as the major centres of strategic

Map 8.8

Strategic areas for cross-border co-operation at the regional level



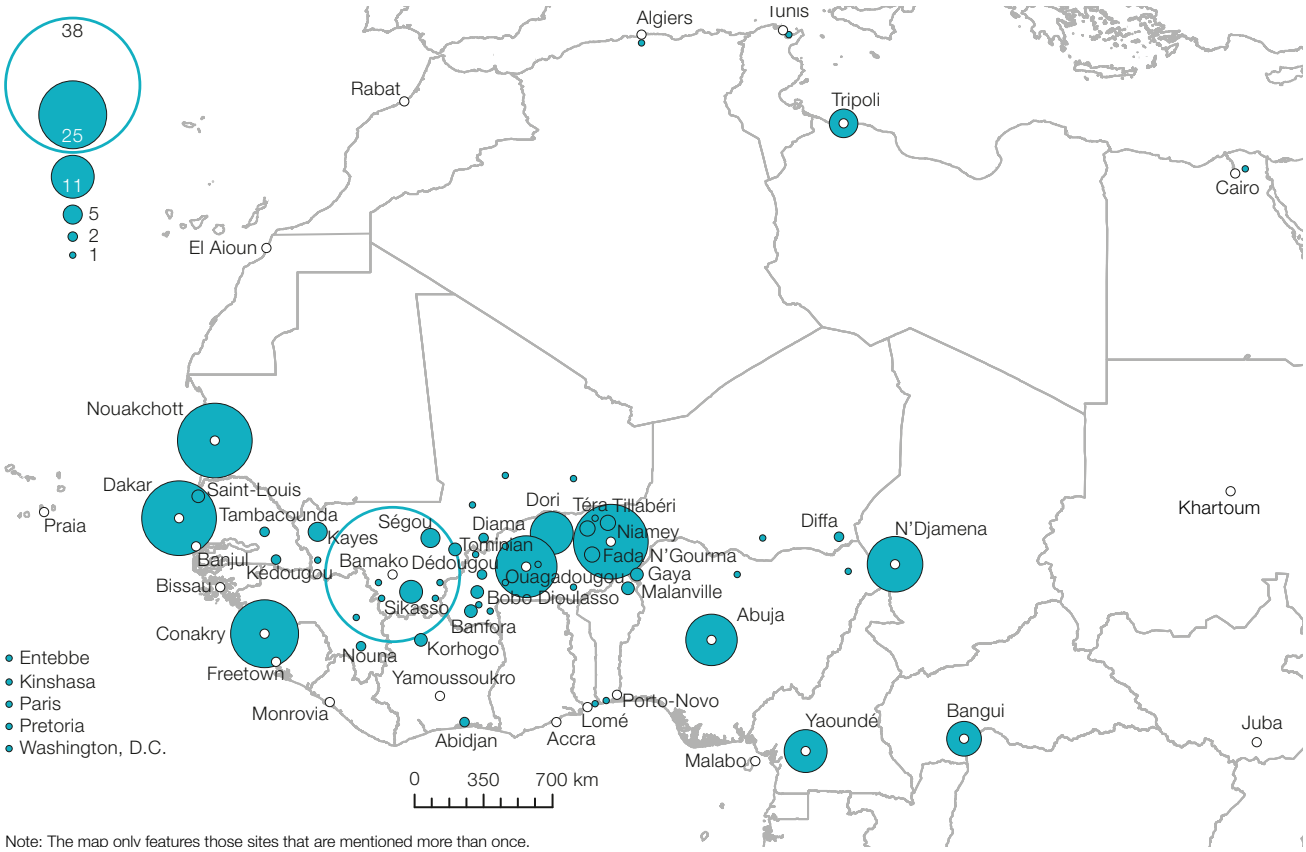
decision making due to the rotating presidency of the OMVS. These key locations decisively outrank the more distant capitals of Niger and Burkina Faso, as well as regional centres such as Kayes, Sikasso and Ségou in Mali (Table 8.4).

In Liptako-Gourma, Ouagadougou is widely considered to be the most strategic location for co-operation because in addition to being a member of the ALG, it is also the headquarters of both the ALG and UEMOA. The other capitals of ALG member countries – Niamey and Bamako – are also viewed as particularly central. One of the names most frequently mentioned is Dori, a small town in Burkina Faso, whose strategic importance far outweighs its small size (23 050 inhabitants in 2010 according to *Africapolis* [Moriconi-Ebrard, Harre and Heinrigs, 2016]). Dori essentially owes its significance to the fact that its former mayor, Hama Arba Diallo, played a leading role in the consolidation of nine territorial authorities in the Decentralised Cross-Border Co-operation Unit of Sahel Local Authorities, known as C3SAHEL. Before moving to Niamey, the Billital Maroobe Network (RBM) was headquartered in Dori, as was the Association for the Promotion of Livestock in the Sahel and the Savannah (APESS). In addition, Dori regularly hosts meetings of the region's pastoral organisations. Many other locations of lesser importance in terms of population are mentioned in the region, suggesting that cross-border co-operation in Liptako-Gourma is based on a dense group of cities of various sizes.

No such polycentrism exists in the Lake Chad region, where strategic decisions are

Map 8.9

Strategic areas for cross-border co-operation at the local level



Note: The map only features those sites that are mentioned more than once.

chiefly taken in the capital of Chad, followed by the capitals of Nigeria, Niger and Cameroon. The role of Tripoli and Bangui, two capital cities of countries that are official members of the LCBC, is of less importance because of the current conflicts in Libya and the Central African Republic. No other city plays a strategic role in the region.

An analysis of strategic locations for cross-border co-operation suggests that most decisions are taken in West African capitals, whether they concern policies with regional impact or local initiatives. It is largely in these capitals that the public policies affecting cross-border regions are drawn up between very different partners, not all of whom are governmental. Only the Liptako-Gourma region has a group of smaller centres that can potentially play a role in local governance.

TOWARDS MULTI-LEVEL GOVERNANCE?

Relations between subnational and central government may take the form of multi-level governance, in which state power is supplemented from the top by supranational organisations, from the bottom by local and regional entities, and laterally by actors in the private sector and civil society. This reorganisation of the role of the state is necessitated by the dispersal of resources between public and private organisations, the need for collective decision making between hierarchical levels and the obligation to include private actors in public policy making. It complicates the process of governance, as the exchange of information and the decision making processes which take

place between these actors not only follow hierarchical structures but can also take the more difficult-to-discern form of a network. The governance structures implemented by the interplay of different actors with multiple affiliations are akin to a series of arrangements and coalitions that vary in time and space. Whereas the governance of public affairs tends to be vertical, institutionalised and co-ordinated at the national level, governance relationships are more horizontal, informal and devolved at the local level.

The examination of cross-border public policy networks presented in Chapter 7 suggests that this form of multi-level governance is emerging in West Africa, where information and power networks involve actors with very different skills, although each region will have one dominant form of relationships. At the regional level around Lake Chad, for example, the policy network is mainly based on internal interactions within intergovernmental organisations, while internal relations between government officials are the preferred mode

Table 8.4
Number of mentions of the most strategic locations at the local level

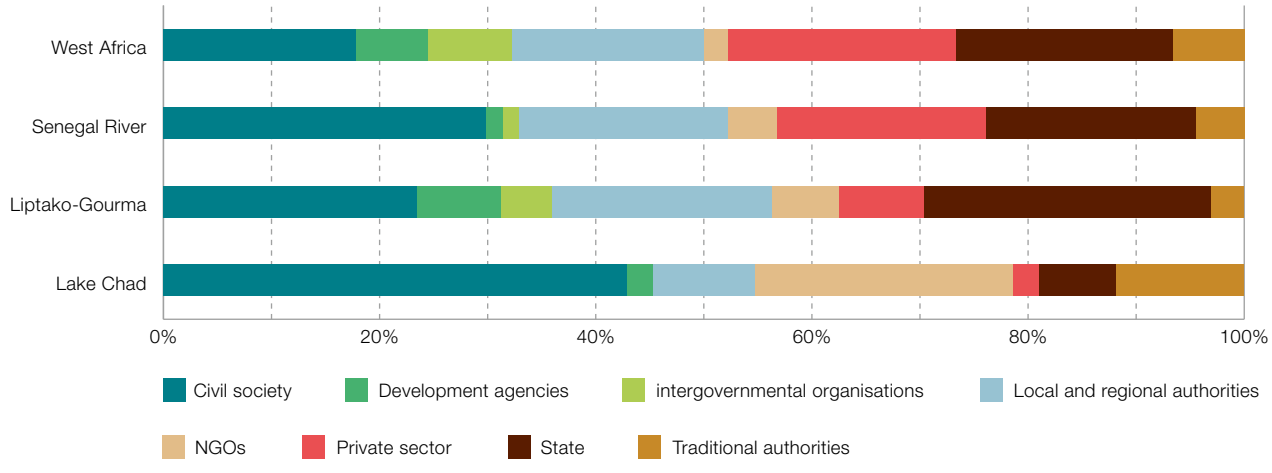
Senegal River	Mentions	Liptako-Gourma	Mentions	Lake Chad	Mentions
Bamako	28	Ouagadougou	18	N'Djamena	16
Dakar	28	Niamey	13	Abuja	11
Nouakchott	27	Dori	11	Niamey	11
Conakry	25	Bamako	10	Yaoundé	11
Kayes	5	Fada N'Gourma	4	Bangui	9
Ouagadougou	5	Téra	4	Tripoli	7
Ségou	5	Tillabéri	4	Diffa	2
Niamey	4	Gaya	3	Others	3
Sikasso	4	Malanville	3	**Total**	**70**
Saint-Louis	3	Abidjan	2		
Tominian	3	Abuja	2		
Abuja	2	Bobo Dioulasso	2		
Banfora	2	Korhogo	2		
Diama	2	N'Djamena	2		
Kédougou	2	Séba	2		
Nouna	2	Sikasso	2		
Rosso	2	Others	23		
Tambacounda	2	**Total**	**107**		
Others	16				
Total	**167**				

along the Senegal River and in Liptako-Gourma. The fact that representatives of non-governmental organisations (NGOs) and the private sector are relatively disconnected from these networks implies that certain actors could become more involved in cross-border co-operation. This is indeed what emerges from surveys of regional players, which show that the state, the private sector, local and regional authorities and civil society should all, to an almost equal degree, play a greater role in cross-border co-operation (Figure 8.3). At the local level, the most frequently mentioned actors are subnational authorities and the state in the Senegal River valley, and NGOs in the Lake Chad region. The private sector is only frequently mentioned in the Senegal River valley. Traditional authorities, which include chiefs and religious leaders, as well as development agencies, were not identified by the respondents as actors which ought to be more closely involved in cross-border co-operation.

Among the state bodies which are cited are line ministries, technical departments, security forces (e.g. customs, police, gendarmerie, military and intelligence), chambers of commerce, industry, handicrafts, agriculture and universities. These bodies have the regulatory, legal and financial authority that gives states such a vital role in cross-border co-operation. To quote one representative of a Western development agency based in Addis Ababa: "Strategic decisions are taken at the national level because those are the people who enter into agreements and decide that police officers at the border need training or children in border regions can gain access to schools. So as sovereign bodies they need to take action and decide what they want." State-level financial investment in cross-border initiatives remains insufficient, however, according to many respondents who point out that many regional organisations depend heavily on these resources. The executive secretary of one of the region's co-operation structures reports: "The major challenge is funding. In the last couple of years, it has not been very easy to get the contribution of member states that will allow us to fully execute our planned programmes." This issue is particularly crucial in the Lake Chad region because of the political instability that has been troubling Libya and the Central African Republic for several years, since both countries contribute to the LCBC.

These concerns raise the more general question of cross-border funding and whether it should be the business of states, regional organisations or international fundraisers. An AU representative puts it as follows: "At the state, regional and international levels, the mechanism of funding cross-border activities doesn't exist. States are reluctant to fund activities that benefit several states, and ECOWAS has no mechanism for distribution

Figure 8.3
Actors needing to play a greater role in cross-border co-operation by region



to the member states jointly … ECOWAS integration funds are more or less about intra-state activities."

Following the launch of the ECOWAS Cross-Border Initiatives Programme (CIP) (now known as the Cross-Border Co-operation Programme [CBCP]), a number of cross-border initiatives have received greater funding, notably from the Peace Fund. UEMOA's Council of Local Governments (CCT) has brought fresh support to strengthen subregional decentralisation. As an example, its investment programme located in the IIR Sahel area (the border area between Burkina Faso, Mali and Niger) supports local border authorities. Funded by the Government of Luxembourg, the Local Cross-Border Initiative (LOBI) project covers eight UEMOA member states, providing for the establishment of institutional and financial tools to ensure that investments are equitable and respond to the needs of border communities such as the SKBo and IIR Sahel areas. Cross-border co-operation was taken up for the first time in the Regional Indicative Programme (RIP) under the tenth European Development Fund (EDF), making it possible for two neighbouring states to align their cross-border priorities as expressed through the National Indicative Programme (NIP). Whilst this list of initiatives is not exhaustive, there is a real lack of financial support for cross-border projects at the regional and subregional levels, and many obstacles remain to ensuring the sustainability of existing mechanisms at the legislative, technical, financial and political levels. Furthermore, the creation of regional funds to finance cross-border co-operation is complicated by the fact that the funds set up for regional co-operation are not designed to finance local activities and the funds administered by national authorities for the purpose of financing local activities are limited to the national territory (AU, 2007). This also requires the implementation of regulatory requirements that can accurately assess the financial feasibility and logistical viability of cross-border projects within national and regional legislation contexts.

In addition, technical and financial partners still face real difficulties when working on cross-border projects. Certain attempts to launch twin programmes on both sides of a border have been hampered by a lack of coherence between national funds and programmes or between funds operated by the same co-operation agency based in two neighbouring countries. These constraints can be attributed as much to the different policies and priorities of each country as well as to the relatively underdeveloped dialogue and planning processes that exist between stakeholders. The limited financial instruments available from both states and technical and financial partners (TFP) often go hand-in-hand with a lack of support in the pre-funding of these activities.

The need for greater direct private sector involvement in the construction of border regions is also a leitmotif for the representatives of regional organisations. One ECOWAS civil servant based in Abuja says: "We need to involve the professional organisations. Nobody more than them can bring practical rules and instruments to facilitate cross-border mechanisms… I am talking about the producers and traders along the value chains... If they are not part of our policies, we will never make any impact." It is frequently observed that traders, farmers, fishermen, and their respective associations harbour knowledge of cross-border dynamics that remains underutilised in regional policies. Because of strong demographic growth, these actors are increasingly involved in supplying the region's towns and cities with agricultural and manufactured products. One representative of a governmental structure working in food safety in Benin has the following to say: "We should better involve these big business people who are now developing cross-border trade. Yoruba and Ibo traders go through their networks, they are settled everywhere and should be involved in strategic decisions." This statement echoes the call of earlier studies, which reported the low investment of private actors in the formal process of regional integration (Terpend, 2006).

The way in which the private sector could be consulted and involved in cross-border development policies is a delicate question, insofar as certain production and commercialisation activities also thrive on the failings of regional integration (Chapter 3). The solution most often put forward by representatives of government and intergovernmental structures is the formalisation of the informal, whereby private actors adopt transparent accounting

methods, declare their income, pay taxes and conduct their business in accordance with the rules of international trade. An ECOWAS civil servant specialised in customs comments: "We need to see how to incorporate informal traders and make them use the right way. If they are involved, they can help co-operation by fighting against smuggling". The major programmes currently aiming to develop regional transport corridors, build adjacent border posts and report acts of corruption are aiming to do just this: persuade those involved in smuggling and/or the black market to adopt the practices of the formal economy.

A number of actors point out that the current challenges in cross-border co-operation are caused not so much by the absence of certain kinds of organisations but by their lack of co-ordination. The most frequent comment concerning intergovernmental organisations is related to the obstacles in exchanging information with national governments. One expert in agricultural policy working for a Western co-operation agency reports that government representatives responsible for overseeing the application of regional regulations are sometimes the last to be informed of decisions made concerning regional policies: "ECOWAS has a lot of policies and laws, but there is a lack of implementation. Sometimes decisions taken by state representatives are not communicated properly to police and customs officers, and they block border posts for 2 or 3 days." These challenges are a major concern for the representatives of regional organisations, which strive to "domesticate" regional policies by ensuring that they are properly applied at the local level. A senior cross-border co-operation official based in Abuja says: "ECOWAS is putting together a common policy of facilitating action across various sectors where policies have already been adopted. This is to ensure that these policies are domesticated in the region and that member states stick to the decisions adopted at the regional level."

Communication between regional organisations and the principal beneficiaries of free-movement policies on the ground poses another problem. According to the secretary general of an NGO working in local development, appropriating regional policies at the local level requires the crafting of a more targeted message: "If we should address the issue of cross-border co-operation, we should have a narrative of the advantage for people of cross-border co-operation. Most of the time this narrative is not there and people even doubt the advantage of free movement." The "cross-border area" concept introduced by Malian president Alpha Oumar Konaré in 2002 to promote the existence of border regions that share common physical and human characteristics (Diarrah, 2002) is in many respects the cornerstone on which this regional message has been built. This concept is used today by ECOWAS (2005) to promote local integration, and the AU (2007: 6) explicitly mentions the "geographical areas straddling the border lines of two or more neighbouring states and inhabited by people linked by socio-economic and cultural relations" in its programme dedicated to cross-border co-operation.

More generally, the focus which the cross-border area concept puts on local actors recalls the *borderlands* concept that has been integrated into the border studies discipline since Martinez's (1994) work on communities living in the border areas between the United States and Mexico (Box 5.1). The head of an African NGO states: "[Alpha Oumar] Konaré said once that borders should be transformed from barriers to bridges, and he defined such cross-border areas as regions where we can have different equipment in different territories across borders, so that we eliminate in the spirit of people the presence of this colonising legacy." Given this remark, it is hardly surprising that the inhabitants and civil society of border regions should be more closely integrated in cross-border co-operation, especially local associations, women and young people. A senior civil servant in the AU, based in Addis Ababa, for example, asserts: "For cross-border to succeed you must rely on the communities at the grassroots… They are immediately impacted by policies… The communities organise themselves, they have local agreements, they promote peace and co-habitation, they are doing everything together." The solidarity networks that unite the populations separated by borders bolster the role of civil society at both the regional and local levels.

Box 8.1
Securing transborder mobility: The BRACED project

In the Sahel where recurring droughts are the norm and localised droughts are an annual phenomenon, mobility forms a vital strategy to utilise and optimise scattered and unpredictable resources. Post-drought studies have unequivocally shown that transborder mobility of livestock is crucial to the resilience of pastoral and agro-pastoral communities to climate variability and extremes. Well-equipped and secure livestock corridors, which facilitate these mobile strategies and transborder flows, are therefore vital to the ability of communities to cope with climate extremes, enabling animals to reach vital rural and urban livestock markets.

Against this background, the Acting for Life (AFL) project Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED) has been working since 2015 to strengthen the resilience of pastoral and agro-pastoral communities in West Africa. The project, funded by the UK Department for International Development (DFID) and co-financed by the EU and AFL for a total of EUR 9.6 million until December 2017, promotes transborder livestock mobility across the Sahel by securing strategic transborder corridors. It provides key services and enables communities and stakeholders to lobby for livestock mobility and for appropriate policy making at local, national and regional (ECOWAS) levels.

During the first 15 months of implementation the project secured more than 1 640 km of strategic transborder corridors and provided more than 3 400 tonnes of livestock fodder across two transnational territories interconnecting Mali, Mauritania and Senegal, and Burkina Faso, Mali and Niger. These zones capture major seasonal movements of transhumant pastoralists and agro-pastoralists accessing grazing resources and markets, and refuge areas during droughts. The secured livestock corridors act as both a circulatory system conveying flows of transhumant herders and also trade routes for trekking with livestock.

Fundamental challenges to cross-border mobility have been transborder dialogue between local governments and the inter-co-operation between municipalities for securing livestock corridors which is often limited and fragmented. To address these issues, the AFL BRACED project works with local authorities in decentralised and devolved government mechanisms to ensure actions are made within existing legislative contexts. AFL BRACED has developed an approach in which regional councils are teamed up with local project partners to provide key social and technical engineering expertise to local governments, based on formal contractual agreements. To complement this approach a new training module on livestock mobility in West Africa is in development, which will highlight the issues faced by cross-border mobility, particularly in regards to movement between the Sahel and coastal countries.

Local and regional authorities represent another kind of actor that could, according to the opinions expressed by the actors in cross-border co-operation, engage more closely with cross-border issues, given that most West African states have implemented administrative and political decentralisation policies since the 1990s. A Nigerien civil servant from the Ministry of Hydraulics and Sanitation, for example, says: "With the decentralisation process underway in various countries, neighbouring territorial authorities should be more involved in cross-border co-operation. They are the best placed to understand the concerns of the people on either side of the borders." In West Africa, decentralisation aims to support local governance so as to channel civil engagement into national unification, increase democratisation and achieve a better use of resources and public services. The creation of new levels of administration varies substantially between countries, and does not always lead to a real transfer of

resources and authority to local and regional bodies. In Niger, for example, decentralisation led to the creation of urban communities from larger agglomerations, urban districts from cities, and rural districts from *cantons*.

The involvement of local and regional authorities is perceived as a way to legitimise regional integration policies designed by civil servants in intergovernmental organisations. Seen from Abuja or Addis Ababa, greater involvement of subnational authorities helps to implement the subsidiarity principle, inspired by Europe, which recommends that decisions be taken at the most efficient level of the administration and as close as possible to the people. Until now, however, local and regional authorities have been largely sidelined from policies designed to promote cross-border co-operation, whereas in other parts of the world genuine local and/or metropolitan governance has been built up on the basis of original legal instruments, such as the European Grouping of Territorial Co-operation (EGTC). The existence of small and medium-sized cities that are particularly affected by cross-border dynamics should inspire a re-evaluation of the potential of local and regional authorities and encourage the emergence of greater inclusive governance.

CONFLATING THE THREE DIMENSIONS OF CROSS-BORDER CO-OPERATION

Cross-border co-operation is a complex integration process which this study has broken down into three dimensions, with analysis focusing on the potential of the regions, the structure of the networks linking actors and the political vision underpinning institutional initiatives. This section sets out to combine these three fundamental dimensions – which until now have been examined separately – in order to deliver an overview of co-operation dynamics in place in cross-border areas. This task of linking highly disparate indicators has been made necessary by the fact that policies reflecting the vision of cross-border co-operation should be based on both an appraisal of the regions' characteristics and precise knowledge of the existing network of social actors.

The mapping carried out thus far provides a means of comparing the three dimensions of cross-border co-operation, as the maps can be used to assess the regional variations that can inform cross-border policies. The purpose of this process is to spatialise development at the most appropriate scale according to the phenomena observed. A certain number of dynamics such as long-distance trade and the governance networks of intergovernmental bodies do have a genuinely regional dimension, in that they cover the whole of West Africa. Other phenomena specific to cross-border co-operation, such as accessibility to border markets and local governance, are better observed at the scale of micro-regions. Indeed, there are highly visible internal differences within West Africa which, it should not be forgotten, has a surface area of 7.85 million square kilometres (km^2). This makes it as large as the contiguous United States albeit with 18 constituent countries.

Cross-border co-operation policies are considered fully integrated when they combine the three dimensions of cross-border co-operation. By leveraging the potential of each region, they help foster policy networks based on a common vision which transcends the national framework. This situation, which characterises western Mali, the SKBo triangle, Liptako-Gourma, Dendi, the Lagos-Accra conurbation and northern Ghana, is nevertheless relatively uncommon in West Africa, where considerable differences can sometimes be seen between the potential, the current state and the future vision of cross-border co-operation. Of the nine theoretical possibilities generated by cross-referencing the three dimensions of cross-border co-operation, three present differences capable of informing the place-based policies implemented in the region.

Leveraging untapped co-operation potential

The first situation concerns regions which have potentially favourable conditions for co-operation but where local actors are not particularly well connected to governance networks. This situation, which reflects

untapped potential, is relatively rare in West Africa. More than 50 years after the first sectoral regional organisations were established, most of the high-potential regions have attracted institutional initiatives designed to encourage cross-border co-operation. This is notably the case in the Senegal River valley, where the actors occupy a relatively central position in regional governance networks through dense ties linking them to partners in regional centres in Dakar, Nouakchott and Bamako and, more broadly, to other West African decision making centres (Map 7.2).

Liptako-Gourma also appears to be an area with potential that is being realised by cross-border governance networks, in particular along the border between Niger and Burkina Faso (Map 7.3), with Ouagadougou and Niamey acting as relays to regional organisations. This region is also characterised by a large number of local initiatives and a dense network of actors working for numerous small and medium-sized decision-making centres. This polycentrism, harnessed to the very real dynamism of the municipalities, can be considered as beneficial for the implementation of bottom-up integration programmes, especially in livestock rearing, which is one of the region's main resources. (Box 8.1)

Around Lake Chad, the correlation of integration potential with co-operation networks is less obvious than elsewhere. The region may be home to the oldest river basin organisation in Africa, but it does not have many connections to regional governance networks (Map 7.1). At the local level, the focus of the governance network on LCBC actors, many of whom are based in N'Djamena (Map 7.4), does little to promote the border areas, especially between Chad and Cameroon. There is an even greater disparity between co-operation potential and regional governance networks in Gambia and across the whole of Liberia, Sierra Leone, Côte d'Ivoire and southern Guinea. Despite the fact that each one of these regions has an intergovernmental body potentially capable of managing cross-border co-operation at the local level – the Gambia River Basin Organisation (OMVG) and the Mano River Union (MRU) – their involvement in West African networks remains marginal. The capital cities and major towns in these four countries do not host any actors with a particularly central role in co-operation or any regional institutions to rival the ones in Ouagadougou and Abuja.

Improving co-ordination within networks

The second situation concerns regions which are recognised as being priorities for cross-border co-operation, but which have poorly developed local and regional governance networks. This situation requires tighter co-ordination within the local and regional governance networks in order to remove any institutional blockages. As the study revealed, the existence of institutional structures did not necessarily guarantee the proper functioning of cross-border co-operation. These structures must also be capable of encouraging the exchange of information and good practices across national borders and between partners of different natures.

In this respect, the network analysis carried out in West Africa suggests first and foremost that the general structure of networks heavily influences the exchange of information and power between actors. In this respect, decentralised networks are particularly suited to the constraints of cross-border co-operation, which requires constant co-ordination between actors with highly diverse skills. At the individual level, network analysis also shows that regional integration is facilitated by both the involvement of co-operation actors in dense groups of partners (embeddedness) and the construction of ties which extend beyond the local level (brokerage). Embeddedness strengthens trust between like-minded actors, reduces risks related to project implementation and helps border regions to develop a common vision, while brokerage gives them access to new resources in other border regions or at the level of regional organisations. The most central actors are therefore those who combine embeddedness and brokerage, which is also the conclusion reached by more qualitative studies on the links between social capital, poverty and development (Narayan, 1999; Woolcock and Narayan, 2000).

The case of northern Nigeria is particularly interesting in that the Hausaland has not become a highly institutionalised cross-border area, despite being recognised as one of the

top priorities in the region. This region, often called K²M in reference to the three main cities of Kano, Katsina and Maradi, was one of the pilot sites for the West African Borders and Integration Initiative (WABI) to document the cross-border integration process and promote co-operation in the mid-2000s (SWAC/OECD, 2006; Abdoul and Trémolières, 2007; Abdoul, Dahou and Trémolières, 2007). Hausaland, an area which straddles Nigeria and Niger and covers a land area of 83000 km² with over 50 million inhabitants, is one of the oldest trade corridors. It has connected the Gulf of Guinea to North Africa and the Middle East for centuries. With a dense urban network organised around the city of Kano, it illustrates a polarisation of Niger's economy by Nigeria along the length of the 1500 km border. The intensive trade that thrives here is in livestock from Niger, cereals and manufactured products from Nigeria, and products re-exported to Nigeria.

K²M was on the original ECOWAS agenda for the implementation of the Cross-Border Co-operation Programme (CBCP). Initial work carried out by WABI focused on the relationships between improving border crossings for cereal and livestock markets and food security following the serious food crisis in 2005. Several institutions are involved in this process: CILSS, the Famine Early Warning Systems Network (FEWS NET), the United Nations Office for the Co-ordination of Human Affairs (OCHA), the Sahel and West Africa Club (SWAC), the United Nations Development Programme (UNDP), the United Nations International Children's Emergency Fund (UNICEF), the Network Information Systems Markets of West Africa (WAMIS-NET), the World Food Programme (WFP), and the Nigeria-Niger Joint Commission for Co-operation (NNJC). The K²M initiative was launched under the authority of this commission. The bi-national legal and governance framework of the NNJC gives it the perfect status for heading a policy committee containing representatives of the national boundary commissions of both Niger and Nigeria. The NNJC therefore has a key policy role to play in moderating platforms which are intended to be the privileged forum for the expression of local initiatives (both public and private).

More recently, support from the World Bank led to the implementation of the Competitiveness and Growth Support Project, designed to create a master plan for developing and adapting the Kano-Katsina-Maradi corridor. The focus of lenders on transport infrastructures, trade circuits and markets suggests that cross-border co-operation in this region is based on an integration model which gives priority to socio-economic interactions. This is in sharp contrast therefore with the heavily institutionalised model in place in Liptako-Gourma and the Lake Chad basin. This juxtaposition of very different integration models is characteristic of many West African countries. Sectoral regional organisations created in these countries in the 1960s now work alongside more recent and less institutionalised initiatives. These were designed primarily to reduce the frictions that hinder regional trade through the creation of adjacent border posts, the reinstatement of transport corridors, and the removal of the informal controls and practices that had led to a fragmentation of the regional area, proving particularly costly for cross-border economic operators in West Africa (Chapter 2).

Reconciling political priorities

Political trade-offs are the most likely explanation for a failure to prioritise regions exhibiting potentially favourable conditions for cross-border co-operation. This situation is the most restrictive in terms of cross-border development, as the construction of micro-regions presupposes that local and regional authorities are sufficiently autonomous in terms of resources and power to make their interests heard by central government. Without strong regions, it is difficult to talk of regional construction.

Situations in which the development of certain border regions is perceived as being of secondary importance reflect balances in the political relationships between national elites and local and regional authorities, which differ according to the extent to which states are decentralised. Heavily centralised states tend to focus their investments on a small number of urban regions, in particular around capital cities, without necessarily implementing regional policies likely to encourage cross-border co-operation. This situation can persist until decentralisation results in an actual

transfer of resources and power to local and regional authorities. This is notably the case in the region covering southern Guinea, the border between Liberia and Sierra Leone, and western Côte d'Ivoire, where the resources and performances of the local authorities are below the regional average (UCLG [United Cities and Local Governments], The Cities Alliance, 2015). In this region, co-operation potential is largely overlooked by most of the actors involved in co-operation (Map 7.1), despite the fact that it was the epicentre of the Ebola virus disease epidemic declared between December 2013 and November 2015. The areas worst affected by this outbreak were in the border regions of southern Guinea (Gueckedou, Kissidougou, Macenta, Nzerekore), eastern Sierra Leone (Kailahun) and northern Liberia (Lofa, Gbarpolu). This provides a clear illustration of both the vibrancy of the social and economic interactions that characterise the region and the need to develop a common vision. As a senior ECOWAS official commented, the region deserves better treatment: "The region has also been through civil unrest and war and is countering a major health concern, the health epidemic of Ebola. We had thought that this is a zone that should be given priority attention".

For federal states or states which have pursued decentralisation in order to strengthen local and regional authorities, the issue is not so much about determining whether investments should be distributed on a fairer geographic basis but rather about prioritising those which can actually be funded out of the public financing available. This is the case in eastern Nigeria, where its high co-operation potential has not resulted in political priority status due to the fact that most of the co-operation resources allocated by the federal state and its regions are focused around Lake Chad. This is also the case along the northern border between Togo and Benin (high co-operation potential), where the Lomé-Cotonou conurbation attracts the bulk of national and international investments.

The pursuit of integration in Africa and West Africa needs to be reinforced through greater co-operation, particularly between border areas. Each border segment and micro-region possesses its own unique dynamic whereby cross-border co-operation occurs on different temporal and spatial levels, with varying degrees of formality. However, the decentralisation process, as well as improvements in frameworks for border demarcation and the existence of a convention on cross-border co-operation present favourable conditions for the effective management of greater regional integration.

From an administrative perspective, several types of co-operation mechanisms exist, the most prominent being administrative border co-operation and decentralised co-operation. Administrative co-operation is practiced by border authorities at different levels of the administration, taking place through regular meetings between the administrative authorities of two countries, for example, or through joint structures in charge of border and cross-border co-operation issues or twinning arrangements between cities. Decentralised co-operation is based upon the participation of diverse players such as local authorities, economic operators and civil society associations and organisations. It requires strong political will, given the institutional differences that may exist between states and the potential of border areas. By transferring resources and responsibilities to local and regional levels, decentralised co-operation would allow border communities to experiment with new approaches to local development initiatives and would facilitate improvements in the effectiveness of intercommunal cross-border co-operation policy.

From a legal perspective, greater cross-border co-operation in West Africa also requires that certain prerequisite steps are taken. The AU Convention defines cross-border co-operation as "any act or policy aimed at promoting and strengthening good-neighbourly relations between border populations, territorial communities and administrations or other stakeholders within the jurisdiction, including the conclusion of agreements and arrangements useful for this purpose." The term "territorial communities and authorities" refers to the domestic laws of African states, as well as to the areas and procedures of co-operation (ex. applicable law, the legal form of co-operation, etc.). International texts serve to define the basic principles of cross-border co-operation, and it is then up to domestic law to put these principles into practice. In order to become operational in the field, these texts must be

signed and ratified by member states and then transposed into domestic law in a consistent manner. In this respect, bilateral agreements should be signed on a border-to-border basis in order to outline the practical procedures and applicable framework for cross-border co-operation. Where such conventions exist, it will be necessary to ensure that regional and national texts are consistent with one other. Such bilateral agreements could serve to define the legal framework for cross-border co-operation between local authorities, provide legal certainty and greater transparency, and ensure that laws on both sides of a border are consistent (SWAC/OECD, 2007).

Furthermore, the momentum for regional integration can be accelerated according to the motivation and interests of the communities that co-operate across borders. Given that integration still faces many challenges, public policy should aim to push forward legislation, end corrupt practices that hinder cross-border flows of goods and people, and develop joint projects of interest to border populations. Irrespective of the legislative mechanisms that are developed, cross-border policies are faced with the challenge of providing a sufficiently flexible framework that draws upon the border potential and informal component of each region. As this report demonstrates, such place-based policies are enabled by a better understanding of the governance networks in place which shape cross-border co-operation in West Africa and which help connect it to the rest of the globalised world.

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West African Studies

Cross-border Co-operation and Policy Networks in West Africa

This publication examines how policy actors involved in cross-border co-operation contribute to the regional integration process in West Africa. It uses a pioneering methodology, known as social network analysis, to visualise the formal and informal relationships between actors involved in cross-border policy networks, showing that borders have notable and diverse impacts on exchanges of information and the relative power of networks. The report then analyses a range of regional indicators of co-operation potential, visually demonstrating that borders can also affect the ability of sub-regions within West Africa to develop cross-border initiatives in a number of ways. Combining these two analyses with the perceptions of regional policy makers as to which border areas they consider as priorities for regional integration, the publication provides the analytical foundations for more effective place-based policies that can enhance cross-border co-operation in West Africa.

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