

A practical guide to legal and financial levers

Border cities and climate change

JULY 2020 (REVISED EDITION)



Introduction

Promoting the resilience of border cities to climate change

Objective

Africa played an active role in the COP21 negotiations, emphasising the importance of cities at the forefront of climate resilience and the need for mechanisms to finance adaptation to climate change. Many opportunities exist for fostering cross-border co-operation between local authorities. However, given the lack of suitable legislation and funding, local authorities do not always have the means to carry out cross-border projects and the ability to directly access climate finance.

The Secretariat continued its work to better understand the environmental constraints that affect cities in cross-border areas. The work reviews international funding sources. It assesses the legal, financial and governance options that could help local authorities carry out cross-border projects. The Secretariat completed two case studies in Dori (Burkina Faso) – Tera (Niger), Gaya (Benin) – Malanville (Niger) and one ongoing study along the Lago (Nigeria) – Abidjan (Cote d’Ivoire) corridor. This work feeds into advocacy efforts following the Paris Agreement to provide cities and local authorities with access to climate finance, within the framework of the Climate Task Force of the United Cities and Local Governments of Africa (UCLG Africa)

Impact

- Local authorities and cities will be better able to assert their role in formulating climate risk mitigation policies.
- Improved knowledge of climate finance for cross-border bodies, as well as of legal levers and financial support for border co-operation.

Acknowledgements

The work has been carried out in collaboration with the Transfrontier Operational Mission (MOT) and draws on its past experience collaborating with the African Union Border Programme, SWAC Members, including regional organisations, UCLG Africa, Climate Chance and Olivier J. Walther (Sahel Research Group, University of Florida).

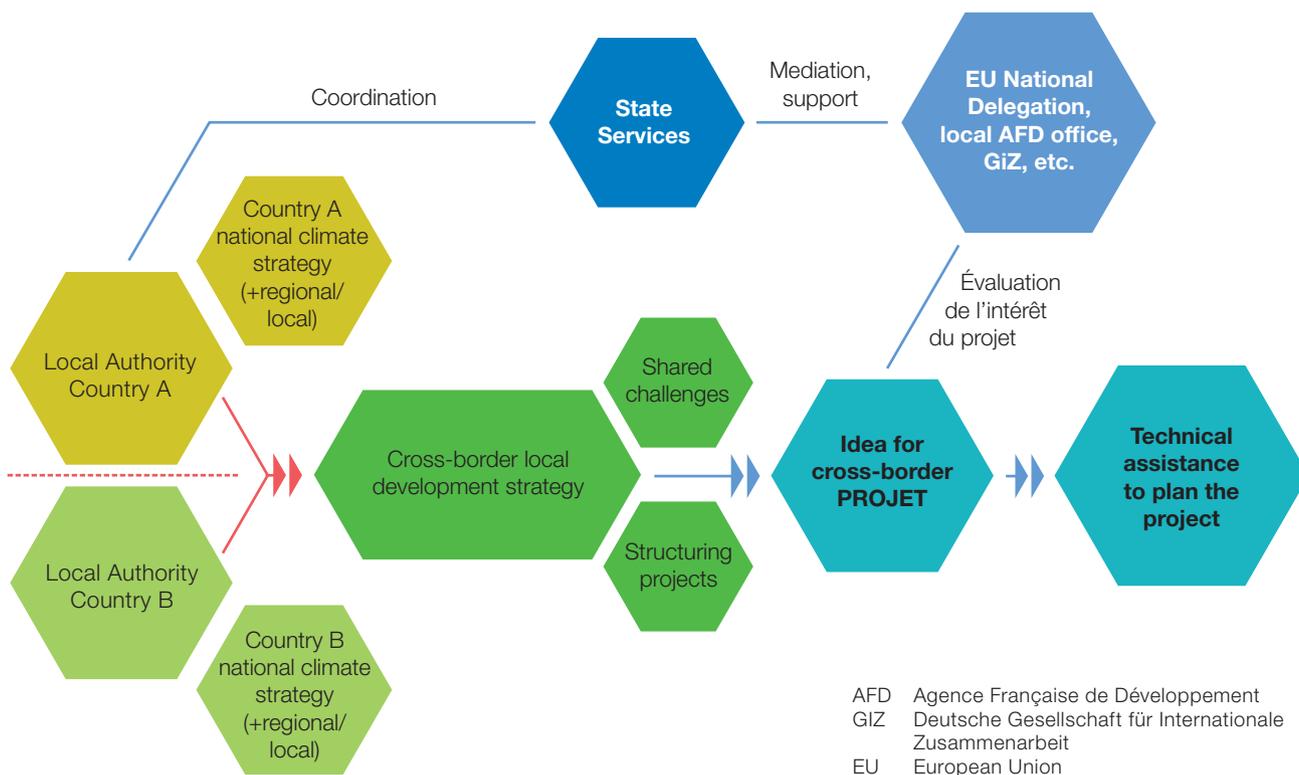
Border cities and climate change

The process

A cross-border climate adaptation project is implemented in a series of steps. This process is the same for all of the various stakeholders, including those who are already at a stage in which co-operation is underway and can therefore skip the steps that have already taken place.

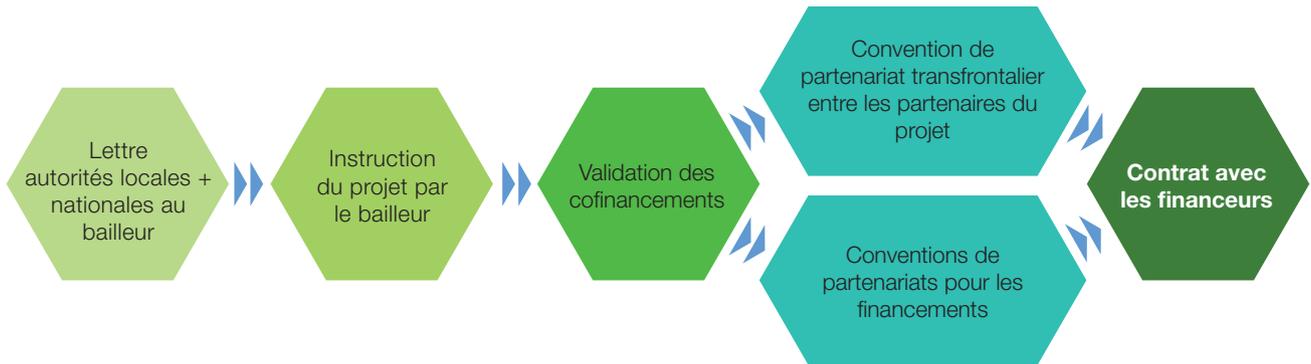
Phase 1

From inception to planning a cross-border project



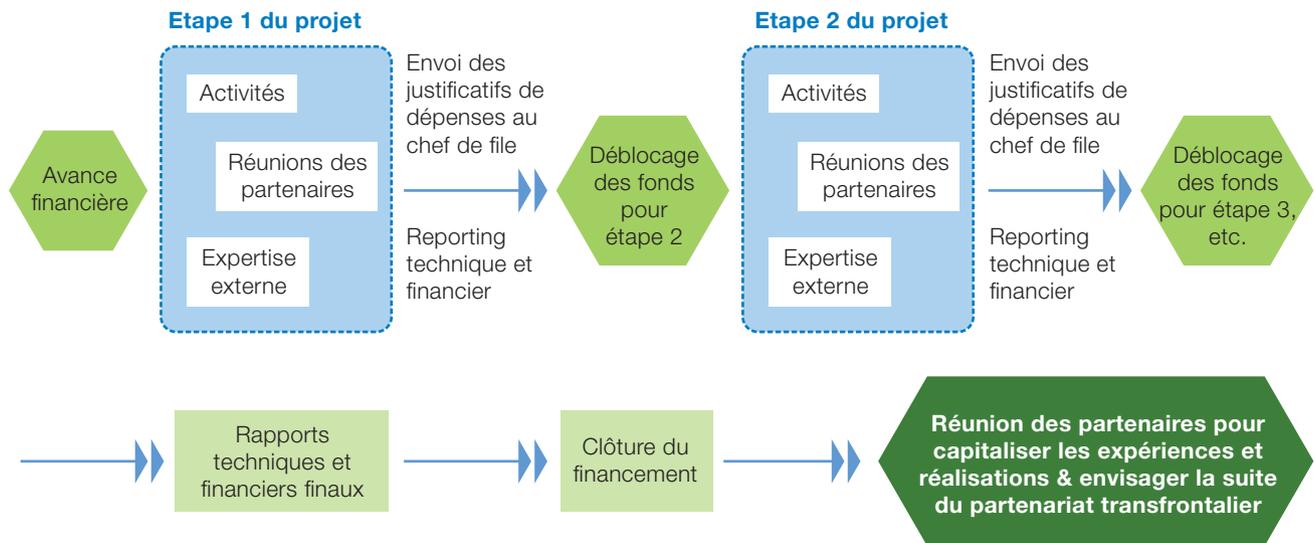
Phase 2

Contracting between partners and with financiers



Phase 3

The setting up of a cross-border project



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Establishing a local and national climate change strategy

The drafting of climate mitigation and adaptation strategies at the national level is recommended in the United Nations (UN) Conference of the Parties (COP) framework and supported by the [National Adaptation Plan \(NAP\)](#) process for Least Developed Countries (LDCs). The objective is to support country risk assessments related to or reinforced by climate change and to develop an action plan to reduce vulnerabilities.

National Adaptation Plans by country

West African country	Have a national climate change strategy?	Have a National Climate Change Action Plan (NCCAP)?	Have a National Adaptation Programme of Action (NAPA) for climate change?	Examples of territorial climate change strategies
Benin	Yes more info	Yes more info	Yes more info	
Burkina Faso	Yes more info	Yes more info	Yes more info	
Côte d'Ivoire	Yes more info	Yes more info	Yes	
Ghana		Yes more info	Yes more info	
Mali	Yes more info	Yes more info	Yes more info	An adaptation support programme for the Mopti and Timbuktu regions, especially those which are vulnerable.
Mauritania	Yes	Yes more info	Yes more info	
Niger	Yes	Yes more info	Yes more info	
Nigeria	Yes more info	Yes more info	Yes	
Togo	Yes	Yes more info	Yes more info	
Senegal	Yes more info	Yes more info	Yes more info	Yes, Dakar Territorial Climate and Energy Plan.

Greater implication of local stakeholders can compensate for a shortcoming in national capacities and expertise to establish an accurate climate vulnerability analysis. Decentralising climate information at the regional and local level also helps identify risks and actions to be taken in border towns, which share the same risks with towns on the other side of the border. Establishing a reliable national climate change strategy and bringing it down to the local/regional level is the first step in identifying cross-border climate change adaptation issues that can foster cross-border projects.

According to the World Bank, investing in urban resilience strategies and projects can save on the cost of disasters and keep populations out of poverty ([read press release](#)). The [Guiding Principles for City Climate Action Planning](#) were

drawn up within the framework of a multi-stakeholder initiative led by UN-Habitat. More than 45 partners defined the principles to which city planning officials can refer to develop their climate strategies.

Adapt'Action Programme of the French Development Agency (AFD)

The Adapt'Action Programme supports “climate” capacity building and governance to implement the Nationally Determined Contributions (NDCs) for reductions in greenhouse gas emissions; integrating adaptation issues into sectoral public policies and setting up structural adaption projects/programmes. It supports the following actions:

- strengthen institutional processes, technical capacities and awareness-raising actions of stakeholders for greater engagement and implementation of the NDCs;
- improve climate vulnerability analysis;
- support the implementation of the NDCs into one or two sectoral policies according to their relevance;

- identify institutional reforms, the participation process of civil society to develop public policies, and institutional capacity needs;
- develop action and investment plans;
- finance feasibility and/or pre-feasibility studies of structural projects and programmes for the country;
- assist in identifying financing and financial partners (including AFD).

Source: <https://www.afd.fr/en/adaptation>

The production of local climate information is particularly important so that local and regional authorities can develop pertinent and coherent adaptation strategies based on territory-specific information. This includes taking into account microclimates and risks incurred locally by populations and economic stakeholders so that a territory does not undertake poorly adapted measures that , that could lead to greater risks.

In order to do this, technical and financial engineering capacities are needed to produce analyses that help develop local and regional strategies. A national or regional agency with expertise in territorial planning and sustainable development issues could support this methodology.

Africa 4 Climate

Update on the development of national and regional adaptation strategies in Benin

Africa4Climate is an AFD project that took place partly in Benin at the national level and at the decentralised level within the *Collines* region.

Expertise France along with the Group for Environment, Renewable Energies and Solidarity (GERES) and the *Groupement Intercommunal des Collines* (GIC) produced local climate information and trained municipal technical teams on development and climate issues and on techniques to restore degraded soil.

At the national level, the project consisted of developing a national adaptation strategy with the Minister of Environment of Benin to raise awareness of climate change among the population.

The GIC is an inter-communal service of shared technical support for the *Collines* region of which the financing (50% of its budget) provides various types of services for development planning. The other half of its financing came from the Picardie Region (France)¹. The *Hauts-de-France* region is no longer providing financial

support, which raises the issue of the sustainability of the service; although it has been extremely useful for the shared technical engineering that it offers the municipalities. The GIC has been around for about 20 years and is known locally. Its participation in the project is two-fold: firstly, to share its practical knowledge of decision makers and local stakeholders; and secondly to receive training from *Expertise France* in order to pass on this technical engineering capacity to the municipalities of the *Collines* region.

This project is particularly informative since it combines the transfer of expertise, technical engineering and decentralised co-operation, with the aim of creating local knowledge and strengthening the capacities of local stakeholders to lead bankable projects thereafter.

It also emphasises the importance of local structures like regional/national agencies that can provide technical expertise on territorial planning issues related to climate change issues.

Source: <https://www.afd.fr/fr/africa4climate-appui-la-definition-et-la-mise-en-oeuvre-de-politiques-de-developpement-plus-durables>

1 Interview with Nicolas Rossin, AFD Senior Climate Expert

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Border cities and climate change

Establish a cross-border local development strategy

Cross-border regions are living areas in which populations often share the same cultural and linguistic features, as well as specific needs for territorial development, which is particularly the case when a capital city is far from the border. Some of these specific needs are accessibility to basic services like health and education/training, facilitating trade in cross-border markets, territorial development and cross-border transport.

Mobilising local political and technical stakeholders to create partnerships around a cross-border territorial project is essential for concerted territorial development that does not negatively impact neighbouring countries (ex. flood control hydraulic structures on the Niger River) and that take into account population flows around infrastructure (markets and related services, health centres, etc.).

Once contact has been established between local authorities on both sides of the border around a joint project (ex. the project between Dori and Téra around access to water and sanitation infrastructures), co-operation sustainability is based on the development of a cross-border strategy for local development and integrated territorial development.

This type of approach is supported, inter alia, by UEMOA which has funded studies to support the drafting of Integrated Transboundary Development Schemes (ICDP/SATI) in several pilot zones.

UEMOA Integrated Transboundary Development Scheme

Several cross-border pilot zones are focused on (IIIRSahel, SKBo, Dendi Ganda, Wanian-Ouarokuy, Kobadah-Kobafini Basin) to draft territorial development strategies structured around cross-border development that help improve the economic and living conditions of cross-border region inhabitants.

Studies conducted with the support of external expertise identify shared needs and priority cross-border projects for integrated cross-border development.

ECOWAS' Regional Cross-border Cooperation Support Programme aims to provide technical and financial support to priority projects in nine pilot zones (see map).

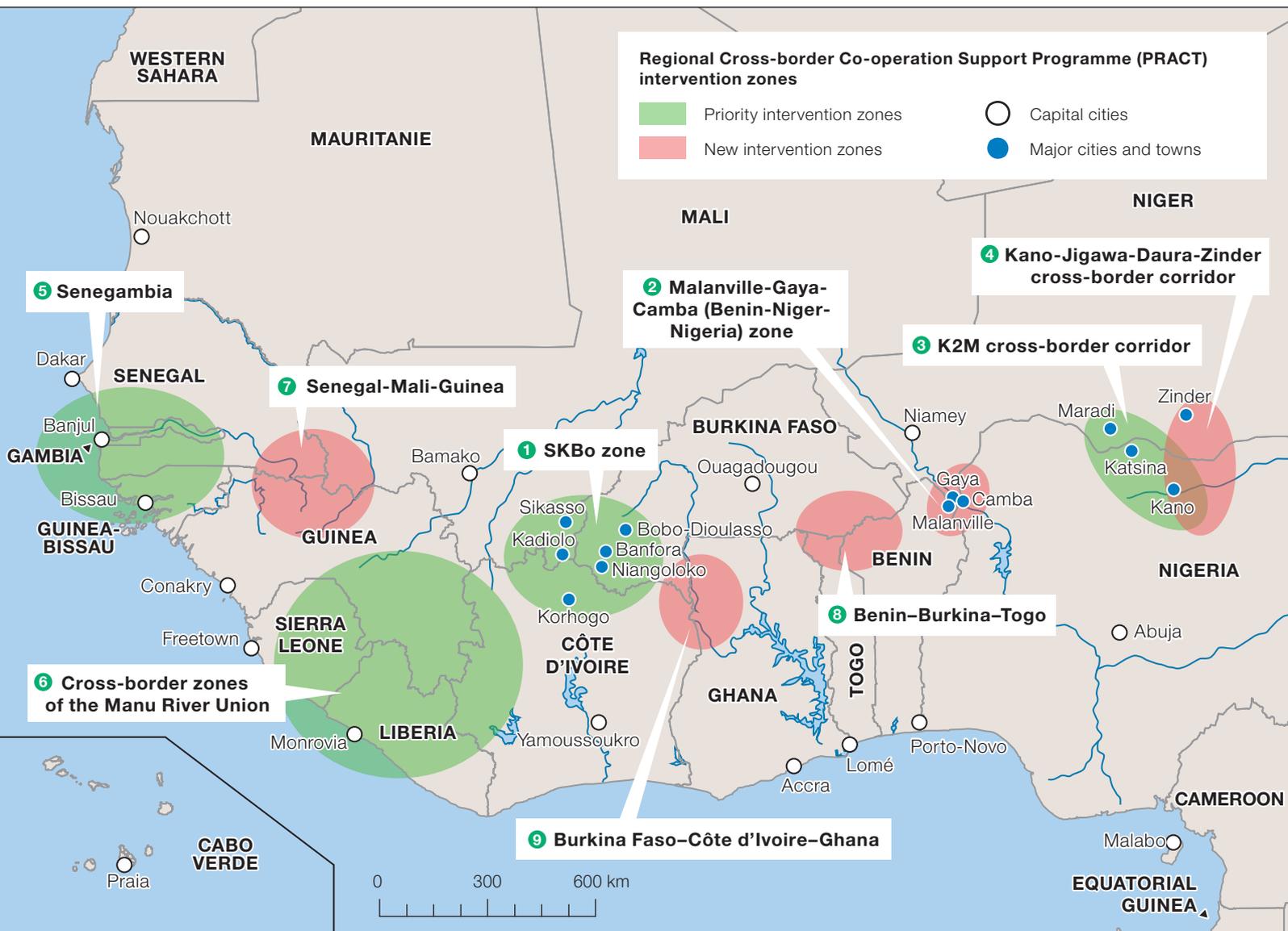
ECOWAS' Regional Cross-border Cooperation Support Programme

Following the Cross-border Initiatives Programme (CIP, 2006-08), it was confirmed that cross-border co-operation stakeholders needed financial and technical support. ECOWAS created the Regional Cross-border Cooperation Support Programme for 2017–21. This programme involves other development partners in the ECOWAS zone, and targets nine priority cross-border areas:

- 1 Sikasso–Korhogo–Bobo Dioulasso (SKBo – Mali–Côte d'Ivoire–Burkina Faso border)
- 2 Dendi Ganda (Benin–Niger–Nigeria border)
- 3 Kano–Katsina–Maradi Corridor (K2M – Niger–Nigeria border),
- 4 Kano–Jigawa–Daura–Zinder Corridor (Niger–Nigeria border)
- 5 Southern Senegambia (Gambia–Senegal–Guinea Bissau border)
- 6 Mano River Union (Guinea–Sierra Leone–Liberia–Côte d'Ivoire border)
- 7 Kénieba–Saraya–Maali Zone (KESAMA – Mali–Senegal–Guinea)
- 8 Benin–Burkina Faso–Togo border (BBT)
- 9 Burkina Faso–Côte d'Ivoire–Ghana border

Map 1

ECOWAS Regional Cross-Border Co-operation Support Programme intervention zones



Source: ECOWAS programme document

In 2014, the African Union Border Programme (AUBP) submitted the Convention on Cross-border Co-operation to the Heads of State Summit. Although signed, ratification is not yet effective in most of the countries.

The African Union Border Programme (AUBP) (lire note de synthèse)

Signed in 2014, the African Union Convention on Cross-border Co-operation aims to prevent and resolve conflicts related to border delimitation in Africa, by settling tensions peacefully and through successful regional and continental integration.

The AUBP contributes, in operational terms, to:

- Facilitating and supporting the delimitation and demarcation of African borders where this has not yet been carried out;

- building state capacities to manage borders including the development of specialised teaching and research programmes;
- strengthening the integration process within the framework of the Regional Economic Communities (REC), in particular;
- developing local cross-border co-operation within the framework of REC and other regional integration initiatives.

Source: <http://www.peaceau.org/en/article/african-union-border-programme-aubp-uniting-and-integrating-africa-through-peaceful-open-and-prosperous-borders>

In conjunction with national and regional/local climate strategies, cross-border local development strategies can help identify development projects that contribute to strengthening the resilience of territories, including in relation to climate change.

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Setting up a cross-border project

The setting up of the project itself, within the framework of a call for projects, or in order to be submitted to the evaluation of national (state services), regional (ECOWAS, UEMOA, African Development Bank) and international funders, must undergo rigorous strategic thinking to consider and anticipate the needs and risks at each stage of the project.

The main suggested steps are:

1. Define precisely the scope of the project

- ✓ Define the objectives of the cross-border project

Example:

- The construction, equipment and establishment of the management structure of a cross-border health centre;
 - the organisation of study tours/experience sharing among agriculture stakeholders;
 - the opening up of access routes to a health centre.
- ✓ Define the criteria for selecting the cross-border project
 - ✓ Define the project's target audience: Local authorities? Populations? Professionals?
 - ✓ List the local authority members of the cross-border area

2. Define precisely the project's content and resources

- ✓ Define the actions to achieve during the project
- ✓ Define the human resources to be involved in the project: local authority staff, state civil servants, staff of technical and financial partners (TFP)
- ✓ Where appropriate, define the division of labour among the local authorities
- ✓ Define the material resources to mobilise: local, transportation, computers, telephones, internet?
- ✓ Define the financial resources to mobilise. Who will finance the project (local authorities, states, donors)? Explore the opportunities for public/private partnerships.

3. Evaluate project costs in detail and envisage possible external funding

- ✓ Establish a provisional budget to carry out the project
The provisional budget is a first step that, depending on the project, can be completed by a feasibility study and will specify the various line items expected in terms of revenue and expenditure. The costs should be broken down into major categories of expenditure, which are in turn divided into expenditure line items:

Investment::

- Construction, renovation (related to the project team office)
- Equipment (computers, other useful material)
- Other investments

Operation:

- Costs to co-ordinate the project (staff costs related to co-ordinating the project)
- Staff costs apart from co-ordination (staff recruited to carry out the project)
- Travel expenses, accommodation and meals
- Documentation costs (and translation)
- Communication and promotion costs (brochures, website)
- Meetings, conferences and seminar costs
- Other costs (consultant fees, feasibility studies, capacity building, etc.)

Revenue generated by the project (to deduct from the budget)

Any income from the use of the project (example: costs of using a cross-border slaughterhouse)

- ✓ Establish a financing plan that sets out all of the available external financing for the project (local authorities, states, donors, etc.)

This plan should separate the TFP subsidies from other financial sources (states, local authorities, etc.).

4. Define the project's governance structure

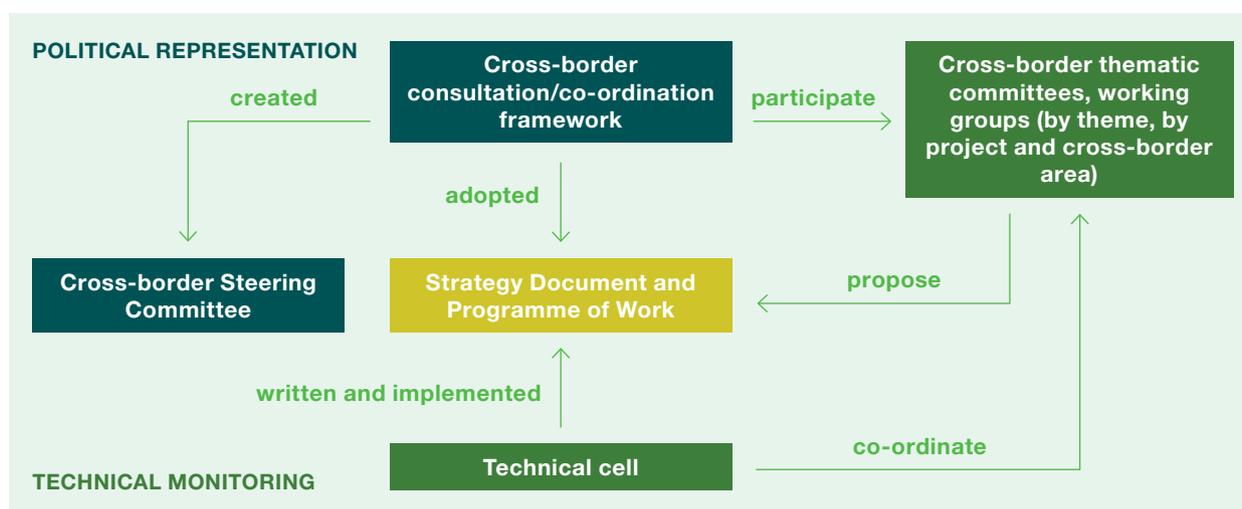
At this stage, the co-operation frameworks at local level should be defined. These co-operation frameworks can be flexible (organising the partnership, co-ordination actions, carrying out studies, lobbying) or more structured (equipment, infrastructure, public services development).

- ✔ Define the technical and political monitoring bodies guaranteeing that sufficient progress of the cross-border project is achieved, while ensuring that all project partners are represented.

The project must be monitored by all involved stakeholders, from the general co-operation framework to technical implementation. This co-operation framework is closely aligned to the project as it forms a specific governance framework.

Example:

Cross-border organisation with local authorities diagramme



- ✔ From the outset, anticipate solutions to management problems:
 - If there is a disagreement
 - If a partner leaves
 - If the project goes over budget

Documents à réaliser	Outils et connaissances à mobiliser
Schéma d'organisation locale trans-frontalière inter-collectivités	Conventions liées à la coopération transfrontalière
<ul style="list-style-type: none"> • Organigramme de l'équipe technique en charge du projet • Programme de travail annuel ou pluriannuel du projet • Liste des parties prenantes du projet (financeurs) • Finalisation du budget prévisionnel 	Textes réglementaires sur les projets transfrontaliers

5. Define the project's financing mechanism

In choosing the project's financing mechanism, it is important to bring together the commitment and the potential with regard to the financing modalities of each institutional partner (local authorities, states, regional organisations), technical and financial partners (donors, in particular). This may also incorporate existing financing channels and possibilities (funding from local authorities via the state, cross-border funding via already existing international organisations - example: Liptako-Gourma Authority).

Based on the public financing modalities, the following points should be reflected in the financing mechanism that separates budget management (adoption and authorisation of expenditure and revenue) and the project's accounting budget (actual payment of expenditure and actual collection of revenue after verifying the correct payment schedule).

- ✔ Choose how to **manage the project's budget** (financial authorising officer): several modalities can apply to budget management. The adoption of a provisional budget (as well as the final budget at the end of the accounting year) and the scheduled budget (the order in which to pay or collect revenue, after checking whether or not to incur these expenses and revenue collection) should be distinguished.

While a local authority conducts the project, public law, as it applies in the countries concerned, must be respected, by including a budget line corresponding to the project for the local authority or authorities concerned. The project budget will subsequently follow, as far as possible and in line with the sought operational capacity. The partners concerned will formally adopt the budget and one or more persons will be appointed to be responsible for scheduling (for practical reasons, the signature of one single person is often preferable). In any case, the project budget is adopted by all cross-border partners.

- ✔ Choose the methods of **accounting**: depending on the countries concerned, there are various public accounting options, from the State providing a public accountant, to the local authority handling the accounting. In order to ensure maximum security for its operation and reassure financial partners, the cross-border project may have an accountant separate from the authorising officer (hosted by a local authority, in a state, or another institution as a financial partner) that will ensure the payment of expenditure and the collection of revenue, by order of the authorising officer.
- ✔ Retain the **methods for allocating potential revenue**: for projects that generate revenue (and even more particularly if this revenue is sustainable and exceeds the project's period of existence, such as the construction of a specific infrastructure, it is very important to provide for distribution of these revenues across the borders. In the context of a cross-border project, it is of course recommended to find a way to allocate the benefits generated to all of the authorities concerned, at least in order to carry out other cross-border projects among these authorities.

6. Define a technical team and an operational programme of work

- ✔ Who is responsible for implementation?
- ✔ Who are the technicians involved? (What are the profiles?)
- ✔ Verify staff status (available or specific recruitment for the project)
- ✔ Provide an annual or multi-year programme of work with the objectives and actions to undertake within the framework of a cross-border project.
Example of a project framework:

Actions	Chronological framework	Responsible Party	Financing source	Methodology of joint work / co-ordination mechanism in place	Planning
Action 1	Year X to year Y	Local authority X and/or Y, State X and/or Y, TFP	Local authority X and/or Y, State X and/or Y, TFP	<ul style="list-style-type: none"> • Joint meetings • Development of a partnership agreement • Development of internal rules and regulations governing the association of LA partners 	Proposed sum (in FCFA or USD)
Action 2

7. Define the project's legal framework

The cross-border project's legal framework depends on the purpose of the co-operation, its duration and the stakeholders involved. The aim is to determine the appropriate legal framework for carrying out the cross-border project.

The following should be identified for each co-operation framework:

- ✓ Cross-border co-operation areas of interest: what is the purpose of cross-border co-operation?
- ✓ The value added of an ad hoc cross-border co-operation framework with regard to existing initiatives
- ✓ The most relevant level of organisation: what geographical coverage and what level of decision-making?
- ✓ The partners concerned: socio-economic, institutional stakeholders; broad or restricted co-operation framework
- ✓ Duration of the partnership: is this long-term co-operation or ad hoc?
- ✓ The most relevant legal tool to formalise the preferred co-operation framework
- ✓ The legal transcript of partners' expectations

To note

The legal structure issue (last two points) arises when all of the first five points have been determined. The concertation framework can take various forms: from a simple agreement to a dedicated joint permanent structure, the choice of the legal framework therefore depends on the goal of the co-operation, its duration and the stakeholders involved. It is clearly not recommended to have too many concertation frameworks. Nevertheless, there may be several cross-border co-operation frameworks for the same territory for different purposes. Co-ordination is essential between these different types of co-operation so as to promote synergy among the actions and avoid competition situations that would be counterproductive (duplication of efforts).

8. Define the means of internal and external communication to publicise the project

Internal communication, with the local population and towards other territories, is very important for a cross-border project. Inhabitants can have a better understanding of the planned approach while communication also provides evidence that funding from ministries and STFs are being used. It highlights the real benefits of cross-border co-operation.

- ✔ Define a communications plan and tools to communicate on the implementation of the project to local populations (brochure, film, other awareness-raising and promotion actions)
- ✔ Define tools to communicate on the issues and results of the project outside the co-operation area (brochure, website, etc.).

9. Define the monitoring – evaluation mechanism

This stage can be carried out either by a local authority or a group of local authorities concerned by the cross-border project, as well as within a state body or an entity providing technical and/or financial assistance.

In order to follow the evolution of a cross-border project, to see whether it has achieved the expected objectives and analyse its impact on the ground and on the populations, there are three types of indicators:

- ✔ Realisation indicators: measuring the direct effects of the actions implemented (example: number of transhumance paths created in one year)

- ✓ Result indicators: measuring the direct and immediate outcomes on the public concerned (example: number of people treated at the new cross-border health centre)
- ✓ Impact indicators: measuring the indirect or long-term effects of the projects (strengthening of co-operation, partnership and cross-border value added)

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Structure the project around available technical engineering

A study by AFD on planning a climate project at the local level ([read study](#)) identified six essential aspects needed to carry out a well-structured climate project. These six points can be used as an evaluation grid to determine the “bankability”, that is to say the credibility, of the project among donors. In order to fulfil these six key aspects, it is important to set up engineering “upstream” and prepare the project through co-ordination meetings among stakeholders and complementary studies, etc.

The six aspects are:

- 1 Raising public awareness of climate change issues (no climate-development policy dichotomy)
- 2 A stable regulatory framework for promoting climate change mitigation and adaptation
- 3 Strong political support
- 4 Technical capacity among local authorities
- 5 Territorial action or approach (place-based policies) with regard to climate change
- 6 A group of technical and financial stakeholders to support local authorities (such as ADEME and CEREMA in France)

Many stakeholders agree that an essential step for the project to be bankable is to carry out preliminary work indicating the project's structure and proposing several technical assistance mechanisms to prepare the project.

The R20 approach: Structuring projects and ensuring their bankability
– Regions of Climate Action



Source : <https://regions20.org/approach-2/>

Project preparation is both a “missing link” and a “cornerstone for climate action” (2017 CCFLA Report). Indeed, the challenge for most local and regional authorities is developing “bankable”, “investment-ready” infrastructure projects, which are at the same time attractive for public and private funders. This requires a high degree of financial and technical engineering capacity, which local and regional authorities do not necessarily have in countries that are still undergoing the decentralisation process. In addition, the project preparation phase helps refine the search for potential co-financers and ultimately offers them a successful, coherent and solid project.

Some mechanisms therefore contribute to strengthening local and regional authorities’ governance capacities in developing their urban resilience strategies and project concepts, as well as in the search for funding. Here are some examples.

Financial and technical engineering to build local capacities: tools for decentralised co-operation

Exchanges between local authorities of the North and South, with the participation of technical agencies, can provide knowledge and technical know-how within the framework of specific projects needed to carry out certain adaptation and development actions in West Africa. These exchanges may involve only local authorities or agencies with technical expertise. Funding schemes conceived to encourage decentralised co-operation can then be mobilised and help provide the required technical and financial assistance.

ADEME international actions

The French Environment and Energy Control Agency (Agence française de l’Environnement et de la Maîtrise de l’Energie - ADEME) has extensive technical expertise on climate change issues, including adaptation. It provides local authorities with a number of [resource publications](#), provides expertise on the design and implementation of public policies on sustainable development issues, and leads networks of local authority technicians so as to exchange knowledge and experiences.

ADEME brings this expertise to projects on a European and international scale, for example in partnership with agencies for electrification in Africa and the [ECOWAS Regional Centre for Renewable Energy and Energy Efficiency](#). It thus proposes to lead multi-country multi-stakeholder networks. However, a rather atypical project in relation to ADEME’s modes of intervention foresees a new relationship among expertise agencies in northern countries and state and non-state stakeholders in Southern countries around issues of adaptation to climate change

TyCCAO project

Launched in 2016, the TyCCAO between Senegal and Mauritania focuses on the Senegal River Valley.

Typha is an invasive species of reed that appeared in the 1980s in the Senegal River waters due to the construction of the anti-salt dam. Typha is problematic for the fisheries and agricultural sectors, as well as for public health because it promotes schistosomiasis. It is already used by local populations in the pharmacopoeia and as a construction material in Senegal because it has insulating properties. Therefore, the project focuses on gaining an understanding of the plant to establish a value chain around the industrial exploitation of typha (cutting areas, logistics: conservation, cutting, downstream marketing, etc.). In addition, in Mauritania the NGO GRET has developed a method to carbonise typha, which then could be used as a fuel by the populations. It is about adapting to a phenomenon that will be amplified by climate change, because the rise in temperatures should spur on the growth of typha.

ADEME thus leads the TyCCAO project with exchanges of good practices, involving academics as well as local populations, around these two possible uses of the invasive plant in the Senegal River Valley. ADEME is working in Mauritania with the NGO GRET, Institut Supérieur d'Enseignement Technologique (ISET) in Rosso, and for Senegal, alongside the Ministry of the Environment and research teams of the Centre de Suivi Ecologique de Dakar.

In addition to its technical and leadership expertise, it supported the structuring of the project and acted as intermediary to obtain financing from the French Facility for Global Environment (Fonds Français pour l'Environnement Mondial) and the Green Climate Fund.

Hence, the TyCCAO project shows a new way for North-South exchanges, the transfer of knowledge and the provision of financial and technical engineering in local capacity building.

Decentralized co-operation actions among local authorities

Local authorities in the North, according to their responsibilities and the fields of expertise that they have developed (good practices in waste management, floods, urban development, etc.) can also support decentralisation co-operation projects in developing countries. There are incentive financing mechanisms to encourage these solidarity projects for the transfer of know-how.

AFD's French Local Authorities Financing Facility

AFD's French Local Authorities Financing Facility (FICOL) is aimed at all French local authorities and their consortium that are interacting with local authorities in developing countries within the framework of a decentralised co-operation partnership. AFD is only in contact with French local authorities that it subsidises to carry out their project within the partner country.

Proposed projects should promote dialogue on shared development topics (health, education, training, urban development, fight against climate change, digital transition in territories, etc.), consistent with the responsibilities of the initiating local authority and the expertise that it has developed. The projects must be in line with the Sustainable Development Goals, as well as AFD's strategy on the theme and geographical area concerned.

FICOL finances projects from a minimum of 200 000 € up to 1 million € over a 1 to 3 year period. At least 30% of the project's financing plan is provided by local authorities (French local authority and its partner local authority) and their potential partners

involved in the project (operators, agencies, etc.).

FICOL operates through calls for projects, with about 3 calls per year. A note of intention of 4 to 5 pages must be drafted by the French local authority, and then, at the end of a pre-selection phase, the authority proposes a project for which to request funding.

In the least developed countries, FICOL can finance the preparation of projects, if the theme falls under the responsibility of the French initiating local authority, which mobilises its expertise, and if the project in the South already has minimal structure (political support, solid partnership, proven need, etc.).

For amounts of less than € 200,000, the 1% solidarity mechanisms of the French Ministry of Foreign Affairs can be requested within the framework of calls for thematic projects: 1% water,¹ 1% energy, 1% waste.

¹ French Ministry of Foreign Affairs Guide for 1% drinkable water and sanitation: https://www.diplomatie.gouv.fr/IMG/pdf/744_Eau_et_assainis-2_cle4d4c6a.pdf

The transfer of financial and technical assistance to institutions at the regional level in Africa.

Regional institutions in Africa also present technical and financial assistance for climate action projects, which could where appropriate be multi-country. This assistance may be provided by the United Nations Framework Convention on Climate Change or the African Union. The African Development Bank (AfDB) becomes the strong arm of the Green Climate Fund in African States and other regional funds for resilient infrastructure development; and programmes independent of the African Development Bank. The following are some programmes that can support climate change adaptation projects - potentially cross-border and fund initiatives for sustainable and resilient development in West Africa.

Programme for Infrastructure Development in Africa (PIDA) [more info](#)

The AfDB is the executive agency for this programme led by the African Union Commission and the NEPAD Secretariat. PIDA aims to promote socio-economic development and the fight against poverty in Africa by improving people's access to infrastructure networks and services. After conducting sector studies, PIDA will develop a short, medium and long-term infrastructure investment programme through 2030, built around key priorities for the following sectors:

- Energy
- Transportation
- ICT
- Cross-border water resource management¹)

¹ [PIDA Management of cross-border water:](#)

African National Resources Centre (ANRC) [more info](#)

The African Development Bank's African National Resources Centre does not provide loans but provides expertise and services to the Bank and its member states such as, policy advice, technical assistance, advocacy and knowledge development. It has

particular expertise in regional initiatives (Land Policy Initiative and the African Union's African Mining Vision) and relies on regional organisations as entry points, especially with regard to cross-border initiatives.

Review of initiatives linking cities and climate

Cities and Climate Change Initiative

Objective

Strengthen the capacity of local stakeholders with regard to climate issues

Initiative organizer

UN-Habitat

Partners

Norway, World Bank, United Nations Environment Programme (UNEP), ICLEI, GIZ, Durham U., HIS, IIED, Arcadis, CDIACible géographique

Geographic focus

Africa, Asia/Pacific, Latin America & the Caribbean

Description

The “Cities and Climate” Initiative contributes to improving the preparedness of cities in developing countries and mitigation activities. It focuses on good governance, concrete projects from local governments, communities and citizens.

The initiative notably supports the development and implementation of innovative climate policies and strategies for the poorest populations. It provides local authorities and stakeholders with a suite of tools to carry out adaptation and mitigation actions.

Green Climate Cities (GCC) Programme [read brochure](#)

Objective

Strengthen the capacity of local authorities with regard to climate issues

Initiative

ICLEI (Secretariat)

Partners

ICLEI offices, Bonn Center for Local Climate Action and Reporting (Carbon Center), UN-Habitat, European Union (financing from the Urban-LEDS project)

Description

ICLEI’s Green Climate Cities (GCC) programme supports local climate action processes, in particular, developing plans to fight climate change, as well as seeking funding for urban projects and programmes.

It supports local communities that are on the front lines addressing the challenges and opportunities of urban growth, exploring the potential of green economy and pursuing a low emission development trajectory.

The programme’s methodology aims to support local governments through 3 phases: Analysis, Action, Acceleration - by offering tools, instruments, strengthening management process and promoting good practices.

“Transformative Actions” Programme -TAP

Objective

Organise and encourage access by regional and local authorities to financial and technical engineering mechanisms

Initiative organiser

ICLEI

Partners

World Bank, Global Environment Facility - GEF, UN Habitat, OECD, Global Infrastructure Basel (GIB), SECO (State Secretariat for Economic Affairs – Switzerland), French Development Agency (AFD), UCLG, C40, R20, The Climate Group, FMDV, Association Internationale des Maires Francophones, WWF

Description

TAP is an innovative Pre-Project Preparation Facility that functions as a project pipeline, bringing together climate projects from local and regional authorities seeking financial or technical support, in order to develop coherent and bankable projects.

This partnership programme, supported by networks of cities and regions, aims to improve access to funding by cities and regions and in governance processes, in order to maximise investment in low-carbon and resilient urban development. In addition, TAP serves as an advocacy mechanism to demonstrate the need for financial and technical engineering to enable local climate action.

This programme helps build trust among local authorities, donors and investors in order to reduce risk. It also promotes multi-level co-operation and governance in mitigation and adaptation, making local climate action visible at the national and international levels.

Developing and Financing City Climate Action Plans Programme

Objective

Support regional and local authorities in facilitating project preparation

Initiative organiser

UN-Habitat

Geographic focus

East Asia/Pacific, Least Developed Countries, Small Island States, Latin America & Caribbean, South Asia, sub-Saharan Africa

Description

Developing and financing City Climate Action Plans adopted by cities in developing countries with relevant project preparation facilities and funding agencies.

Finally, some stakeholders more specifically propose project preparation mechanisms, that is to say, provide their own financial and technical engineering on upstream studies of project implementation and structuration, to make it more bankable and interesting to potential investors.

City Resilience Programme [visit the site](#)

Objective

Support regional and local authorities in preparing and financing their projects

Initiative organiser

World Bank

Geographic focus

West Africa: Sierra Leone and Ghana

Description

This programme is financed by the Global Facility for Disaster Reduction and Recovery

NEPAD's Infrastructure Project Preparation Facility (IPPF)

Objective

Support regional and local authorities in preparing their projects

Initiative organiser

African Development Bank

Partners

Canadian International Development Agency (CIDA), Norwegian Investment Fund for Developing Countries (Norfund), UKaid, KfW, Spain

Geographic focus

Middle East and North Africa, Sub-saharan Africa, Africa Development Bank member countries

Description

NEPAD's (African Union) IPPF is a special multi-donor fund hosted by the African Development Bank. It supports African countries in the preparation of regional infrastructure projects in the energy, transportation, information and communication technologies (ICT), and cross-border water management sectors.

It provides grants to support the preparation of high quality projects in the energy, cross-border water management, transportation and ICT sectors.

Cities and Climate Change for Africa (CiCLIA) Programme

Objective

Support regional and local authorities in preparing and financing their projects

Initiative organiser

French Development Agency (AFD)

Partners

European Union, SECO (State Secretariat for Economic Affairs - Switzerland)

Geographic focus

sub-Saharan Africa

Topics

Climate change, Energy Efficiency, Housing, Infrastructure and Industry / Industrial Processes, Renewable Energy, Resilience, Transportation, Urban Adaptation, Urban Mitigation, Waste

Description

“Cities and Climate Change” is a project preparation programme that encompasses four regional initiatives (Africa, Asia, Middle East and North Africa, Latin America) supporting the development of urban climate strategies to develop/implement concrete projects with shared climate benefits. CiCLIA is the facility dedicated to Africa, supporting the preparation from projects in urban areas to climate co-benefits.

CiCLIA covers all the urban sectors, which is a broad spectrum. It does not directly finance investments but prepares an investment project: carrying out technical studies (feasibility and vulnerability), structuring the project so that the AFD will be able to position itself with regards to financing.

How AFD finances a project:

- Local authority supported by the state concerned (Ministry, etc.) send a request letter to AFD.
- The local AFD office studies the file and seeks co-financing from the local authorities, the ministry, urban agent (national or regional public works agency, etc.).

- Identify the needs of the partner stakeholders in order to target the investment. This investment must be at least eight to ten million euros for a national programme, the cost would be twenty to twenty-five million euros. Several projects can be packaged together to reach the minimum funding threshold (eg: drilling + pond + development of transhumance paths, etc.).
- The study terms of reference are drawn up and validated by the partners (SECO and EU).
- A bid is launched to select the group that will carry out the study.
- An agreement is signed between the study office and CICLIA.
- The preliminary studies are carried out by one of the groupings in the framework agreement in co-ordination with the local and national partners of the country concerned.

This practical guide is published by the Sahel and West Africa Club Secretariat (SWAC/OECD).

The opinions expressed and the arguments employed herein do not necessarily reflect the views of the OECD, the SWAC Secretariat or their respective Members.

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Please cite this work as: OECD/SWAC (2020), Border Cities and Climate Change: A Practical Guide to Legal and Financial Levers, Rev. ed. Paris.

Graphic design: Daniel Krüger, Martin Rümmele

Border cities and climate change

Dori (Burkina Faso) et Téra (Niger)

The following case study describes Dori and Tera, two non-contiguous settlements, about 95 kilometres apart, located on both sides of the Burkina Faso-Niger border. They form a network of cities considered as “twin cities”, separated by a few kilometres, functioning as a tandem due to flows, transit logics and interurban mobility.¹

Dori: Town located in northeastern Burkina Faso. Capital of the department of Dori in the province of Seno and part of the historic Liptako region with a population of 27 123 (Africapolis, 2018). Dori is made up of 78 villages with a surface area of 2 532 km².

Tera: Town in the department of Tera, within the Tillabéri region in western Niger. Tera has an estimated population of 31 768 inhabitants (Africapolis, 2018) and a surface area of 2 380 km².

The area is predominantly agro-pastoral: 90% of the population lives from cattle, goat or sheep farming, including a good part of transhumant livestock farming. The 200-kilometre livestock transhumance path between the Dori, Seytenga, Tera and Sebba municipalities is an example of how it is possible to for local development and the preservation of peace to co-exist.

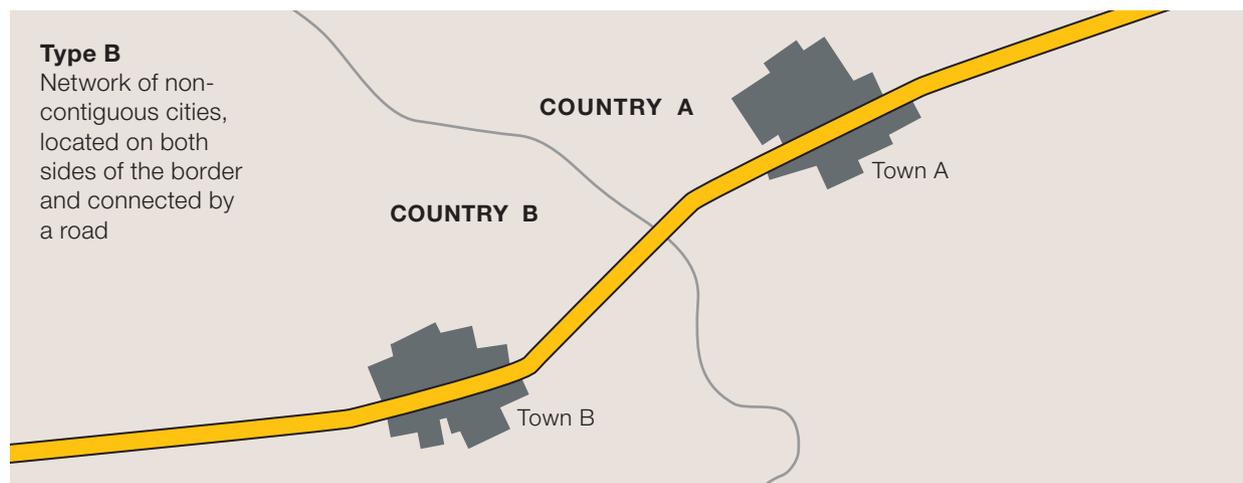
There are numerous cross-border markets in the Dori-Tera cross-border region. Cereal is traded on the Tera market, which attracts Dori’s Burkinabes and beyond for the sale of livestock. The breeders sometimes come from Kaya, traveling hundreds of kilometres to sell their livestock in Tera’s livestock market.²

There is a transhumance route for livestock between Dori and Téra, and de facto cooperation between the local communities of Burkina Faso and Niger

¹ Presentation made by Edmond Sougué at the EU/Afrique Platform event organised by Les Entretiens Européens & Eurafricains (ASCPE), 19 May 2017

² Interview with Mr. Issiaka Hebié of Afrique Verte, Burkina Faso

which are made up of the same populations and share the same agricultural and livestock farming practices.³



Climate and cross-border co-operation

A legal framework exists to support cross-border co-operation between both urban municipalities in the areas of climate, environment and agriculture.

The state of decentralisation and transfer of skills

The decentralisation process is fairly advanced in both Burkina Faso and Niger and there is a main governing framework. The implementation methods and progress are relatively comparable in the two neighbouring countries. On one hand, each country has its own General Local Authorities Code (GLAC),⁴ which constitutes a collection of the main decentralisation texts that, along with the Constitution (2 June 1991⁵ for Burkina Faso and 25 October 2010⁶ for Niger), governs the decentralisation framework. On the other hand, both countries face practical limitations preventing the full and effective application of the legal frameworks. However, local authorities are increasingly gaining autonomy.

Local authorities in Burkina Faso and Niger are organised and established in their structures and responsibilities. In addition, co-operation tools and structures are planned, in particular to serve co-operation with foreign authorities.

³ Interview with Mr. Issiaka Hebié of Afrique Verte, Burkina Faso

⁴ Burkina Faso: <https://burkina24.com/wp-content/uploads/2013/09/LOI-n%C2%B0055-2004-AN-du-21-d%C3%A9cembre-2004.pdf>

Niger: http://decentralisation-niger.org/images/docs/code_general_ct_niger_2011.pdf

⁵ <http://www.legiburkina.bf/SitePages/Constitution/c-2012.pdf>

⁶ <http://mjp.univ-perp.fr/constit/ne2010.htm>

Moreover, in theory, the transfer of skills is essentially based on the general jurisdiction clause and on the principle of subsidiarity. The Burkinabe and Nigerien states determine which competences are to be transferred. Responsibilities relating to the environment have in general been transferred to the decentralised local authorities.

Nevertheless, the transferring of responsibilities from the central state to decentralised entities still has to be done by decree. Such decrees have not been adopted in Niger whereas the adopted decrees in Burkina Faso are not effective due to a lack of resources.

Finally, while Burkina Faso is still managing the consequences of the dissolution of its elected bodies which took place in October 2014 and the establishment of special delegations (no longer in existence), Niger abides by the community approach, recognised by the Constitution (traditional chiefdoms, wielding customary authority, Article 167 of the Constitution), which sets the limits of the decentralisation process on the ground. Therefore, the following questions arise: In the face of traditional communities, have the decentralised local authorities been able to realise their full potential? Can limitations in the transfer of competences to local authorities and delays in operationalisation be overcome when it comes to national sectoral policies? What is the role of decentralised authorities?

With regard to the provisions of decentralisation, the constitutions of both countries only provide the main principles for governing local authorities while referring to the law for the organisation of the form and content of their actions.

Territorial communities of identical level on both sides of the Burkina Faso-Niger border: Municipalities and regions

The texts of the General Local Authorities Codes on both sides of the border provide for the same levels of decentralised local authorities in urban and rural municipalities and in the regions. However, in Burkina Faso only municipalities have real decentralised competences. In addition, the texts are not sufficiently elaborated and the Code was under revision in 2018.

At the same time, there are deconcentrated levels that have supervisory power over decentralised local authorities. This supervisory power, which is exercised at the regional and departmental levels in Niger and at the level of rural municipalities, in the person of the prefect in Burkina Faso, will have concrete and practical consequences for cross-border co-operation of local authorities in Burkina Faso and Niger.

The planned legal action framework concerns tools and structures that can benefit the cross-border co-operation of local authorities in Burkina Faso and Niger ([Table 1](#)).

Furthermore, the texts relating to the division of competences provide the fields of action within sectoral policies transferred to local authorities. The joint actions of the decentralised Burkinabe and Nigerian authorities with regard to climate, environment and agriculture will be further examined ([Table 2](#)).

In addition to the competences held by local authorities, the legal framework of both Burkina Faso and Niger makes it possible to envisage new transfers of competences in some areas (precisely set out in Niger's General Local Authorities Code, although the law is not as precise in Burkina Faso). The Nigerien code encompasses various areas such as, "land and state-owned land; economic development; territorial development; urban planning and housing; education and literacy; professional and technical training; health, hygiene and sanitation; social development; livestock; agriculture; fishing; hydraulics; environment and natural resource management; taxation and finance; equipment, transport infrastructure; communication and culture; youth, sports and recreation; tourism and crafts; any other area that the state deems useful to transfer to local authorities" (Nigerien GLAC, Article 163). "On the proposal by the Minister in charge of the trusteeship over local authorities, in relation to sectoral ministries, a transfer decree is issued by the Council of Ministers for each area of competence (...) (Nigerien GLAC, Article 164).

Areas of state competences: Inclusion of state services in cross-border co-operation activities

Regarding the remaining regulation, since cross-border co-operation must involve entities that have common areas of competences, it is still foreseen that "the State and local authorities (...) [Burkinabes] will determine, by contract, their joint interventions in all of the national and local public interest domains" (GLAC, Article 45), as well as enter into "planning contracts and/or programme contracts to achieve economic, social cultural, sanitary, scientific, and environmental development goals" (Burkina Faso GLAC, Article 92; joint State planning contracts and regional State planning contracts are also set out in the Nigerien GLAC in Articles 79 and 149).

The governments of Burkina Faso and Niger can be associated in cross-border co-operation activities. The presence of the supervisory authorities exercising a compulsory trusteeship over the legality of the acts of local authorities, and the fact that local authorities do not always have the right to use their tax resources (the collection of which is also a matter solely for the states) freely, could make this association indispensable.

Stability of the Burkina Faso - Niger border

Finally, cross-border co-operation requires stable borders that have been agreed upon by border countries. A border dispute between Burkina Faso and Niger along 375 kilometres of shared border between Botou in Burkina Faso and Tong Tong in Niger (involving the Dori/Tera cross-border urban system) was resolved following the ruling by the International Court of Justice (ICJ) on 16 April 2013 to definitively establish the litigious border. The two parties have agreed to respect the decision. On 12 July 2013, three experts were appointed by an ICJ's order to effectively apply this ruling. The final demarcation of the new border was planned for the end of 2016, a prerequisite for effective cross-border co-operation between Dori and Tera.

Cross-border co-operation between Dori and Tera

The Liptako-Gourma region is located in the southwestern part of Niger, northeastern Burkina Faso and eastern Mali.

Under the leadership of the former mayor of Dori, Hama Arba Diallo, the municipalities of Dori, Djibo, Gorom-Gorom in Burkina Faso, the urban municipalities of Tera and Tillabéri in Niger, the Regional Council of Timbuktu and the municipalities of Gao and Timbuktu in Mali have joined forces in a cross-border, decentralised co-operation unit of local authorities in the Sahel (C3SAHEL). This initiative has led local authorities to develop a common cross-border investment programme called the Regional Integration Initiative for the Sahel (IRSAHEL). This programme has been supported under the Local Border Initiative (LOBI) programme led by UNCDF and UEMOA.

The relationship between Dori and Tera is a motor for co-operation across the C3SAHEL, starting with the water and sanitation project initiated by the two mayors in 2009. There was already integrated co-operation with regard to investments, which enabled the construction of infrastructure on each side of the border (water retention basins, drainage pipes, etc.).

In addition, there is also a “cross-border inter-communal consultation framework” between Niger and Burkina Faso on cross-border transhumance⁷ which demonstrates a form of “bottom up” integration.

Finally, the “Programme for Local Cross-border Co-operation” (PCTL), supported by the Swiss Agency for Development and Cooperation, operates in the C3SAHEL area. This programme promotes the development of a cross-

⁷ OECD/SWAC (2017), Cross-border Co-operation and Policy Networks in West Africa, West African Studies, OECD Publishing, Paris, <https://doi.org/10.1787/9789264265875-en>.

border area vision (SATI) for 2030 and the preparation of bankable project profiles for investment.⁸

In Tera, the Programme for Local Cross-border Co-operation,⁹ financed by UEMOA (Council of Local Authorities), ECOWAS and the Swiss Agency for Development and Cooperation plans to establish a cross-border hub. Tera with its small market, its big market and its bus station, located at the crossroads of trade routes is a cross-border exchange hub. Thus, there are strategic guidelines to ensure some priority public services and adapted urban development. Some infrastructure projects (roads, hospitals, etc.) can or could be the focus of cross-border co-operation, particularly with Burkina Faso.

⁸ https://www.urbaplan.ch/wp-content/uploads/2017/07/15068_plaquette_0.pdf

⁹ Programme for Local Cross-border Co-operation in Téra https://www.urbaplan.ch/wp-content/uploads/2017/07/15068_plaquette_1.pdf

Tools and structures for cross-border co-operation

	CT BURKINA FASO	CT NIGER
Tableau 1	Outils et structures juridiques	Outils et structures juridiques
Outils et structures de droit public	<p>1) Entente ou convention pour la mise en place de conférences (art.123 et suivants CGCT)</p> <ul style="list-style-type: none"> • Fondement juridique : une convention • Pas de personnalité juridique • Membres : collectivités burkinabés et étrangères • Droit applicable aux partenaires (CGCT) • Objet/actions : « relations de coopération sur des objets d'utilité publique compris dans leurs attributions et les intéressant conjointement », « Des conventions à l'effet d'entreprendre ou de conserver à frais communs des ouvrages et des institutions d'utilité publique ». <p>2) Jumelage (article 127 et suivants du CGCT)</p> <ul style="list-style-type: none"> • Fondement juridique : une convention de jumelage • Membres : collectivités burkinabés et étrangères • Instauration d'un comité de jumelage au niveau local qui correspond à une association à but non lucratif ouverte à l'adhésion de personnes physiques. • L'organisation et le fonctionnement des comités de jumelage sont fixés par décret pris en conseil des ministres, sur proposition du ministre chargé des collectivités territoriales. • Objet/actions : « relations de coopération en vue de la réalisation d'un idéal commun, notamment dans le domaine économique, culturel et social. » 	<p>Accords de coopération (de la commune : article 79 du CGCT et de la région : article 149 du CGCT)</p> <ul style="list-style-type: none"> • Fondement juridique : une convention • Pas de personnalité juridique • Membres : collectivités nigériennes et étrangères, organismes nationaux et étrangers • Droit applicable aux partenaires : le CGCT <p>Conventions (article 327 du CGCT)</p> <ul style="list-style-type: none"> • Fondement juridique : une convention qui entre en vigueur après approbation du ministre chargé de la tutelle des collectivités territoriales • Pas de personnalité juridique • Membres : collectivités nigériennes et étrangères, organismes nationaux et étrangers • Droit applicable aux partenaires dans les limites des compétences des CT (CGCT), le droit international souscrit par le Niger • Objet/ actions : les compétences des CT dans le respect des engagements internationaux du Niger

	CT BURKINA FASO	CT NIGER
Outils et structures de droit public avec participation d'acteurs privés	<p>Structures de concertation et de coopération (art. 134 et suivants du CGCT)</p> <ul style="list-style-type: none"> • Base légale : une convention • Pas de personnalité juridique • Membres : collectivités territoriales burkinabés, personnes morale de droit public ou privé, nationales ou étrangères • Objet/actions : questions d'intérêt commun <p>2) Groupements d'intérêt public (art. 138 et suivants du CGCT)</p> <ul style="list-style-type: none"> • Base légale : accord • Personne morale de droit public • Membres : collectivités territoriales burkinabés, Etat, établissements publics, toute autre personne morale de droit public ou de droit privé • Objet/actions : réalisation d'une œuvre ou d'un service présentant une utilité pour chacune des parties. • Par voie d'exploitation directe ou participation à des organismes dans les mêmes conditions que les CT. 	<p>Accords de coopération (de la commune : article 79 du CGCT et de la région : article 149 du CGCT)</p> <ul style="list-style-type: none"> • Fondement juridique : une convention • Pas de personnalité juridique • Membres : collectivités nigériennes et étrangères, organismes nationaux et étrangers, de droit privé et de droit public • Droit applicable aux partenaires : le CGCT. <p>2) Groupements d'intérêt public (art. 328 du CGCT)</p> <ul style="list-style-type: none"> • Base légale : accord • Personne morale de droit public • Membres : collectivités territoriales nigériennes et étrangères, Etat, établissements publics, toute autre personne morale de droit public ou de droit privé • Objet/actions : mettre en œuvre et gérer ensemble pendant une durée déterminée toutes les actions requises par les projets et programmes de coopération interrégionale et transfrontalière intéressant des collectivités territoriales appartenant aux pays de la sous-région • Par voie d'exploitation directe ou participation à des organismes dans les mêmes conditions que les CT.

	CT BURKINA FASO	CT NIGER
Outils et structures de droit privé gestionnaires de service public	<p>Associations ayant leur siège au Burkina Faso et associations étrangères de jumelage et de coopération inter-collectivités auxquelles peuvent adhérer les CT Burkinabés (article 129 du CGCT, loi n°064-2015/CNT portant liberté d'association. JO n°07 du 18 février 2016)</p> <ul style="list-style-type: none"> • Membres adhérents : tout groupe de personnes physiques et morales, nationales et étrangères • Droit applicable : droit des associations, loi n°064-2015/CNT portant liberté d'association. JO n°07 du 18 février 2016 • Cadre de constitution : provincial, régional ou national • Objet/actions : à but non lucratif et ayant pour objet la réalisation d'objectifs communs, notamment dans les domaines culturel, sportif, social, spirituel, religieux, scientifique, professionnel ou socioéconomique. Elles peuvent acquérir le statut d'organisation non gouvernementale ou d'association reconnue d'utilité publique • La déclaration des associations est faite dans les quinze jours suivant leur constitution, soit auprès du ministre chargé des libertés publiques, pour les associations ayant une vocation nationale ou internationale, soit auprès de l'autorité administrative locale compétente lorsqu'elles sont régionales ou provinciales. 	<p>Sociétés chargées d'exploiter des services publics locaux (article 18 du CGCT)</p> <ul style="list-style-type: none"> • Membres adhérents : personnes physiques et morales ; les CT peuvent soit acquérir des actions ou obligations, soit recevoir à titre de redevances, des actions d'apports ou parts des fondateurs émises par lesdites sociétés dans les conditions fixées par la réglementation en vigueur • Droit applicable : droit des sociétés • Objet/ actions : à but lucratif

	CT BURKINA FASO	CT NIGER
Tableau 2	<p>Compétences propres et transférées (exécutoires après transmission des actes à l'autorité de tutelle¹⁰ pour contrôle de la légalité)</p>	<p>Compétences propres et transférées (exécutoires après transmission des actes à l'autorité de tutelle¹¹ pour contrôle de la légalité ; les actions de coopération entre collectivités sont soumises à l'autorisation préalable de l'autorité de tutelle)</p>

10 Sous réserve des actions soumises à l'approbation ou à l'autorisation préalable de l'autorité de tutelle.

11 Idem

Aménagement du territoire, gestion du domaine foncier et aménagement urbain

Communes urbaines	<p>L'aménagement et la gestion du domaine foncier transféré sont soumis à l'autorisation préalable de la tutelle</p> <ol style="list-style-type: none"> 1. Avis sur le schéma d'aménagement urbain avant son approbation par l'Etat ; 2. Etablissement et exécution de plans de lotissement, après approbation de l'autorité de tutelle ; 3. Attribution des parcelles et délivrance des titres d'occupation se rapportant à leur domaine foncier (propre et national transféré) ; 4. Délivrance des autorisations de construire ; 5. Délivrance des certificats de conformité ; 6. Délivrance de certificat d'urbanisme ; 7. Délivrance de permis de démolir ; 8. Validation des chartes foncières locales ; 9. Constatation des possessions foncières rurales ; 10. Délivrance des attestations de possession foncière rurale ; 11. Délivrance des autorisations de mise en valeur temporaire des terres rurales ; 12. Tenue des registres fonciers ruraux au nombre de quatre ; 13. Participation à la gestion des terres du domaine foncier national situé dans leur ressort territorial ; 14. Délivrance des autorisations d'occupation du domaine public ; 15. Création, réhabilitation et entretien des rues et des signalisations ; 16. Construction et entretien des canaux et caniveaux, des gares et aires de stationnement. 	<p>Les outils d'aménagement du territoire et d'urbanisme, les opérations domaniales et foncières et toute intervention impliquant la cession de biens ou de ressources de la collectivité sont soumis à l'autorisation préalable de la tutelle</p> <ol style="list-style-type: none"> 1. Disposition du domaine privé de la commune ; 2. Gestion du domaine public de la commune ; 3. Gestion des couloirs de passage, des aires de pâturages et des points d'eau pastoraux ; 4. Élaboration et adoption des documents de planification, d'outils d'aménagement foncier et urbain ; 5. Plan de développement communal et autres outils de planification ; 6. Réalisation, entretien et gestion de parcs publics, complexes sportifs et culturels, terrains de jeux de la commune ; 7. Construction, aménagement, entretien des voiries; notamment construction et entretien des pistes rurales ; 8. Construction, aménagement, entretien des collecteurs de drainage, d'égouts et de stations de traitement des eaux usées et d'usines de traitement des ordures ménagères.
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	CT BURKINA FASO	CT NIGER
Régions	<p>L'aménagement et la gestion du domaine foncier transféré sont soumis à l'autorisation préalable de la tutelle</p> <ol style="list-style-type: none"> 1. Compétence partagée avec l'État pour l'initiative d'élaboration du schéma régional d'aménagement du territoire ; 2. Avis sur le schéma régional d'aménagement du territoire et les schémas directeurs d'aménagement et d'urbanisme réalisés à l'intérieur du territoire régional avant leur approbation par l'Etat ; 3. Délivrance d'autorisations d'occupation du domaine foncier national géré par la région ; 4. Construction et entretien des pistes rurales. 	<p>La région est une collectivité territoriale à vocation essentiellement économique, sociale et culturelle (article 96 du CGCT, ordonnance n°2010-54)</p> <p>Les outils d'aménagement du territoire et d'urbanisme, les opérations domaniales et foncières et toute intervention impliquant la cession de biens ou de ressources de la collectivité sont soumis à l'autorisation préalable de la tutelle</p> <ol style="list-style-type: none"> 1. Actes d'acquisition ou de disposition de biens du domaine régional ; 2. Opérations d'aménagement de l'espace régional; 3. Gestion des couloirs de passage, des aires de pâturages et des points d'eau pastoraux.

Environnement¹² et gestion des ressources naturelles

Environnement ¹² et gestion des ressources naturelles		
Communes urbaines	<ol style="list-style-type: none"> 1. Elaboration de plans communaux d'action pour l'environnement ; 2. Participation à la protection et à la gestion des ressources en eaux souterraines, en eaux de surface et des ressources halieutiques ; 3. Assainissement ; 4. Lutte contre l'insalubrité, les pollutions et les nuisances diverses ; 5. Création, réhabilitation et gestion des espaces verts et des parcs communaux ; 6. Lutte contre la divagation des animaux et réglementation de l'élevage ; 7. Enlèvement et élimination finale des déchets ménagers ; 8. Délivrance d'autorisation préalable de coupe de bois à l'intérieur du territoire communal ; 9. Participation à la conservation et à la gestion de ressources naturelles renouvelables d'intérêt régional ou national ; 10. Prévention et lutte contre les feux de brousse et contre la coupe abusive du bois ; 11. Participation à la protection et à la gestion des ressources fauniques des forêts classées; 12. Protection et gestion des ressources fauniques des forêts protégées ; 13. Avis sur l'installation des établissements insalubres, dangereux et incommodes de première et deuxième classes conformément au code de l'environnement. 	<ol style="list-style-type: none"> 1. Initiative, soutien et suivi de la mise en œuvre des actions de développement entreprises au sein de la commune : agriculture, élevage, pêche, pisciculture, chasse, artisanat ; 2. Initiative, soutien et suivi de la mise en œuvre des actions de secours et d'assistance sociale entreprises dans la commune ; 3. Préservation et protection de l'environnement ; 4. Gestion de ressources naturelles.

¹² Le principe de la protection de l'environnement a une valeur constitutionnelle au Niger puisqu'aux termes de l'article 37 de la Constitution : « Les entreprises nationales et internationales ont l'obligation de respecter la législation en vigueur en matière environnementale. Elles sont tenues de protéger la santé humaine et de contribuer à la sauvegarde ainsi qu'à l'amélioration de l'environnement ».

	CT BURKINA FASO	CT NIGER
Régions	<ol style="list-style-type: none"> 1. Création de bois et de forêts d'intérêt régional ; 2. Participation à la protection, à la gestion et à la mise en défens des forêts classées et des forêts protégées ; 3. Participation à la protection des cours d'eau ; 4. Prévention et lutte contre les feux de brousse et contre la coupe abusive du bois dans les bois et forêts d'intérêt régional; 5. Protection de la faune et des ressources halieutiques d'intérêt régional ; 6. Participation à la gestion et à l'exploitation des Périmètres aquacoles d'intérêts économiques (PAIE) ; 7. Elaboration, mise en œuvre et suivi des plans ou schémas régionaux d'action pour l'environnement ; 8. Délivrance des autorisations de coupe de bois dans le domaine foncier national concédé à la région ; 9. Participation à l'établissement par les services de l'Etat des schémas directeurs et des plans d'enlèvement et d'élimination des déchets. 10. Délivrance de permis de petite chasse dans les zones de conservation d'intérêt régional ; 11. Délivrance de permis de pêche sportive sur les cours et plans d'eau d'intérêt régional. 	<ol style="list-style-type: none"> 1. Plan et programme de développement régional; 2. Initiative, soutien et suivi de la mise en œuvre des actions de développement entreprises au sein de la région: notamment transports, santé animale, tourisme, actions culturelles et sportives ; 3. Préservation et protection de l'environnement: mobilisation et de préservation des ressources en eau, protection des forêts et de la faune, conservation, défense et restauration des sols.

	CT BURKINA FASO	CT NIGER
Santé et hygiène		
Communes urbaines	<ol style="list-style-type: none"> 1. Construction et gestion des formations sanitaires de base ; 2. Participation à l'organisation de l'approvisionnement pharmaceutique et prise de mesures relatives à la réglementation et à la prévention des maladies ; 3. Prise de mesures d'hygiène et de salubrité dans leur ressort territorial ; 4. Contrôle de l'application des règlements sanitaires ; 5. Participation à la résolution des problèmes de santé ; 6. Participation à l'établissement de la tranche communale de la carte sanitaire nationale. 	<ol style="list-style-type: none"> 1. Construction et entretien courant des centres de soins de santé primaire ; 2. Construction, entretien et gestion des abattoirs et séchoirs ; 3. Construction, entretien et gestion des marchés et gares routières ; 4. Assistance sociale aux personnes âgées, aux handicapées, aux orphelins sans ressources et autres indigents.
Régions	<ol style="list-style-type: none"> 1. Participation à la construction et à la gestion des formations sanitaires de base; 2. Construction et gestion des formations sanitaires intermédiaires ; 3. Organisation de l'approvisionnement pharmaceutique ; 4. Réglementation et prise de mesures relatives à l'hygiène, à la salubrité et à la prévention des maladies ; 5. Valorisation de la pharmacopée traditionnelle ; 6. Participation à la résolution des problèmes de santé ; 7. Participation à l'établissement de la tranche régionale de la carte sanitaire nationale 	<ol style="list-style-type: none"> 1. Construction et entretien des hôpitaux régionaux;

Eau et assainissement

Eau et assainissement		
Communes urbaines	<ol style="list-style-type: none"> 1. Avis sur le schéma directeur d'approvisionnement en eau ; 2. Elaboration et mise en œuvre des plans locaux de production, de distribution et de maîtrise d'énergie ; 3. Création et gestion d'infrastructures énergétiques ; 4. Participation à la production et à la distribution de l'eau potable ; 5. Réalisation et gestion de puits, de forages et de bornes-fontaines ; 6. Elaboration et mise en œuvre des plans locaux d'approvisionnement en eau potable et d'assainissement ; 7. Participation à l'élaboration, à l'approbation, à la mise en œuvre et au suivi des Schémas directeurs d'aménagement et de gestion de l'eau (SDAGE) et des Schémas d'aménagement et de gestion de l'eau (SAGE) ; 8. Assainissement. 	<ol style="list-style-type: none"> 1. Collecte, évacuation et traitement des eaux usées et des ordures ménagères ; 2. Collecte, évacuation et traitement des eaux pluviales ; 3. Construction, aménagement, entretien des collecteurs de drainage, d'égouts et de stations de traitement des eaux usées et d'usines de traitement des ordures ménagères ; 4. Construction, aménagement, entretien des fontaines et puits publics.
Régions	<ol style="list-style-type: none"> 1. Avis sur les programmes nationaux d'approvisionnement en eau et d'assainissement ; 2. Participation à l'élaboration du schéma directeur régional d'approvisionnement en eau ; 3. Participation à l'entretien et à la conservation des cours d'eau ; 4. Participation à la réalisation et à l'entretien des retenues, des barrages, des puits et forages et des adductions d'eau potable ; 5. Participation à la production et à la distribution de l'eau potable. 	<ol style="list-style-type: none"> 1. Préservation et protection de l'environnement: mobilisation et de préservation des ressources en eau, protection des forêts et de la faune, conservation, défense et restauration des sols.

Climate

The region is an adaptation testing ground with regard to climate risks as it is affected by very different types of risks: soil degradation, lack of access to water, water-related and therefore climate-sensitive diseases, degraded roads during winter causing territories to be isolated, and health issues affecting populations, etc.

According to the 2011 CGIAR report No. 5 “Mapping hotspots of climate change and food insecurity in global tropics”¹³, West Africa is likely to be affected by several factors undermining the food security of territories linked to environmental and climatic risks:

Variability of plant growing season

When the length of the growing period decreases by 5% or more, or even less than 120 days. Some plants may no longer be able to grow sufficiently in this shorter period, hence agricultural systems will need to be adapted (choice of plant species according to their characteristics) in order to maintain sufficient yield and quality foods. With the number of days of growth being critical for some plant species, farmers may reconsider their strategies if it seems too risky to count on certain sensitive plant species.

Rainfall-related risks

It is difficult to forecast rainfall, tropical rains are even more particular, and the various scientific projection methods contradict each other.¹⁴ Experts, however, agree on increasing the variability and intensity of climate events (rainfall, droughts) with an impact on the types of crop and soil erosion, for example.

The global increase of temperatures and an upsurge of extreme weather

According to a SWAC/OECD report¹⁵, “this warming is likely to be higher here (in the Sahel) than in the global average. This means a temperature increase between 3 and 4 degrees by the end of the century with respect to the last twenty years of the 20th century. [...] Geographically the greatest warming (~4 degrees) occurs over land and in particular in the western side of the Sahel. [...] The strongest warming is expected to occur during the summer months (Christensen et al., 2007).

¹³ p46 <https://ccafs.cgiar.org/publications/mapping-hotspots-climate-change-and-food-insecurity-global-tropics#.WX9T1FFpypp>

¹⁴ SWAC/OECD (2010), Sahelian climate: Past, Current, Projections, Security implications of climate change in the Sahel (SICCS), Paris, <https://www.oecd.org/swac/publications/47092928.pdf>.

¹⁵ SWAC/OECD (2010)

In addition, the study indicates that the “thermodynamic argument suggests a general increase in the intensity of high-rainfall events. There is no consensus among models whether extremely dry or extremely wet seasons are likely to become more common over the area. However, it is virtually certain that extremely hot seasons will become more frequent in the future.”

Taking into account all of these hydro-meteorological factors along with the varying availability of arable farmland according to country and demographics, there could be considerable pressure on the agricultural resources.

The Dori-Tera region:

Dori and Tera are in the Sahelian climate zone, which receives 300 to 600 millimetres of rain on average per year and is conducive to agro-pastoralism. The only information available is related to Dori but it sheds light on the situation in the area.

Table 9.1: Annual rainfall (in mm) and annual rainy days in areas of the Sahel region

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Dori										
Amount of rain	753	311	722	397	519	503	417	447	528	624
Nr. of rainy days	56	37	55	37	46	46	40	46	39	53

Table 9.2: Extreme temperatures (in centigrade) in Dori

	2003	2004	2005	2006	2007	2008	2009	2010	2011
Dori									
Minimum Temperature	22,9	22,9	23,4	22,7	23,0	22,3	23,8	23,6	23,1
Maximum Temperature	37,2	37,7	37,2	37,5	37,4	36,6	37,8	37,6	37,3

Source : INSD

The number of rainy days in Dori has been increasing since 2009; temperatures have remained relatively stable since 2003. There is little rainfall north of the urban municipality of Tera hence there are few irrigated crops.¹⁶ Instead, it is a breeding area with many pastoral enclaves (enclosed areas intended for breeding). Most of the urban municipality of Tera has hydromorphic

¹⁶ Issa Abdou Yonlihinza. Transports et désenclavement dans la problématique du développement local à Téra au Niger. Economies et finances. Université Toulouse le Mirail - Toulouse II, 2011. « Les zones agro-climatiques » p 147

soil,¹⁷ rainfall of about 500 millimetres per year, and thus the potential for agricultural irrigation. Due to the lack of pastoral enclaves, animals place a great deal of pressure on crops close to watering points.

The region's local economy is driven by agriculture and the population subsists on the food crops they grow. Depending on rainfall and different types of soil, millet, sorghum, cowpeas (rain-fed crops), peanuts, okra, sesame and sorrel are grown in the dune areas. Large quantities of cereals such as millet and sorghum are grown in areas where rainfall is frequent and sufficient. In the Niger River valley and the valleys of the river's three tributaries (Gorouol, Dargol and Sirba), the soil is essentially clay-like or sandy-clay.

Floods are common in Dori and can cause significant damage, as in 2012¹⁸ when more than 150 homes collapsed; forcing 86 families to move, 119 fields were flooded preventing subsequent harvests. In Tera, the floods of the Niger River following heavy rainfall also led to floods, such as that of June 2017¹⁹, which destroyed 45 houses and affected more than 300 people in the greater Tillabéri region, killing one person in Tera.²⁰

The methodology developed by the ESPON study, "Climate – climate Change and Territorial Effects on Regions and Local Economies in Europe",²¹ identifies different types of vulnerabilities within a territory, and explores its capacity to evaluate its adaptation potential.

The rainy season is short and the rains do not occur evenly across the area²² and, in addition, the geological structure is not conducive for adequate water tables. In Tera a dam and ponds - including the large Dori pond - provide access to surface water, but they dry up quickly after the rains have stopped. The lack of water resources has serious consequences on hygiene, health, and the market gardening and livestock economic sector, hence on food. Coupled with the territory being isolated, the population is greatly impacted and thus socially vulnerable.

Soils do not adapt well to droughts and intense rainfall and are thus physically and environmentally vulnerable. During the rainy season, houses can be destroyed by torrential rains and floods, routes to market or access to basic services like health (the regional hospital is located in Dori) can be impassible.

17 Issa Abdou Yonlihinza. Transports et désenclavement dans la problématique du développement local à Téra au Niger. Economies et finances. Université Toulouse le Mirail - Toulouse II, 2011. « Les zones agro-climatiques » p 148

18 Burkina Faso information site: <http://lefaso.net/spip.php?article49800>

19 http://reliefweb.int/sites/reliefweb.int/files/resources/NER_Flash_Inondations_16062017.pdf

20 <http://www.nigerinter.com/2017/06/communiqué-du-conseil-des-ministres-du-vendredi-16-juin-2017/>

21 ESPON Climate: <https://www.espon.eu/programme/projects/espon-2013/applied-research/espon-climate-climate-change-and-territorial-effects>

22 French atlas of decentralised co-operation and other external actions, Partnership « Appui institutionnel au développement et au renforcement de la gouvernance locale à Téra »: <https://pastel.diplomatie.gouv.fr/cncdext/dyn/public/atlas/detailProjet.html?criteres.prjId=6092>

Extreme weather events hamper crops, and changes in plant growth accentuate economic vulnerability, since agricultural activities and trade in the markets are curbed. Agriculture and livestock-related economic sectors are particularly sensitive to climate change.

Based on this analysis, the territory’s institutional and economic recovery capacities should be assessed and, from a political and planning perspective, how well it can manage extreme weather events, restore infrastructure and continue to produce wealth.

Which adaptation issues can be addressed by cross-border co-operation projects?

The National Adaptation Programmes for Action for Climate Change (July 2006),²³ supported by the Global Environment Facility and the United Nations Development Program, address adaptation measures to be implemented in various agriculture, livestock and health sectors, relevant in the Tillabéri Region.

Sector	Relevant adaptation solutions
Agriculture	<ul style="list-style-type: none"> • Manage water resources • Create food banks • Protect riverbanks and improve silted ponds • Promote RGA and develop mutual benefit societies • Foster CES/DRS actions for agriculture, forestry, and pastures • Strengthen technical service capacities • Support animal and vegetable species best-adapted to climate conditions • Produce and disseminate agro-meteorological information • Diversify and intensify irrigated crops • Restore basins for irrigated crops
Livestock breeding	<ul style="list-style-type: none"> • Foster CES/DRS actions for agriculture, forestry, and pastures • Strengthen technical service capacities • Support animal and vegetable species best-adapted to climate conditions • Promote Livestock Food Banks • Create veterinary product shops • Introduce pastoral forage species • Promote market gardening and peri-urban livestock breeding • Restore and manage livestock routes
Health	<ul style="list-style-type: none"> • Build the capacity of technical services • Contribute to the fight against climate-sensitive diseases

23 <http://unfccc.int/resource/docs/napa/ner01f.pdf>

More detailed project identification sheets accompany these courses of action, with pilot projects planned by region.

The following project identification sheets are relevant to the Tillabéri Region:

- Promoting revenue generating activities and developing mutual benefit societies (Sheet No. 6)
- Water control (Sheet No. 7)
- Producing and disseminating meteorological data (Sheet No. 8)
- Creating food banks (Sheet No. 9)
- Contributing to the fight against climate-related diseases (Sheet No. 10)
- Improving erosion control, water harvesting and conservation measures for agricultural, forestry and pastoral purpose (Sheet No. 11)
- Building of material, technical and organisational capacities of rural producers (Sheet No. 14)

The planned actions promote cross-border co-operation:

- in terms of sharing tools: food banks, agro-meteorological information tools;
- in terms of concerted actions: fight against climate-related diseases, capacity building;
- in terms of exchanging good practices: water and soil management, sharing of agricultural practices resilient to climate change.

Opening up the region to improve people's access to basic services (especially health) is also important, as is promoting cross-border trade to ensure food security (markets and cross-border trade).

What are the obstacles for stakeholders?

In order to develop veritable cross-border projects with integrated governance, local authorities must be able to rely on stable legal frameworks, allowing for cross-border co-operation actions. Therefore, the first obstacles are the completion and operationalisation of the legal frameworks. A workshop was organised in 2016, with the Liptako-Gourma Authority on the legal frameworks for cross-border co-operation. A list was drawn up of obstacles and gaps to be addressed in the legislation in Burkina Faso, Niger and Mali.

The more serious issue is the inadequate capacity of local authorities, as well as the lack of long-term financing for stable and sustainable projects over time.

Recommendations

At the local level:

- Reproduce the SATI Initiative in all of the West African border zones:
 - SATIs are under discussion for Côte d'Ivoire's coastal corridor towards Nigeria and for the Senegal River Valley. The Initiative could be replicated in the Katsina-Kano-Maradi-Zinder zone, Mano River Union, Southern Senegambia, etc.
 - These plans are based on a territorial analysis to conceive a strategy and prioritise structuring and win-win projects for the cross-border area concerned in line with an action plan that would attract investment.

At the regional level:

- Allow access to territorial-specific information on climate change in order to adopt relevant strategies. climatiques, afin d'adopter des stratégies pertinentes
- Promote multi-country and even cross-border projects, which concern several countries and correspond to trade and population basins. Such projects will have a more direct and significant effect on food security in those areas where people depend on co-operation to cope with crises.
- Organise cross-border reviews of existing initiatives such as the C3SAHEL to overcome obstacles to legislative co-operation and improve the country's legislative framework accordingly (including local self-governing and the effectiveness of decentralisation, in general).

- Strengthen local authority capacity in terms of human resources: facilitate the availability of state officials in the territories, in order to increase the competences of the local authority staff.
- Strengthen local authority capacity in terms of local resources, notably by improving local taxation.
- Enable access to long-term financing for stable and sustainable projects over time.

Current and future cross-border environmental and climatic initiatives and projects

There are many cross-border projects between Dori and Tera and more broadly in the C3SAHEL region, supported by the UEMOA PCTL, financed by the Swiss Agency for Development and Cooperation.

SATI relies on structuring projects that are focused on agrosilvopastoral zones. These include:

Mobilise surface water and exploit groundwater

Hydraulics need to be managed because, despite the current reservoirs, water resources dry up as soon as the rains are over. Management may involve drilling (groundwater), dams or ponds (surface water). Investments have financed the management of the Dori pond: a dike was constructed to increase the capacity of water retention and flood prevention. Its capacity today is 2.5 million m³.²⁴ It is a transit point for migratory birds and a water point for transhumant livestock that is strategic from a cross-border perspective.

In Mali, the Gossi Dam also plays this role with a large water reservoir capacity that attracts many livestock farmers from neighbouring countries during transhumance and there are plans to refurbish this dam. The Tera Dam, built in the 1980s by China's International Development Cooperation Agency, needs upkeep because it is heavily silted.²⁵ This dam, however, could provide water to the population and livestock, for recession crops and fish farming. Drilling, on the other hand, involves much greater investment, approximately seven million CFA francs per drilling²⁶.

24 Interview with Mr. Aziz Ahmed Diallo, Mayor of Dori and President of the C3SAHEL

25 French atlas of decentralised co-operation and other external actions, "Institutional support for development and the strengthening of local governance in Tera partnership" Partnership: <https://pastel.diplomatie.gouv.fr/cncdext/dyn/public/atlas/detailProjet.html?criteres.prjld=6092>

26 GGWISS information brochure d'information: <http://www.fao.org/3/a-az713e.pdf>

Contribute to fighting climate-related diseases

At the start of transhumance routes, a vaccination park is set up along with veterinary services, which are accompanied by awareness campaigns among breeders and breeders' organisations²⁷.

Accessibility

Due to the type of soil, the region's paths, when dry, are useable, but during the winter, the roads can deteriorate due to the rains (sometimes torrential) and crossing structures are needed.²⁸ Some areas become inaccessible posing security problems for the population. Without road access, it is impossible to reach the main regional hospital in Dori. SATI is planning to develop a regional road network and build crossing structures, particularly between Tera (Niger) and Sebba (Burkina Faso).

Combat desertification and land degradation

Cross-border actions are organised in connection with the African Union and FAO as part of the Great Green Wall Initiative for the Sahara and the Sahel (GGWISS).²⁹ This pan-African programme, launched in 2007 by the African Union, contributes to combating desertification and land degradation and contributes to strengthening the food security and resilience of local communities to climate change. It involves numerous adaptation actions with the aim to protect the soil, increase food production and improve the availability and quality of water: reforestation, training of local populations in assisted natural regeneration and sustainable management of the forest, drilling and building water reservoirs, etc.

The initiative is now a regional programme for the sustainable development of territories and sustainable land management, including actions for the development of market gardening and sustainable economic activities. It extends from Dakar to Djibouti, and other African countries have asked to join (Morocco, Democratic Republic of Congo, etc.).

The FLEUVE³⁰ (Local Environmental Coalition for a Green Union) project is a component of the Great Green Wall Initiative for the Sahara and the Sahel. It aims to integrate the management of natural resources (land, communal forests) and ecosystem risks in the Dori development plan and, thus, the development of economic activities focused on forestry and subsistence vegetable production. This project's implementation relies on multi-stakeholder partnerships including the public and private sectors as part of a

27 GGWISS information brochure d'information: <http://www.fao.org/3/a-az713e.pdf>

28 GGWISS information brochure d'information: <http://www.fao.org/3/a-az713e.pdf>

29 GGWISS information brochure d'information: <http://www.fao.org/3/a-az713e.pdf>

30 Interview with Mr. Aziz Ahmed Diallo, mayor of Dori and President of the C3SAHEL

contribution to implementing the Great Green Wall Initiative in Burkina Faso. It is implemented by the Mayor of Dori, the National Coordination of the Great Green Wall (CN/GGW) of Burkina Faso and the NGO “Sahel Network Desertification” (Réseau Sahel Désertification - RéSaD) with the NGO “International Union for Conservation of Nature” (IUCN) as a fiduciary agency. It receives funding from the European Union via the Global Mechanism of the United Nations Convention to Combat Desertification (UNCCD).

Since the first actions undertaken in Dori in 2016, several activities have taken place with regard to the communal forest:

- planting 60 000 plant species, involving the men and women of the municipality’s seven villages
- work on the 4.2 kilometre fence surrounding the forest
- making and installing signs for the forest
- forming village and inter-village forest management committees
- purchasing equipment, vegetable inputs and seeds to benefit 40 producers

Other activities have helped to secure water availability in the municipality:

- construction of rainwater retention basins with a capacity of 200 to 300 m³ each
- drilling equipment for solar pumping

Some activities carried out in synergy with the World Food Programme (WFP) and the Great Green Wall / National Forest Seed Transboundary Project (CNSF) have led to the development of subsistence agriculture and the strengthening of food security:

- achieving, in two phases, 880 hectares of agricultural half-moons, ZAI technique
- reforestation activities of at least 40 000 plants of local species, mobilising 1 797 producers and the inhabitants of 32 villages - with more than 60% of women participating
- receiving support of more than 124 000 million CFA francs for food assistance

Finally, the project supports the development of sustainable economic activities for the territory, such as the structuring of the cowpea, fodder

and sesame sectors (support for studies to be carried out) and beekeeping (installing beehives, training and equipment for beekeepers, monitoring and advice for beekeepers), which also provides environmental services (pollination).

Promote revenue-generating activities

The processing of livestock products, such as milk and meat, are high value-added activities that would increase producers' incomes and contribute to the region's food security. This requires end-to-end investments in the cross-border livestock and livestock trade value chain: livestock feed, slaughterhouses, milk and meat storage facilities in refrigerated rooms, cheese and meat processing plants.

Strengthening the material, technical and organisational capacities of rural producers

Building slaughterhouses in Tillabéri and Timbuktu is planned to improve the meat sector in the C3SAHEL area.

Studies must be carried out on the development of a dairy industry in the area. In Dori, a project for the construction of a livestock feed production plant could be set up as part of a public-private partnership between an economic operator in the region, the municipality and the state. Storage warehouses should be built in other municipalities in Burkina Faso, Niger and Mali.

Like the development of a dairy industry, technical vocational training has been identified as a priority in the C3SAHEL. The aim is to train, especially young people, in the techniques of the cross-border area's main activities: breeding, crafts, solar energy. SATI also plans to finance business micro-projects to support the creation of activities by young people and women.

Other projects carried out at other levels, by international organisations in particular, aim to disseminate good agricultural practices to local authorities and rural producers, for effective and climate-resilient agriculture.

Since 2016, the World Bank has funded the Climate Smart Agriculture Support Project in Niger.³¹ The project plans to improve agricultural productivity in targeted communities, up to 2022, by developing adaptation practices to climate change, and to increase the capacity to cope with crisis or emergency situations.

³¹ World Bank explanatory note on the Climate Smart Agriculture Support Project : <http://documents.banquemondiales.org/curated/fr/530641522419514807/pdf/Disclosable-Version-of-the-ISR-Climate-Smart-Agriculture-Support-Project-P153420-Sequence-No-04.pdf>

It involves the development of 15 pilot schemes for smart agriculture and integrated sub-projects and the establishment of a call number for producers to have access to climate and market information, as well as information on good agricultural practices. For the first three months, the call centre was able to provide advice to more than 7 800 producers. About 1 000 tonnes of drought-resistant seeds have been distributed to more than 123 000 farmers.

Such projects, because they concern border areas, such as Tillabéri (east of Tera) and Maradi (Niger-Nigeria border, Kano-Katsina-Maradi-Zinder area), can have an effect on the food resilience of the entire cross-border region.

However, multi-country projects or those aimed at local authorities in the C3SAHEL, for example, would have a more direct and practical effect on food security in the region, as countries are interdependent for the survival of populations in crises.

Capacity building of local authorities in setting up effective policies for food security in the region

The local authorities' lack of capacity in terms of financial and human resources hinders the implementation of effective policies at the local level. Indeed, it is difficult to attract competent staff given the low level of remuneration that municipalities can offer in terms of budget. Lack of human resources makes it difficult to co-ordinate and resolve barriers to regional food trade.

Indeed, despite regional provisions on the free movement of goods and people, there are still obstacles to cross-border mobility and trade in grain. Therefore, the negative impact of these restrictions on the food situation of so-called grain deficit areas should be limited. This includes a structured policy dialogue and encouraging the emergence of shared governance of public policies for food security. Civil society stakeholders, in conjunction with local authorities, have thus begun adapting agricultural policies to improve food resilience in the region.

The project “Coordinated political dialogue on food security in West African cross-border areas” (Dialogue politique concerté sur la sécurité alimentaire dans les zones transfrontalières d’Afrique de l’Ouest or DIAPOCO)³² was conducted by the Association Afrique Verte, AFD, and the NGOs CCFD Terre Solidaire, GRDR, and Development and Peace (Développement et Paix) from March 2014 to May 2017. The project was renewed until March 2018.

Through the organisation of meetings and workshops, capacities of the partner organisations, their members and the elected officials of the local

³² Final evaluation of the DIAPOCO project: https://f3e.asso.fr/media/attached/app_appel/diapoco_tdr_evaluation_finale_vf_mars_2017-382-2382.pdf

authorities are strengthened to contribute to improving food security in the Sahelian cross-border zones, which suffered severe food insecurity in 2012. A point of agreement was found to capitalise on the dynamics of local production, processing and marketing of agro-pastoral resources. Training activities for local authorities on agricultural policies for food security are also proposed as part of this project.³³

33 A few links on the DIAPOCCO project: http://www.grdr.org/IMG/pdf/compte-rendu_atelier_diapoco.pdf
<http://ccfd-terresolidaire.org/projets/afrique/comment-renforcer-le-4712>
<http://ecowas-agriculture.org/sites/default/files/LivretEcowap2014-fr-Light.pdf>

This practical guide is published by the Sahel and West Africa Club Secretariat (SWAC/OECD).

The opinions expressed and the arguments employed herein do not necessarily reflect the views of the OECD, the SWAC Secretariat or their respective Members.

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Please cite this work as: OECD/SWAC (2020), Border Cities and Climate Change: A Practical Guide to Legal and Financial Levers, Rev. ed. Paris.

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Border cities and climate change

Gaya (Niger)- Malanville (Benin)

This case study describes the Gaya-Malanville cross-border region. Developed along the Cotonou-Niamey route, the cities of Gaya (Niger) and Malanville (Benin) are 10 kilometres apart and separated by the Niger River. This cross-border agglomeration is the economic core of the Dendi region. In 2018, the border agglomeration of Gaya (Niger) and Malanville (Benin) had about 111 000 inhabitants of which 50 368 lived in Gaya and 60 806 lived in Malanville. It is estimated that in 2020, there will be a total of 135 000 habitants.

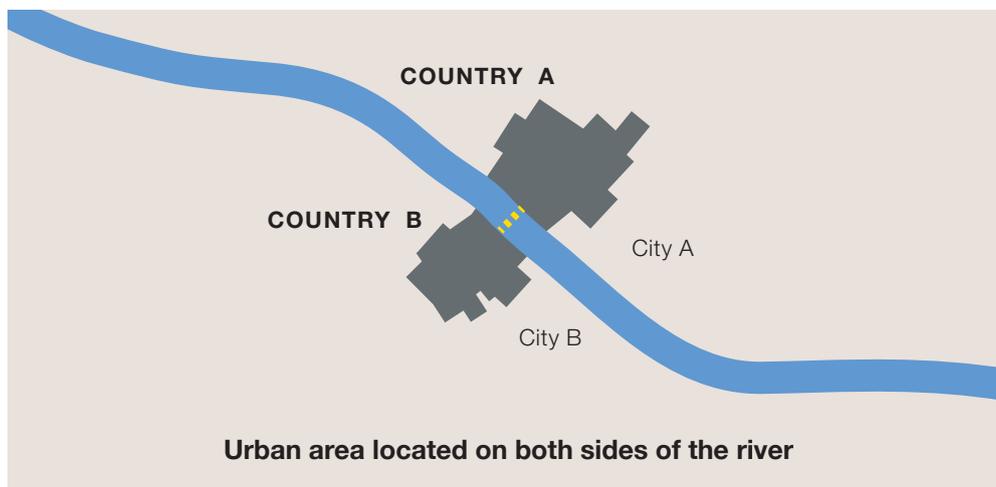
Context

The cross-border area formed by Gaya, Malanville and Kamba (Nigeria), makes up a cross-border or three-city urban network called Dendi Ganda. Dendi means «across the water» in the Songhai language. The Dendi region is located on one of the main historic trade routes. Today, much of cross-border trade is informal. These trade activities are not carried out within the framework of co-operatives or legal companies, their accounts do not conform to official or national standards, and they are not registered in trade registers. The infrastructure of the Dendi region border markets is well developed due to their advantageous positions and they are clearly geared towards inter-regional trade and re-exporting. Many border towns profit from the existing legal and trade barriers that exist between two countries, such as differences in tax regimes and exchange rates, and the subsidies for some products such as fertilizers. In addition, cross-border regions pay the price for the lack of synergy at the supranational level with regard to transnational issues. Nigeria, for example, is not part of UEMOA.

In order to transport goods outside of the state borders at the best price, Sahelian traders have two distinct strategies: evasion and arrangement. Evasion, which is often used by small economic operators, involves using indirect routes to smuggle banned goods into a given country. Arrangement usually entails negotiations between merchants and officials responsible for monitoring the national territory, which is required as long as there are regular significant trade flows across borders. These two strategies illustrate the fact that controlling mobility in the Sahel is linked to the ability to control the area. Trade negotiations and maintaining the inter-personal relationship between merchants and government officials is more profitable than inter-state collaboration to fight fraud.

In the Gaya, Malanville and Kamba region, for example, this affects trade in cereals, hydrocarbons and textiles, which account for a large share of products that cross borders. For example, Benin's maize, millet and rice are exported from small illegal ports on the Niger River, reducing road transport costs and bypassing customs and border authorities. In the event of a cereal shortage in Niger, these networks help transport agricultural products to Niamey, Niger's capital, in three days by motorised canoe. When the situation improves, especially after harvest, the products are transported to the Gaya River port for sale locally. Although this type of trade is very important from a food security perspective, it is far from being as profitable as trading hydrocarbons. The close proximity of Nigeria and Benin facilitate the creation of extensive networks of smuggling goods from Nigerian cities downstream from Gaya. A waterway brigade is in charge of intercepting traffickers carrying fuel in canoes from Nigeria. However, the ever-expanding networks and the obvious lack of financial means compromise this task.

The second-hand clothing trade is another highly representative example of border flows, mainly for re-export internationally, which has developed as a result of Nigeria's import restrictions. These flows are based on trade relationships that link some large warehouse owners in Gaya and Malanville with other Nigerian importers wanting to transport large stocks of clothing from the United States and Western Europe. The effectiveness of their networks to cross borders, the lack of government cross-border co-operation and the obvious complicity of the authorities, now allow these traders to supply the major Sahelian markets with imported textiles.



Which form of local governance is most applicable to the environmental context?

With regard to decentralised co-operation, Gaya and Malanville do not seem to participate in international twinning. However, some steps have been taken in cross-border areas.

The Niger River Commission, created in 1963, provided the first co-operation framework on infrastructures using the river shared by 9 countries: Benin, Burkina Faso, Cameroon, Chad, Côte d'Ivoire, Guinea, Mali, Niger and Nigeria.¹ The Niger Basin Authority (NBA), which replaced the Commission in 1980, co-ordinates national policies to focus on water resources and aims to plan the development of the basin, particularly by building structures and facilities and joint projects.²

In 2012 Benin set up the National Policy for the Development of Border Spaces (Politique Nationale de Développement des Espaces Frontaliers - PNDEF) led by the Beninese Agency for the Integrated Management of Border Spaces (Agence Béninoise de Gestion Intégrée des Espaces Frontaliers - ABeGIEF). The latter organised a cross-border language forum in Malanville in 2015. Other actions concerning the Dendi area are related to the management of border disputes. Niger does not have a national border area policy that enables cross-border actions to be co-ordinated with neighbouring countries.

Malanville and Gaya, as well as Kamba paved the way for more formal cross-border co-operation by signing a Memorandum of Understanding on 21 July 2016 in Kamba. The event brought together locally elected officials, administrative and customs authorities, technical services, and civil society organisa-

¹ <http://www.oecd.org/fr/csao/publications/38410112.pdf>

² <http://geoconfluences.ens-lyon.fr/doc/typespace/frontier/FrontDoc.htm>

tions from the municipalities. This Memorandum of Understanding provides project management for a local cross-border co-operation programme (programme de coopération transfrontalière locale - PCTL) supported by the Swiss Agency for Development and Cooperation (SADC).³ In preparation for the Gaya-Malanville SATI, the SADC carried out a study on accessibility.

The SADC is very active in the synergy between Gaya, Malanville and Kamba. The co-operation dynamics have evolved from de facto co-operation - with flows and exchanges among inhabitants - to institutional co-operation between cities. Periodic meetings are set up to deal with the mobility of people and goods, the condition of the roads, etc. It is a gateway to promote projects. Although the SADC programme does not deal specifically with floods and climate change, other stakeholders are, such as the Red Cross, which produces flood maps, constructs protection dykes and irrigation structures.

Finally, ECOWAS launched a 2017-2021 Cross-Border Co-operation Programme (PRACT) with a focus on the Benin-Niger-Nigeria cross-border area. The main projects to be developed are: the establishment and formalisation of cross-border governance; spatial planning and infrastructure development and sustainable development of agro-pastoral activities and natural resource management.

Cross-border co-operation issues and climate change

The Niger River is a shared resource enabling the development of irrigated crops and hydropower plants to increase the energy and food autonomy of the Sahel region. There is therefore a shared stake in the River's equitable and sustainable management for economic development and poverty reduction in the Niger River valley.

The ecosystems which thrive there also need to be protected. To do so, the governance of regional co-operation should be solid and transparent in order to foster the Niger Basin's resilience. Within the PCTL framework, the major priorities are to strengthen local cross-border agricultural sectors (greater exploitation of the agricultural potential of the Niger River valley; dismantling of the administrative barriers which affect the trade sectors) and respect the specificities of the ecosystem (effectively manage the river valley).

Choosing the Gaya-Malanville cross-border agglomeration

The Gaya and Malanville cross-border agglomeration is an interesting case because it is an integrated cross-border area, with border markets and many economic, trade and socio-cultural flows, etc. The agglomeration is located in an area in which populations are truly socio-cultural and linguistically homogeneous.

3 https://www.urbaplan.ch/wp-content/uploads/2017/07/15068_plaquette_6.pdf

In addition, Gaya-Malanville is a transit centre between Cotonou and Niamey. It is also easily accessible from Burkina Faso, Mali, Niger and Nigeria. The juxtaposed checkpoint located in Malanville and the cross-border bridge over the Niger River greatly facilitate exchanges and co-operation.

Recently several steps have been taken to bring cross-border areas (Gaya-Malanville-Kamba memorandum of understanding) and co-operation programmes (PCTL, PRACT) closer together.

Cross-border co-operation between Gaya and Malanville

The area is important for international trade. Wholesalers wanting to trade with Nigeria are based in Gaya as Nigeria prohibits the import of many goods such as second-hand clothes. Every day, hundreds of trucks loaded with food, manufactured goods, petroleum and uranium concentrates use the busy one-way road that crosses Gaya towards the Gulf of Guinea and other major Sahelian cities. Half of Niger's imported goods and three-quarters of its total exports pass through the Cotonou Corridor in which Gaya is located. Bordering on three countries, Gaya's strategic position has attracted wholesalers, for over thirty years, who have built dozens of warehouses. The city is now over four kilometres long and the urban centre - which originally was concentrated around the historic centre of Gaya - has grown ten-fold. Gaya's location is also strategic due to its relative proximity to the port of Cotonou (about 700 kilometres away on the RNIE2, Benin's main north-south road, which connects the Niger River to Cotonou), from where textiles can be transported free of customs duties. This advantageous geographical location enables traders to import textiles exempt from customs duties and negotiate their sale with Nigerian merchants who re-export them to their country and, to a lesser extent, to Burkina Faso, Cameroon, Chad and Mali. This trade is dominated by about twenty big traders from Niger, the Igbo from Nigeria and a small number of Tunisians and Lebanese, some of who have come to Gaya from Cotonou, Lomé or Burkina Faso. These imports highlight Niger's growing dependence on globally sourced cereals, such as rice and wheat, as well as the dramatic rise in imports of intermediate goods and final consumer goods (plastics, machinery, cement, sugar, milk), due to the rapid urbanisation of the country.

A few kilometres to the south is Malanville a regional centre for agricultural goods produced in the Niger River valley, such as onions, cassava and cereals. The Malanville market began in the colonial era and is one of the largest in Benin after that of Dantokpa in Cotonou. It is also an ever-expanding warehouse of goods destined to the west of Niger. Its import-export activities mainly focus on agricultural products from the Gulf of Guinea and the global market, then redistributed to Sahelian markets. With its strategic geographical location on the Cotonou-Niamey axis, the setting up of foreign traders and low taxes, the market attracts an international clientele.

This cross-border area has developed because of cross-border trade. The Gaya and Malanville markets are closely connected. However, the main market is located in Malanville. It is the second largest international market in Benin after Cotonou as it is accessible from Niger, Nigeria, Burkina Faso and Mali. There is a sort of protectionism on some products within the cross-border area. For example, Nigerien onion producers do not have access to the Malanville market before the Beninese producers have disposed of their stock. Markets have helped create tertiary sector jobs (banking services, transport services, communication services, etc.).

However, trade is not the only cross-border interaction. People cross the border mainly for socio-cultural reasons with more than 60% due to family-related issues. There is also a cross-border use of health services and schooling children from the other side of the border with Beninese teachers in Gaya.

A juxtaposed checkpoint (JCP) located in Malanville opened in 2014. The functioning of the “twin cities” Gaya and Malanville is thus strengthened by the large flow of incoming and outgoing populations and various goods. The checkpoint contributes to the feeling of belonging to a shared zone and reinforces cross-border integration within the area.

The setting up of the JCP falls under the West African Economic and Monetary Union (UEMOA) interstate road transit facilitation programme (programme de facilitation du transit routier inter-États) started in 2005, and of the free trade and free trade policy of the Economic Community of West African States (ECOWAS).⁴

Risks and West African rivers

Although droughts are immediately linked to West Africa when discussing climate change (especially because of the droughts from the 1970s to the 2000s), floods are more and more recurrent.

Heavy rains accompanied by destructive and deadly floods occurred in 2007, 2010, 2013, 2015 and 2017 in Senegal, Mauritania, Gambia, Mali, Benin, Togo, Burkina Faso, Niger, Senegal and Nigeria, among others.

Floods can be caused by heavy rains and the flooding of rivers (a sudden increase in flow) that rises from the river bed and pours into the surrounding lowlands (valley, plain). Exacerbating this situation is the inability of soils to absorb the rains (soil depletion due to drought or human activity), deforestation (accelerated runoff of water on the bare soil, less absorption into the soil) and human activities (soil artificialisation, buildings, dams, etc.)⁵, as well

⁴ <http://journals.openedition.org/tem/3216>

⁵ Cissé, C. et al. (2007), « Chapitre 4. Prévention des risques », in Marie, J., Morand, P. et N'Djim, H. (Eds.), *Avenir du fleuve Niger*. IRD Éditions. doi :10.4000/books.irdeditions.5220.

as the silting up of the river bed, which happens naturally, but can be aggravated by human activities. Floods can also lead to soil erosion and landslides.

The SIFEE (Secrétariat International Francophone pour l’Evaluation Environnementale) conducted an environmental risk assessment following the 2010 floods in selected municipalities in Benin.⁶ The study established a typology of different situations that can lead to floods, identified vulnerabilities, the nature of risk and its origin, and described the threats. Below is a synthesis table produced as part of this study (Table 1).

Causes of floods	Vulnerability factor	Description of threats	Nature of risk/origin
Zone of hydrology	Localities that are part of a high rainfall climate zone	Heavy rains due to the high rainfall variability	Environmental risk (natural)
Hydrography of the environment	Localities within a greater hydrographic area	Inundated communities due to the overflow of rivers	Environmental risk (natural)
Geology and hydrogeology of the environment	Communities living on hydromorphic and/or not very penetrable ground	Aquifers that are quickly saturated and overflowing with water	Environmental risk (natural)

6 SIFEE (2013), « Évaluation des risques environnementaux des inondations de 2010 au Bénin: cas des communes de Lalo, Dogbo, Lokossa, Secrétariat International Francophone pour l’Evaluation Environnementale, http://www.siffee.org/static/uploaded/Files/ressources/actes-des-colloques/lome/affiches/GODONOU_TEXTE.pdf.

Causes of floods	Vulnerability factor	Description of threats	Nature of risk/origin
Anthropisation of the environment (land use patterns)	Insufficient sanitation and storm water drainage networks	- Lack of drainage of the waters into lagoons, lakes and/or rivers; - Overflow of water; - Erosion or degradation of roads	Environmental risk (anthropic)
	Degradation of vegetation cover for agricultural purposes	- Disintegration of the landscape; - Widening of waters; - Loss of crops and harvested crops (famine)	Environmental risk (anthropic)
Anthropisation of the environment (hygiene and sanitation)	Lack of watering points for drinking water	- Use of stream and river water, artisanal wells, etc. for drinking and other purposes; - Increase in water-related diseases	Health risk (anthropic)
	Lack of waste collection points or controlled landfills	-Unhealthiness; -waste pollution	Health risk (anthropic)

Source : SIFEE, 2013; http://www.sifee.org/static/uploaded/Files/ressources/actes-des-colloques/lome/affiches/GODONOU_TEXTE.pdf

The Senegal and Niger River valleys are regularly flooded during the rainy season. The Niger River is the third largest river in Africa after the Nile and the Congo. It is 4 200 kilometres long with a theoretical surface area of 2 000 000 square kilometres. It runs through the centre of West Africa and into part of Central Africa (Yaya, 1995).⁷

With the four main branches of the Niger River converging in Guinea on the border of Sierra Leone (the Niger River, Tinkisso, Niandan and Milo), the Niger River crosses Mali and Niger and runs along the border with Benin, it then crosses Nigeria and empties into the Atlantic Ocean at Port Harcourt City. Tributaries from Côte d'Ivoire, Mali and Cameroon feed into the Niger River of which its basin also goes into Algeria and Chad.

⁷ Cissé, C. et al. (2007), « Chapitre 4. Prévention des risques », in Marie, J., Morand, P. et N'Djim, H. (Eds.), *Avenir du fleuve Niger*. IRD Éditions. doi :10.4000/books.irdeditions.5220.

Map of the Niger River Basin



With a complex network of main branches, and tributaries or distributaries making up the secondary branches, the Niger River feeds lakes and ponds, and submerges floodplains during flood periods. There is thus an interior delta of the Niger River, covering 18% of Mali in a Sahelian eco-climatic zone with less than 550 millimetres of rainfall per year.

This particular area, but more generally the Niger valley, is very conducive to agriculture and transhumant livestock farming (irrigated and recession crops, pastures), fishing, hunting and gathering. It is a sort of “nourishing artery”. There is tremendous biodiversity in an otherwise desert-like environment.

Water levels were low from 1970 to 2005⁸ due to less annual rainfall. Now the Niger River water level is much higher in recent years leading to flooding and causing significant damage throughout the basin, particularly in 2013 and 2014.

As from the 1980s, during a period of extreme drought, the Niger River valley became increasingly developed with rice growing and hydropower so as to end its dependence on cereal and energy. The Niger Basin has significant potential, given that only 9% of agricultural land is irrigable and that it only has developed 25% of its hydroelectric potential, according to a study by the Niger Basin Authority.⁹

Co-operation around the Niger River is organised through the Niger Basin Authority of which its members are Benin, Burkina Faso, Cameroon, Chad,

⁸ http://www.abn.ne/images/documents/PS/plan_strategique.pdf pp. 13.

⁹ Le fleuve Niger et son bassin: aménagements, gouvernance et stratégies d'adaptation au changement climatique, Sandrine Vaucelle, p253, in Cahiers d'Outre-Mer, n°270, avril-juin 2015, pp243-268 <https://www.cairn.info/revue-les-cahiers-d-outre-mer-2015-2-p-243.htm>

Côte d’Ivoire, Guinea, Mali, Niger and Nigeria.¹⁰ In 2008, the Member States signed the Niger Basin Water Charter, which deals with “activities related to knowledge, governance, preservation, protection, mobilisation and use of water resources in the basin” and applies to the Niger River, its tributaries, sub-tributaries and distributaries.¹¹

Managing water resources at the regional level

This intergovernmental body’s goal is to provide a sound legal framework to facilitate and promote co-operation between Member States in managing water resources and investment on the Niger River. It ensures the basin’s integrated development based on its resources (fishing, fish farming, agriculture, livestock, forestry, logging, transportation, communication, industry, energy).¹²

Created in 1964 in Niamey as the Niger River Commission, the NBA is one of the oldest African intergovernmental organisations¹³ and one of the most progressive international river organisations.

At the regional level, dialogue is needed within the Niger Basin Authority to reduce the impact of existing and future infrastructure projects. Investments in infrastructure such as bridges, dams, reservoirs, irrigation systems, hydropower plants and navigation infrastructure can contribute to economic activity, improved livelihoods (energy and food security) and resilience to climate change. Ultimately, economic activity fosters shared prosperity and reduces poverty. However, its success depends on solid co-operation, which can be facilitated by the NBA.

Thus, there were disagreements regarding the construction of dams (the Fomi Dam in Guinea, the Djenné and Taoussa Dams in Mali, etc.), which would benefit some countries upstream of the river, but would reduce the flow for the countries downstream.¹⁴ Subsequent to NBA mediation and studies by the Wetlands International Research Institute on the Fomi Dam project upstream of the river in Guinea, the dam’s plans were revised to greatly reduce its impact downstream.¹⁵ Conversely, plans for flood protection dykes in Benin could exacerbate floods in Nigeria downstream. The NBA charter helps avoid such actions that would lead to conflict.¹⁶

10 Niger Basin Authority website : http://www.abn.ne/index.php?option=com_content&view=category&layout=blog&id=5&Itemid=6&lang=fr

11 Niger Basin Water Charter: <http://www.abn.ne/images/documents/publications/Charte%20Eau.pdf>

12 IRD article: <https://www.ird.fr/les-partenariats/principaux-partenaires-scientifiques/afrique-de-l-ouest-et-centrale/niger/abn>

13 World Bank article: <http://www.banquemonde.org/fr/news/feature/2015/03/04/niger-basin-countries-collaborate-on-hydropower-irrigation-and-improved-water-resource-management>

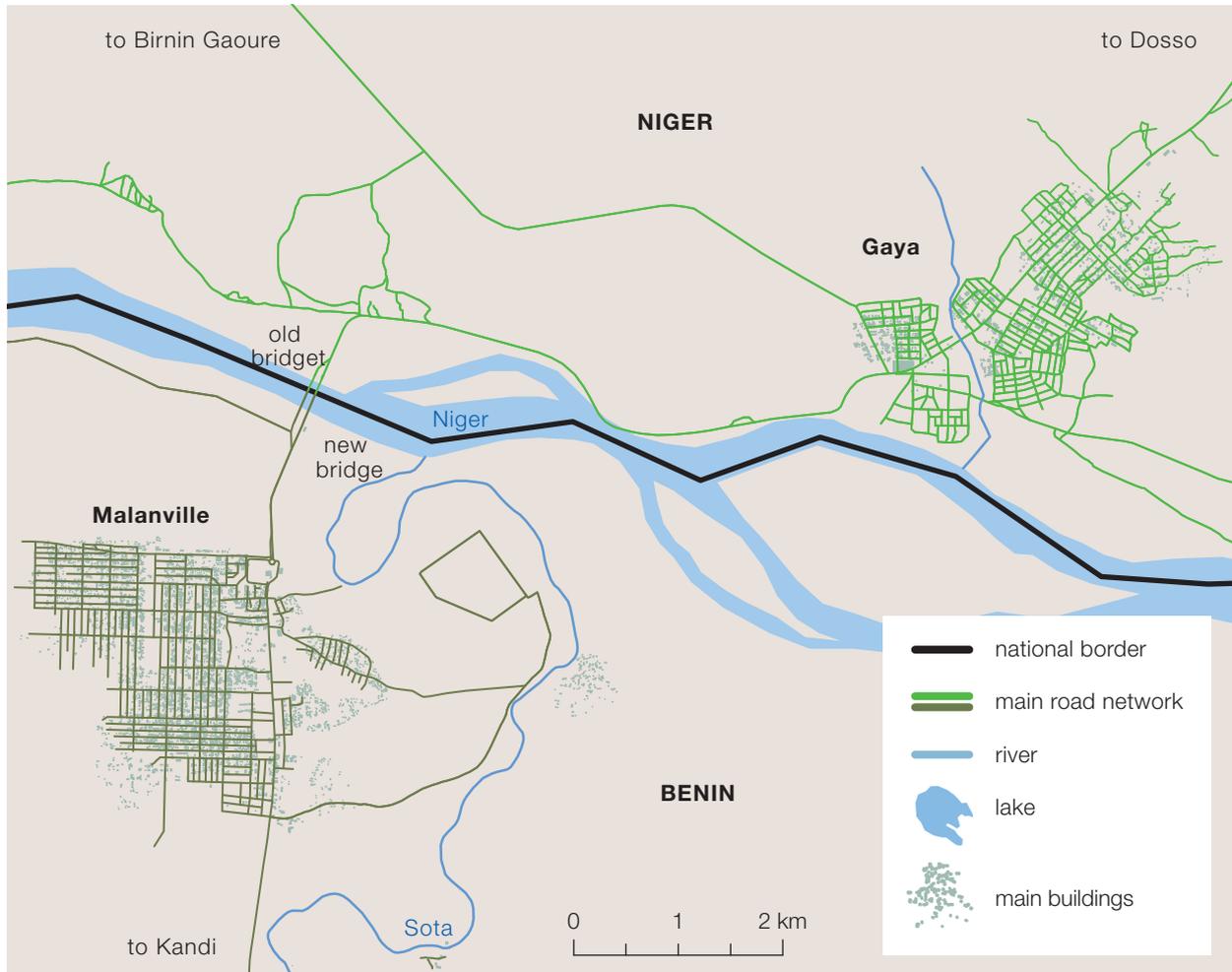
14 http://ipsinternational.org/fr/_note.asp?idnews=6734

15 <http://ml.chm-cbd.net/biodiversity/zone-humide/lacs-et-fleuves/le-fleuve-niger-et-ses-deltas>

16 Gestion des Risques Hydro-pluviométriques dans la Vallée du Niger au Bénin : cas des inondations des années 2010, 2012 et 2013 dans les communes de Malanville et Karimama, ADJAKPA, Tchékpo Théodore, thèse de 2016, p37

En plus d'être une instance politique de concertation, l'ABN est un centre de ressources et d'informations avec un bulletin hydrologique mensuel, une feuille d'information mensuelle sur la prévention des crues « Crue info », des dispositifs d'observation de l'hydrologie.

Map of the Gaya-Malanville agglomeration



Bridge linking Gaya to Malanville



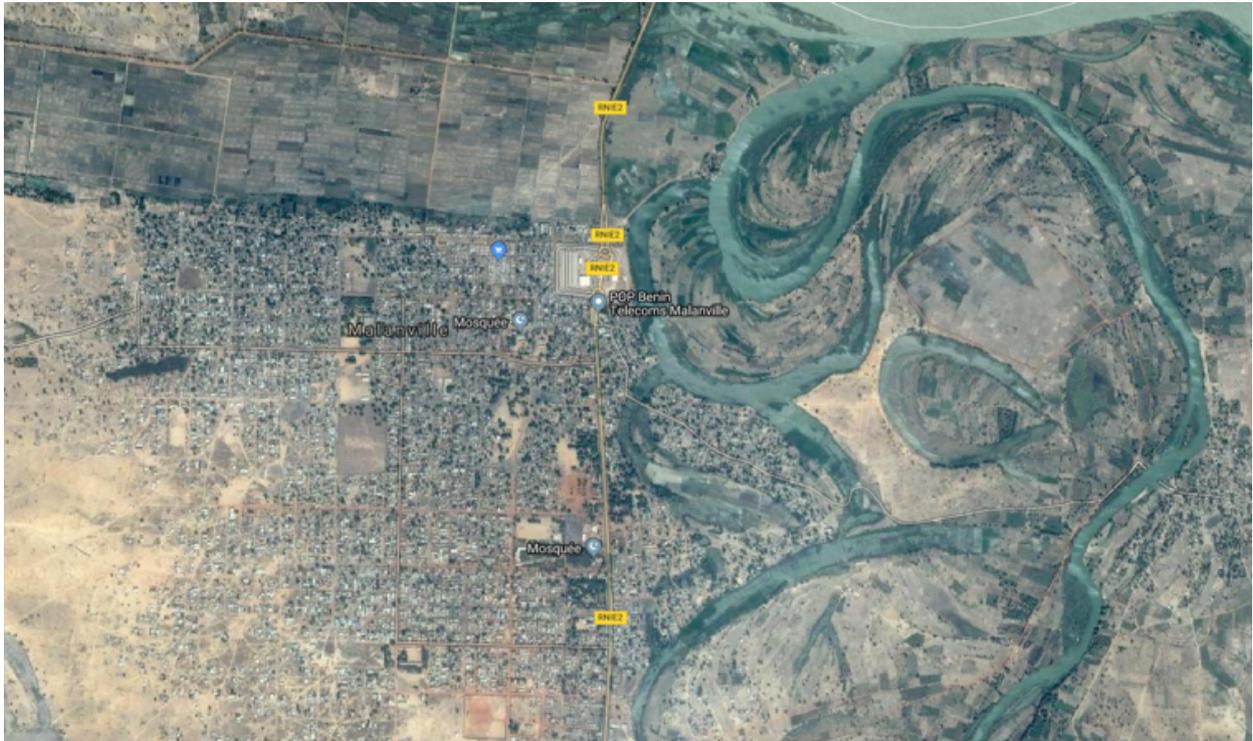
Source: www.anp.ne

Juxtaposed checkpoints in Malanville



Source: www.anp.ne

Satellite photo of Malanville



Source: Google Maps

Satellite photo of Gaya



Source: Google Maps

Obstacles and possibilities for cross-border co-operation and its stakeholders

The dramatic economic development of Gaya and Malanville - among many other West African border cities - is facilitated by the existence of borders and different national currencies. Trade activities between Gaya, Malanville and Kamba are linked to the liberalisation of international trade between Niger and Benin. In this region, trade policies adopted by Benin in 1973 encouraged re-exportation by maintaining lower import barriers than those in Nigeria. These favourable customs regulations allow Benin to import goods and re-export them to neighbouring countries and to promote the development of cross-border trade by the diaspora living in Malanville. The situation has changed from the mid-1990s, when a number of Nigerian importers in Malanville found that it was more advantageous to import goods from the world market through Benin, free of duty, and store them in Gaya and ultimately re-export them to Nigeria. Although less direct, the Benin-Niger-Nigeria route is preferred to that of Benin-Nigeria because goods imported duty-free in Benin must be declared in transit to Niger and not to Nigeria, where the importation of textiles is prohibited. As a result, Benin imports very large volumes of goods declared in transit for landlocked countries, although most are destined for Nigeria. Many experienced traders initially based in Malanville now have large warehouses in Niger and continue to move frequently between the two markets.

Thus, West African traders would have less incentive to extend the transportation of goods across the continent and avoid taxes levied by the customs authorities if it were not for the price differences between countries and import or export bans on certain agricultural or manufactured products. For example, the economic expansion associated with the re-export of used textiles from Gaya and Malanville contrasts with the relative decline of the neighbouring city of Kamba in Nigeria (which had a population of 51 468 in 2018). Having long served as a transit point for the illegal transportation of petroleum products from other parts of Nigeria (where they are heavily subsidised), and for other manufactured goods produced in the country, Kamba has slowly deteriorated. This was due to, firstly, greater controls and seizures by customs authorities, which led to a drop in activity and by the presence of local enforcement officers that Nigeria put in place to fight corruption and thus lower the level of imports that could adversely affect domestic products. Secondly, Kamba's dynamism is greatly affected by structural shortages and by the sabotage of Nigerian oil pipelines and refineries slowing the supply from the northwest of the country. Added to this is the government raising oil prices, aimed at ending massive consumer price subsidies, which has greatly reduced Kamba's attractiveness for residents of Niger and Benin. Thirdly, general ambient insecurity has constrained the movement of traders crossing borders as part of their business. Since the implementation of Sharia law in the northern states of Nigeria and the intensification of tensions with the expansion of Boko Haram, economic activity has slowed down. Christian

Yoruba and Igbo traders based in Kamba since the 1930s have left the city for Gaya, Malanville, and even Ouagadougou and Niamey. The departure of these traders specialised in the sale of manufactured goods (plastic goods, machinery, equipment and spare parts) in the big cities of southern Nigeria contributed to the economic decline of Kamba. Their in-depth knowledge of supply networks has not been replaced at the local level, highlighting the crucial importance of the presence of large traders.

Policy perspectives

Investing in border market infrastructure would promote trade and productive activities in several countries at the same time. The benefits of development focused on functional economic zones, and not on nation-states, would be highlighted, and fears that border trade is undermining productive development could be alleviated. Initiatives are underway, but it should be stressed that national territorial policies have not yet integrated the internal borders issue or the idea of genuine cross-border co-operation. Relations between the Dendi region markets thus show both the limits and the constraints undertaken by the three states, but also the need to maintain their security, failing to intervene effectively in the cross-border economic system.

Despite its specificity and the significant cross-border flows of people and goods, there is not yet a cross-border territory project, despite the Benin Border Area Policy (*Politique des espaces frontaliers du Bénin* - 2012), nor is there such a policy in Niger. A project could be developed for the Dendi Ganda area as part of an Integrated Transboundary Development Scheme (SATI), supported by UEMOA in collaboration with the Swiss Agency for Development Cooperation.

Tools and structures for cross-border co-operation

	CT BÉNIN	CT NIGER
Tableau 2	Outils et structures juridiques	Outils et structures juridiques
Outils et structures de droit public	<p>1) Convention de coopération (art.176 et suivants de la Loi n° 97-029 du 15 janvier 1999 portant organisation des communes en République du Bénin)</p> <ul style="list-style-type: none"> • Fondement juridique : une convention qui entre en vigueur après approbation de l'autorité de tutelle • Pas de personnalité juridique • Membres : collectivités burkinabés et étrangères • Droit applicable aux partenaires (Recueil des lois sur la décentralisation béninois) • Objet/ actions : « la réalisation et de la gestion d'équipements et de la création de services d'intérêt et d'utilité intercommunaux ». 	<p>1) Accords de coopération (de la commune : article 79 du CGCT et de la région : article 149 du CGCT)</p> <ul style="list-style-type: none"> • Fondement juridique : une convention • Pas de personnalité juridique • Membres : collectivités nigériennes et étrangères, organismes nationaux et étrangers • Droit applicable aux partenaires (CGCT)

CT BÉNIN	CT NIGER
<p>2) Organismes de coopération (art.177 et suivants de la Loi n° 97-029 du 15 janvier 1999 portant organisation des communes en République du Bénin)</p> <ul style="list-style-type: none"> • Fondement juridique : une convention qui entre en vigueur après approbation par décret pris en conseil des ministres et sur proposition du ministre chargé de l'administration territoriale • Personne morale de droit public • Membres : collectivités béninoises et étrangères • Droit applicable aux partenaires (Recueil des lois sur la décentralisation béninois) • Objet/ actions : « la réalisation et de la gestion d'équipements et de la création de services d'intérêt et d'utilité intercommunaux ». <p>3) Organisations internationales de villes ou organismes décentralisés étrangers (art.178 et 179 de la Loi n° 97-029 du 15 janvier 1999 portant organisation des communes en République du Bénin)</p> <ul style="list-style-type: none"> • Base légale : une convention d'adhésion • Personnes morales de droit public • Membres : collectivités béninoises et étrangères • Droit applicable aux partenaires : droit international/ le recueil des lois sur la décentralisation béninois/ le droit du siège. 	<p>2) Conventions (article 327 du CGCT)</p> <ul style="list-style-type: none"> • Fondement juridique : une convention qui entre en vigueur après approbation du ministre chargé de la tutelle des collectivités territoriales • Pas de personnalité juridique • Membres : collectivités nigériennes et étrangères, organismes nationaux et étrangers • Droit applicable aux partenaires dans les limites des compétences des CT (CGCT), le droit international souscrit par le Niger • Objet/ actions : les compétences des CT dans le respect des engagements internationaux du Niger

	CT BÉNIN	CT NIGER
Outils et structures de droit public avec participation d'acteurs privés	<p>1) Organisations internationales de villes ou organismes décentralisés étrangers (art.178 et 179 de la Loi n° 97-029 du 15 janvier 1999 portant organisation des communes en République du Bénin)</p> <ul style="list-style-type: none"> • Base légale : une convention d'adhésion • Personnes morales de droit public • Membres : collectivités béninoises et étrangères, organismes nationaux et étrangers, de droit privé et de droit public • Droit applicable aux partenaires : droit international/ le recueil des lois sur la décentralisation béninois/ le droit du siège. 	<p>1) Accords de coopération (de la région : article 149 du CGCT)</p> <ul style="list-style-type: none"> • Fondement juridique : une convention • Pas de personnalité juridique • Membres : collectivités nigériennes et étrangères, organismes nationaux et étrangers, de droit privé et de droit public • Droit applicable aux partenaires : le CGCT nigérien. <p>2) Groupements d'intérêt public (art. 328 du CGCT)</p> <ul style="list-style-type: none"> • Base légale : accord • Personne morale de droit public • Membres : collectivités territoriales nigériennes et étrangères, Etat, établissements publics, toute autre personne morale de droit public ou de droit privé • Objet/actions : mettre en œuvre et gérer ensemble pendant une durée déterminée toutes les actions requises par les projets et programmes de coopération interrégionale et transfrontalière intéressant des collectivités territoriales appartenant aux pays de la sous-région <p>Par voie d'exploitation directe ou participation à des organismes dans les mêmes conditions que les CT.</p>

	CT BÉNIN	CT NIGER
Outils et structures de droit privé gestionnaires de service public	<p>1) Sociétés d'économie mixte, agences d'exécution, organisations non gouvernementales, associations de droit béninoise habilitées, comités de gestion, sociétés privées (art.108 de la Loi n° 97-029 du 15 janvier 1999 portant organisation des communes en République du Bénin)</p> <ul style="list-style-type: none"> • Membres adhérents : tout groupe de personnes physiques et morales, nationales et étrangères • Droit applicable : droit privé interne (béninois ou étranger) et international • Objet/actions : à but non lucratif ou lucratif, exercice des compétences des communes en conformité avec les stratégies sectorielles, les réglementations et normes nationales en vigueur. Dans l'exécution des opérations qui découlent de leurs compétences, les communes béninoises peuvent, sous leur maîtrise d'ouvrage, déléguer, se faire assister, concéder, affermer, sous-traiter ou passer des contrats avec de tels organismes de droit privé. 	<p>1) Sociétés chargées d'exploiter des services publics locaux (article 18 du CGCT)</p> <ul style="list-style-type: none"> • Membres adhérents : personnes physiques et morales ; les CT peuvent soit acquérir des actions ou obligations, soit recevoir à titre de redevances, des actions d'apports ou parts des fondateurs émises par lesdites sociétés dans les conditions fixées par la réglementation en vigueur • Droit applicable : droit privé interne et international • Objet/ actions : à but lucratif
Tableau 3	<p>Compétences propres et transférées (exécutoires 15 jours après transmission des actes à l'autorité de tutelle¹⁷ pour contrôle de la légalité)</p>	<p>Compétences propres et transférées (exécutoires après transmission des actes à l'autorité de tutelle¹⁸ pour contrôle de la légalité ; les actions de coopération entre collectivités sont soumises à l'autorisation préalable de l'autorité de tutelle)</p>

17 Sous réserve des actions soumises à l'approbation ou à l'autorisation préalable de l'autorité de tutelle.

18 Idem

	CT BÉNIN	CT NIGER
Aménagement du territoire et urbanisme		
Communes urbaines (Niger)+toute commune béninoise	<p>Le mode de gestion des propriétés communales et l'élaboration de tous les documents d'urbanisme sont soumis à l'autorisation préalable de la tutelle</p> <p>La commune élabore et adopte son plan de développement. Dans ce cadre:</p> <ol style="list-style-type: none"> 1. Élaboration des documents de planification nécessaires : <ul style="list-style-type: none"> - le schéma directeur d'aménagement de la commune ; - le plan de développement économique et social ; - les plans d'urbanisme dans les zones agglomérées ; - les règles relatives à l'usage et à l'affectation des sols ; - les plans de détails d'aménagement urbain et de lotissements. 2. Délivrance des permis d'habiter et des permis de construire ; 3. Contrôle permanent de la conformité des réalisations et des constructions avec la réglementation en vigueur. 	<p>Les outils d'aménagement du territoire et d'urbanisme, les opérations domaniales et foncières et toute intervention impliquant la cession de biens ou de ressources de la collectivité sont soumis à l'autorisation préalable de la tutelle</p> <ol style="list-style-type: none"> 1. Disposition du domaine privé de la commune ; 2. Gestion du domaine public de la commune ; 3. Gestion des couloirs de passage, des aires de pâturages et des points d'eau pastoraux; 4. Élaboration et adoption des documents de planification, d'outils d'aménagement foncier et urbain ; 5. Plan de développement communal et autres outils de planification ; 6. Réalisation, entretien et gestion de parcs publics, complexes sportifs et culturels, terrains de jeux de la commune ; 7. Construction, aménagement, entretien des voiries; notamment construction et entretien des pistes rurales ; 8. Construction, aménagement, entretien des collecteurs de drainage, d'égouts et de stations de traitement des eaux usées et d'usines de traitement des ordures ménagères.

	CT BÉNIN	CT NIGER
Régions nigériennes		<p>La région est une collectivité territoriale à vocation essentiellement économique, sociale et culturelle (article 96 du CGCT, ordonnance n°2010-54)</p> <p>Les outils d'aménagement du territoire et d'urbanisme, les opérations domaniales et foncières et toute intervention impliquant la cession de biens ou de ressources de la collectivité sont soumis à l'autorisation préalable de la tutelle</p> <ol style="list-style-type: none"> 1. Actes d'acquisition ou de disposition de biens du domaine régional ; 2. Opérations d'aménagement de l'espace régional; 3. Gestion des couloirs de passage, des aires de pâturages et des points d'eau pastoraux.
Environnement¹⁹		
Communes urbaines au Niger+ toute commune béninoise	<ol style="list-style-type: none"> 1. La délimitation des zones interdites à l'urbanisation dans les périmètres réputés dangereux pour des raisons naturelles ou industrielles ; 2. La création, de l'entretien et de la gestion des cimetières et des services funéraires. 3. La création, l'entretien des plantations, des espaces verts et de tout aménagement public visant à l'amélioration du cadre de vie. La commune veille à la protection des ressources naturelles, notamment des forêts, des sols de la faune, des ressources hydrauliques, des nappes phréatiques et contribue à leur meilleure utilisation. 	<ol style="list-style-type: none"> 1. Initiative, soutien et suivi de la mise en œuvre des actions de développement entreprises au sein de la commune : agriculture, élevage, pêche, pisciculture, chasse, artisanat ; 2. Initiative, soutien et suivi de la mise en œuvre des actions de secours et d'assistance sociale entreprises dans la commune ; 3. Préservation et protection de l'environnement ; 4. Gestion de ressources naturelles.

¹⁹ Le principe de la protection de l'environnement a une valeur constitutionnelle au Niger puisqu'aux termes de l'article 37 de la Constitution : « Les entreprises nationales et internationales ont l'obligation de respecter la législation en vigueur en matière environnementale. Elles sont tenues de protéger la santé humaine et de contribuer à la sauvegarde ainsi qu'à l'amélioration de l'environnement ».

	CT BÉNIN	CT NIGER
Régions nigériennes		<ol style="list-style-type: none"> 1. Plan et programme de développement régional; 2. Initiative, soutien et suivi de la mise en œuvre des actions de développement entreprises au sein de la région: notamment transports, santé animale, tourisme, actions culturelles et sportives ; 3. Préservation et protection de l'environnement: mobilisation et de préservation des ressources en eau, protection des forêts et de la faune, conservation, défense et restauration des sols.
Santé et hygiène		
Communes urbaines au Niger + toute commune béninoise	<ol style="list-style-type: none"> 1. La préservation des conditions d'hygiène et de la salubrité publique, notamment en matière : <ul style="list-style-type: none"> • de prospection et de distribution d'eau potable; • de périmètres de sécurité sanitaire autour des captages, forages et puits, • d'assainissement privé des eaux usées ; • de lutte contre les vecteurs des maladies transmissibles • d'hygiène des aliments et des lieux et établissement accueillant du public; • de déchets industriels. 2. Élaboration de la réglementation concernant l'assainissement individuel (latrines, fosses septiques, puisards) et initie toutes mesures de nature à en favoriser la promotion. 3. La réalisation, l'équipement et les réparations des centres publics de santé et de promotion sociale, des infrastructures publiques culturelles de jeunesse, de sports et de loisirs, au niveau de l'arrondissement du village ou du quartier de ville. La commune assure en outre l'entretien de ces centres et infrastructures. 	<ol style="list-style-type: none"> 1. Construction et entretien courant des centres de soins de santé primaire ; 2. Assistance sociale aux personnes âgées, aux handicapées, aux orphelins sans ressources et autres indigents.

	CT BÉNIN	CT NIGER
Régions nigériennes		1. Construction et entretien des hôpitaux régionaux;
Eau et assainissement		
Communes urbaines nigériennes+ toute commune béninoise	<ol style="list-style-type: none"> 1. La fourniture et la distribution d'eau potable; 2. La collecte et le traitement des déchets solides autres que les déchets industriels; 3. La collecte et le traitement des déchets liquides ; 4. La gestion du réseau public d'évacuation des eaux usées et du réseau d'évacuation des eaux pluviales; 5. Des ouvrages d'aménagement des bas-fonds et de protection contre les inondations 	<ol style="list-style-type: none"> 1. Collecte, évacuation et traitement des eaux usées et des ordures ménagères ; 2. Collecte, évacuation et traitement des eaux pluviales ; 3. Construction, aménagement, entretien des collecteurs de drainage, d'égouts et de stations de traitement des eaux usées et d'usines de traitement des ordures ménagères ; 4. Construction, aménagement, entretien des fontaines et puits publics.
Régions nigériennes		1. Préservation et protection de l'environnement: mobilisation et préservation des ressources en eau, protection des forêts et de la faune, conservation, défense et restauration des sols.
Services marchands et investissements économiques		
Communes urbaines au Niger + toute commune béninoise	<ol style="list-style-type: none"> 1. La construction, de l'équipement, des réparations, de l'entretien et de la gestion des marchés et des abattoirs. 2. Toutes mesures de nature à favoriser le tourisme sur le territoire communal et à encourager les opérateurs économiques intéressés à entreprendre des activités dans ce domaine. 3. Des investissements visant à promouvoir l'installation et le développement des activités économiques sur le territoire communal, notamment par l'aménagement de zones artisanales et de zones industrielles. 	<ol style="list-style-type: none"> 1. Construction, entretien et gestion des abattoirs et séchoirs ; 2. Construction, entretien et gestion des marchés et gares routières.

Climate

The regions of the Niger and Mekrou Rivers, bordering Niger and Benin, are located in the Sudanian climatic zone, which is dry and tropical. Average temperatures are generally between 18.6°C and 27.2°C in January and reach maximums between 33.1°C and 40.3°C in April. There is greater precipitation from March to August, which falls off rapidly in September and October. These significant temporal and geographical differences seriously affect the distribution of arable zones in the region, which is due to the Niger River that runs from west to east over more than 100 kilometres. The river's intermittent flow creates - outside the rainy season - a series of ephemeral ponds, which allow a constant mechanical irrigation of the surrounding settlement areas. However, such fluctuations in the water table can cause frequent floods and disrupt or even destroy agricultural production. The Lété Island - in the middle of the border tensions between Niger and Benin - is a good example. With an area of 40 square kilometres, it is the largest island in the Niger River. Situated north-west/south-east, it is about 16 kilometres long and reaches 4 kilometres at its widest point. It is encircled by two branches of the Niger River: the smallest flows towards the north of the island, the largest towards the south. The border crosses the island between these two river branches. Climatic deterioration combined with the transformation of pastoral areas into agricultural land has contributed to deforestation while significantly reducing pastureland. In addition, more and more Fulani shepherds are fighting over land resources with Hausa fishermen who are now farmers and with Beninese neighbours that are seeking arable land further than their villages. These farmers have taken over the high pastures of these (already occupied) sandy flood plains, which are perfectly adapted to agriculture. Regulations regarding livestock and transhumance towards the south of the island have been tightened after the tensions between Niger and Benin. While Beninese authorities are stepping up border controls making crossing the river valley more difficult, livestock farmers have had to abandon the traditional migration corridor.

In addition to rice, onions and off-season produce production, large irrigated paddy fields are planted on the island to stimulate regional agricultural production. Farming on the island is still mainly manual and is organised around family units with itinerant seasonal workers. There are also many farms and dairy farms in the Dendi region that supply regional and international markets.

The Niger River's source is located in Sierra Leone. It crosses six countries and empties into the Atlantic Ocean off the coast of Nigeria. The mountainous region of north-western Benin is a water reservoir for Benin and part of Niger.²⁰

20 Landscapes of West Africa, USAid, p74

Climate change intensifies the possibility of a decrease in the flow of the Niger River²¹ during the dry season, floods during flood season,²² and vulnerability of transhumant livestock²³ (drying up of water points, less fodder, vector-borne diseases, etc.).

Effects on Gaya-Malanville

Floods also affect the border cities of Malanville and Gaya. According to a study by the mayor's office of Malanville, the region is exposed to floods every two years on average,²⁴ with risks of waterborne diseases (cholera, diarrhoea, malaria) especially for children under five years of age. Over the last ten years there has been an increase in the number of floods and their intensity.

The floods from 2010 to 2013 were the most catastrophic in Benin's history and called for international aid.²⁵

During the rainy periods of the wet season, clay soils cause water to stagnate around houses,²⁶ destroy fields and infrastructure (schools, routes, etc.).

The torrential rains further upstream of the Niger River also generate floods, mainly in Malanville, as protective dykes were built in Niger (Gaya is protected by the Dolé Dam that was built between 1993 and 1996). The flooding is made worse by the disruption of the rainy season: rains arrive sooner or stop later, with greater intensity²⁷.

Aggravating the floods²⁸ are wildfires and the exploitation of protected forests (Goungoun Forest and the Djona hunting area) for the wood-energy sector that strip the soil, animals trampling over the soil making it loose and at high

21 <http://iahs.info/uploads/dms/16774.25-131-137-344-08-Mahe-corr.pdf>

22 https://books.google.fr/books?id=zGIFDAAAQBAJ&pg=PA94&pg=PA94&dq=malanville+change+ment+climatique&source=bl&ots=Ni7aSKW7cy&sig=12imBS3MekID4IEyCQN4pOVFa_8&hl=fr&sa=X&ved=0ahUKEwjlq-XOt7HWAhWD2xoKHblUCoEQ6AEIPTAD#v=onepage&q=malanville%20changement%20climatique&f=false

23 <https://www.ajol.info/index.php/afsci/article/viewFile/120096/109568>

24 Gestion des Risques Hydro-pluviométriques dans la Vallée du Niger au Bénin : cas des inondations des années 2010, 2012 et 2013 dans les communes de Malanville et Karimama, ADJAKPA, Tchékpo Théodore, thèse de 2016, p187 <https://books.google.fr/books?id=zGIFDAAAQBAJ&printsec=frontcover&hl=fr#v=onepage&q&f=false>

25 Gestion des Risques Hydro-pluviométriques dans la Vallée du Niger au Bénin : cas des inondations des années 2010, 2012 et 2013 dans les communes de Malanville et Karimama, ADJAKPA, Tchékpo Théodore, thèse de 2016, p39 <https://books.google.fr/books?id=zGIFDAAAQBAJ&printsec=frontcover&hl=fr#v=onepage&q&f=false>

26 Gestion des Risques Hydro-pluviométriques dans la Vallée du Niger au Bénin : cas des inondations des années 2010, 2012 et 2013 dans les communes de Malanville et Karimama, ADJAKPA, Tchékpo Théodore, thèse de 2016, p107 <https://books.google.fr/books?id=zGIFDAAAQBAJ&printsec=frontcover&hl=fr#v=onepage&q&f=false>

27 Gestion des Risques Hydro-pluviométriques dans la Vallée du Niger au Bénin : cas des inondations des années 2010, 2012 et 2013 dans les communes de Malanville et Karimama, ADJAKPA, Tchékpo Théodore, thèse de 2016, p107 <https://books.google.fr/books?id=zGIFDAAAQBAJ&printsec=frontcover&hl=fr#v=onepage&q&f=false>

28 Gestion des Risques Hydro-pluviométriques dans la Vallée du Niger au Bénin : cas des inondations des années 2010, 2012 et 2013 dans les communes de Malanville et Karimama, ADJAKPA, Tchékpo Théodore, thèse de 2016, p32 <https://books.google.fr/books?id=zGIFDAAAQBAJ&printsec=frontcover&hl=fr#v=onepage&q&f=false>

risk of wind and water erosion. Poor populations are particularly vulnerable²⁹ as they live in make-shift houses built from materials that do not adhere to the construction ban in flood zones set out in the Development Master Plans (Schémas Directeurs d'Aménagement).

Finally, environmental and landscape degradation creates river siltation. The sand fills the minor bed and the water spreads over the plain, creating floods.³⁰

The geographical configuration of the river valley and thus the wider flood-plain in Benin could explain why floods in Benin can sometimes be more intense.³¹

Territorial vulnerabilities and its ability to adapt

According to the methodology developed by the ESPON study “Climate – Climate Change and Territorial Effects on Regions and Local Economies in Europe”,³² different types of territorial vulnerabilities can be identified and their (potential) capacity to adapt evaluated.

In the case of Gaya and Malanville, Malanville is more physically vulnerable enduring floods and flood-related destruction of infrastructure: water points, schools, routes, latrines, houses, etc.³³

Soils are environmentally vulnerable, as they do not adapt well to droughts and intense rainfall. The exceptional biodiversity of the Niger Valley (flora, fauna) is also threatened by floods (overflow of wetlands, destruction of habitats, nests of migratory birds) and the increased pressure of human activity (hunting of migratory birds).

The region is very vulnerable economically as the international market is located in Malanville where food crops, vegetables and cash crops (rice, peanut, cotton, onion) are sold, as well as animals (extensive breeding),³⁴

29 Gestion des Risques Hydro-pluviométriques dans la Vallée du Niger au Bénin : cas des inondations des années 2010, 2012 et 2013 dans les communes de Malanville et Karimama, ADJAKPA, Tchékpo Théodore, thèse de 2016, p38 <https://books.google.fr/books?id=zGIFDAAAQBAJ&printsec=frontcover&hl=fr#v=onepage&q&f=false>

30 Interview with Mr. Lawali Dambo, Geography professor at the University of Niamey

31 Interview with Mr. Lawali Dambo, Geography professor at the University of Niamey

32 ESPON Climate: <https://www.espon.eu/programme/projects/espon-2013/applied-research/espon-climate-climate-change-and-territorial-effects>

33 Gestion des Risques Hydro-pluviométriques dans la Vallée du Niger au Bénin : cas des inondations des années 2010, 2012 et 2013 dans les communes de Malanville et Karimama, ADJAKPA, Tchékpo Théodore, thèse de 2016, p135 <https://books.google.fr/books?id=zGIFDAAAQBAJ&printsec=frontcover&hl=fr#v=onepage&q&f=false>

34 Gestion des Risques Hydro-pluviométriques dans la Vallée du Niger au Bénin : cas des inondations des années 2010, 2012 et 2013 dans les communes de Malanville et Karimama, ADJAKPA, Tchékpo Théodore, thèse de 2016, p31 <https://books.google.fr/books?id=zGIFDAAAQBAJ&printsec=frontcover&hl=fr#v=onepage&q&f=false>

fishery products,³⁵ basic necessities such as soap, textiles and handicrafts.³⁶

This results in social vulnerability. Floods and landslides affect many people; the agricultural yields decrease with the floods and threaten food security in the area. Routes can be washed out preventing access to the market; homes can be destroyed, as can schools disrupting the teaching of children.

Based on this analysis, the zone's economic and institutional capacities need to be assessed so as to recover, manage the events from a political and planning point of view, rebuild the infrastructure and continue to produce wealth.

Which adaptation issues could be the focus of cross-border co-operation projects?

At the local and individual levels, the population's farming practices can be adapted to be more resilient to flooding. Co-operation at the local level of the Gaya-Malanville agglomeration could lead to actions such as seeking better information on climate variability and the level of the river upstream, seeds and crop adaptation, building of infrastructure to protect the agricultural value chain, as well as reforestation and the prevention of silting of the river.

Concerning flood risk management measures along the Niger River, floods can be regulated using different techniques:³⁷

- Create traditional dykes, to manage floods, which are drilled or destroyed in order to evacuate excess water and implement recession crops;
- Create regulating structures, reservoirs and artificial floods: as for example at the Sélingué and Markala Dams (Mali). Socio-economic activities downstream must be taken into account;
- Construct dams to limit the floodable area and regulate water flows locally through supply channels, dykes and valves or thresholds. These techniques are used in the Inner Niger Delta, and in modified forms and by associating riverbank protection techniques, to protect agglomerations from floods.

Within each state, every municipality can build traditional dykes and embankments. While this takes place in Gaya, Malanville could benefit from this

35 Gestion des Risques Hydro-pluviométriques dans la Vallée du Niger au Bénin : cas des inondations des années 2010, 2012 et 2013 dans les communes de Malanville et Karimama, ADJAKPA, Tchékpo Théodore, thèse de 2016, p32 <https://books.google.fr/books?id=zGIFDAAAQBAJ&printsec=frontcover&hl=fr#v=onepage&q&f=false>

36 http://www.abn.ne/images/documents/EMS/benin_etudes_multisectorielles.pdf p 144-145

37 Chapitre 4 Prévention des risques, Cheikh Cissé, Lamine Diarra, Almoustapha Fofana et Pierrick Givone, p310-363 in Avenir du Fleuve Niger, dir. Jérôme Marie, Pierre Morand, Hamady N'Djim, IRd Editions, 2014, <http://books.openedition.org/irdeditions/5220?lang=fr>

experience and build this type of dyke, at least in the lower altitude areas where there is a flood risk.³⁸

For all of these local actions, populations must be involved in the strategies and projects, inhabitants must be made aware of the risks and communities should be trained on adaptation measures so that policies are implemented effectively and to avoid and/or adapt to often informal urbanisation in flood zones.

Upstream of the river, transnational co-operation can take place around the creation of regulating structures, reservoirs and artificial floods. The Niger Basin Authority must be able to consult countries further downstream. The sharing of information and alerts must be provided also at the regional level. Thus, the early warning system in Benin can only predict floods one week before they occur.³⁹ However, during periods of heavy rainfall in Niamey, floods in Gaya-Malanville are expected and Niamey could warn inhabitants of Malanville ahead of time by sending information via the Niger Basin Authority.

What are the obstacles for stakeholders?

The main hindrance for stakeholders in preventing floods is linked to the implementation of decentralisation and the principle of subsidiarity. States lack co-ordination when making decisions concerning the territorial development of border areas. There is a lack of vision of cross-border territories, as well as co-ordination between local and regional authorities, and a lack of involvement by local populations.

The dykes and infrastructure are built in Gaya according to traditional know-how and practice from the Inner Niger Delta and other Nigerien regions, helping to effectively prevent flooding. Benin lacks this know-how and traditional practice.⁴⁰ Benin could benefit from these techniques, however, there is no exchange of practices between Niger and Benin. Creating projects to exchange experiences and good practices by involving the local populations would be beneficial. These projects, due to their socio-cultural and linguistic proximity, can impart know-how that are in fact solutions adapted to risks and at the same time respectful of the environment.

38 Gestion des Risques Hydro-pluviométriques dans la Vallée du Niger au Bénin : cas des inondations des années 2010, 2012 et 2013 dans les communes de Malanville et Karimama, ADJAKPA, Tchékpo Théodore, thèse de 2016, p193

39 Gestion des Risques Hydro-pluviométriques dans la Vallée du Niger au Bénin : cas des inondations des années 2010, 2012 et 2013 dans les communes de Malanville et Karimama, ADJAKPA, Tchékpo Théodore, thèse de 2016, p127

40 Gestion des Risques Hydro-pluviométriques dans la Vallée du Niger au Bénin : cas des inondations des années 2010, 2012 et 2013 dans les communes de Malanville et Karimama, ADJAKPA, Tchékpo Théodore, thèse de 2016, p193

RECOMMENDATIONS

- Hold discussions, within the NBA, with local and regional authorities, in order to improve the applicability of decisions that have already been made. It is essential to have an overview of floods and work at the regional level: the NBA is making political decisions at the state level that are difficult to apply within the territories.
- Implement cross-border action to prevent the silting of the Niger River in the zone after the Inner Niger Delta, on the border of Mali and as far as Niamey, with both countries being involved. This would benefit Gaya and Malanville downstream as the environment is very degraded; the river is at maximum level of silting, accelerating the flow of the river downstream and thus promoting flooding.
- Promote, within the UEMOA and ECOWAS, local multi-thematic programmes to finance small local projects on the borders in co-ordination with the decisions made at the supranational level and set out in the territorial strategies.
- Encourage multi-country projects within international organisations, using functional approaches that go beyond institutional boundaries. It would have been interesting to expand the UNDP project in Benin to the three cities in the Dendi Ganda zone and to at least examine the feasibility.
- Respond to the capacity building needs of local authorities. It is currently difficult to adapt at the local level, as this requires significant investment and practices with which populations are unfamiliar (new farming practices, etc.). More financial and human resources at the local level should be dedicated to investments, awareness-raising, training and education for sustainable development to empower communities facing risks.
- Rely more on decentralised co-operation mechanisms to provide the necessary expertise and project engineering. Example: ADEME, the French Agency for the Environment and Energy Management (agence française de l'Environnement et de la Maîtrise de l'Énergie), co-led a project with the Ministry of the Environment in Senegal, the CSE of Dakar and with GRET and ISET in Mauritania on the use of an invasive plant in the Senegal River valley (typpha).
- Create projects to share experiences and good practices with regards to environmental matters involving local populations, who share the same culture and have the traditional know-how.
- Provide programmes specifically targeting civil society organisations, such as the Innovative Project of Civil Societies and Coalitions of Actors (Projet

Innovant des Sociétés Civiles et Coalitions d'Acteurs - PISCCA) of the French Embassy in Senegal, to increase accountability and therefore transparency of public action at local, regional and national levels. The project, "Contribution to strengthening the capacities of local civil society in the governance of cross-border areas between Senegal and The Gambia",⁴¹ emphasises populations' interest to participate in decisions regarding infrastructure projects and solutions to environmental and climate issues in cross-border areas.

41 <http://polecng.sn/Retour-sur-la-mission-de-suivi-des-projets-de-cooperation-dans-la-region-de.html>

Quel est l'état des coopérations transfrontalières de ces territoires?

What type of governance?

The state of decentralisation and transfer of skills in Niger and Benin

The decentralisation process in Benin and Niger is fairly advanced and the key texts governing it were already adopted. The decentralisation process in Benin has been ongoing for some time. The texts date from 1990 and outline its planned base and deployment.

Each country has their own General Local Authorities Code (“Collection of Decentralisation Laws” for Benin) that constitutes a collection of the main decentralisation texts that, along with the Constitution (adopted on 11 December 1990 for Benin; and on 25 October 2010 for Niger) govern its framework. However, the legal framework is not fully implemented in both countries. Hence, it appears that in Benin some sectoral policies that should be transferred to the municipalities are still implemented at the national level. In Niger, the actual transfer of competences from the central state to decentralised local administrative entities should still be carried out by decree. In theory, these transfers are based on the founding principle of subsidiarity’s general competence clause, although in reality the Nigerien state determines the competences to be transferred. However, these implementing decrees have never been adopted in Niger.

The Benin and Nigerien local authorities are organised in their structure and competences. At the same time, the tools and forms of co-operation, especially with foreign local authorities, are provided by the legislation.

Finally, while Benin can rely on a transparent and fair process of regular local elections to elect executive and legislative bodies, Niger abides by the community approach, recognised by the Constitution, and prevents the decentralisation process from gaining traction on the ground. The traditional chiefdoms, custodians of customary authority (Article 167 of the Constitution), do not always recognise the emergence of decentralised local authorities with whom they compete at the local level, and leave little room for the municipalities, at the first administrative decentralised level. The State uses this situation to limit transfers and national sectoral policies are enacted without taking into account the place of local authorities for their implementation.

With regard to the provisions of decentralisation, the Constitutions of both States only provide the main principles governing local authorities while referring to the law to organise the structure and content of their action. The Nigerien Constitution recognises only the traditional chiefdoms as the “custodians of customary authority”, participating in the territorial administration.

Institutional comparison of local authorities

With regard to the texts governing decentralisation, it is clear that only one level of decentralised local authorities is present on both sides of the border, in particular municipalities, common law municipalities, and municipalities with special status for Benin, as well as the urban and rural municipalities of Niger. The region is Niger's second local decentralised level. Concurrently, there are decentralised levels that have supervisory power over decentralised authorities. This supervisory power, which is at the regional and departmental levels in Niger, and at the departmental level in Benin, will have concrete and practical implications for cross-border co-operation between Beninese and Nigerien local authorities.

The planned legal action framework contains tools and structures of which Beninese and Nigerien cross-border co-operation local authorities could benefit. (Table 2)

In addition, the texts relating to the division of competences provide the fields of action within sectoral policies transferred to local authorities. The joint actions of decentralised Beninese and Nigerien authorities will need to be examined with regard to climate, environment and agriculture. (Table 3)

State and community competences in cross-border cooperation

Besides the competences currently held by the local authorities, the legal framework of both states helps anticipate new transfers of competences in some areas clearly set out in the Nigerien GLAC. This would be in areas such as: "land and state-owned land; economic development; territorial planning and development; urban planning and housing; education and literacy; technical and professional training; health, hygiene and sanitation; social development; livestock farming; agriculture; fishing; hydraulics ; environment and natural resource management; taxation and finances; equipment, transport infrastructure; communication and culture; youth, sports and recreation; tourism and crafts; any other area that the State deems useful to transfer competence to local authorities" (Niger GLAC, Article 163). "On the proposal by the Minister in charge of the trusteeship over local authorities, in relation to sectoral ministries, a transfer decree is issued by the Council of Ministers for each area of competence (...)" (Nigerien GLAC, Article 164).

Since cross-border co-operation must involve entities sharing competence, it is important to emphasise that in addition to their own jurisdiction, Beninese municipalities may exercise "under the responsibility of the supervisory authority, other attributions that fall within the jurisdiction of the State" (Article 82 of Law No. 97-029 of 15 January 1999 on the Organisation of Municipalities in the Republic of Benin).

For the rest, it is conceivable for the municipalities of Benin to have “recourse in particular to the State services, state companies and/or agencies, public institutions, public/private businesses and/or implementing agencies, non-governmental organisations, authorised Beninese legal associations, management committees, development partners, private companies, etc.”, in order to “delegate, be assisted, concede, lease, subcontract or contract” (Article 108, Section 8: Procedures for exercising the competences of Law No. 97-029 of 15 January 1999 as regards the Organisation of Municipalities in the Republic of Benin). The Nigerien legislation provides for shared state-plan contracts as well as state-region contracts, respective to Article 79 and Article 149 of the GLAC.

Benin and Niger states could be involved in cross-border cooperation along with their local authorities. The compulsory trusteeship together with the control of the legality of the acts of local authorities, and the fact that local authorities still do not have the right to determine the assessment, the base and the rate of the local taxes (the collection of which is also a matter solely for the States), could require the association of the State.

Finally, cross-border co-operation requires stable borders that neighbouring states have established together. In this regard, there was a border dispute between Benin and Niger along their entire shared border, the Niger River and its various small islands (also involving the cross-border urban system of Malanville/Gaya). Today, this dispute seems resolved as the International Court of Justice issued a decision on 12 July 2005, which both countries considered definitive. The judges considered that the border between Benin and Niger in the concerned sector follows the main navigable channel of the Niger River as it existed on the dates of independence, recognising that the border passes to the left of the three islands situated in front of Gaya. As a result, the islands situated between the border, as defined, and the right bank of the River belong to Benin; and the islands between this border and the left bank of the River belong to Niger. In all, the Court attributed 9 of the 25 small islands identified to Benin and 16 to Niger, according to their location with regard to the main channel.

What cross-border projects and initiatives?

Many cross-border projects have already been initiated between Gaya and Malanville and more widely in the Dendi Ganda area, experiences that should be capitalised on. Other projects are planned to support the capacity-building of local actors.

Strengthening co-operation in the Gaya-Malanville cross-border agglomeration and in the Gaya, Malanville and Kamba cross-border network

An Integrated Transboundary Development Scheme (Schéma d'Aménagement Transfrontalier Intégré - SATI) could be proposed to establish an analysis based on a strategy for the cross-border area and identifying structuring projects for its development, in consultation with inhabitants and co-ordinated with the national policies (Goal for Sustainable Development, National Action Plan for Adaptation, etc.).

Developing the Malanville market is among the projects identified. This would entail providing equipment with “acceptable construction, safety, comfort and hygiene standards” for the most vulnerable traders (such as street vendors) to enable them to increase their incomes such as technical facilities, drainage systems, etc.

The construction of cross-border trade-related infrastructure is also planned, such as the rehabilitation of the route connecting Gaya to Dole-Kaina in Nigeria, an international route used to transport a wide variety of significantly heavy products. At the same time, the Dole-Kaina, Lollo and Kambouo Tounga wharves should be developed so as to improve the transshipment of goods and thus to improve the fluvial transport of goods by creating “community river ports”. The design and construction of the new infrastructure will have to be resilient to flooding.

In addition, the reconstruction of the road from Dosso has also been planned for a few years but there have been problems.⁴² The contract was awarded to a contractor who up to now has been unable to finish the job. The situation is particularly tense in Gaya and as far as the Beninese border. The construction machinery is abandoned in the middle of the road where convoys of uranium intersect with huge imports from Niger (40% of the incoming and outgoing trade flows to and from Niger go through Gaya).

Agricultural practices adapted to flood risks

The Integrated Program for Adaptation to Climate Change through the Development of Agriculture, River Transport and Tourism (Programme

⁴² Interview with Olivier Walther, researcher at the University of Florida

intégré d'Adaptation au Changement Climatique par le Développement de l'Agriculture, du Transport fluvial et du Tourisme - PIACC-DAT),⁴³ launched in 2014 in Malanville and Karimama in Benin, has helped install a direct reading conical rain gauge allowing people to monitor climate variability and to know when to plant and harvest to avoid flooding. Short cycle rice seeds were made available to producer groups, and warehouses to conserve and store seeds were built.

Equipment is provided to the populations so as to develop irrigated vegetable crops in the off-season in particular to set up wells with pumping systems and solar panels.

In the long term, reforestation and agro-ecology practices can improve soil quality and thus its ability to absorb water and prevent landslides. Seeds of forest species can thus be exchanged in cross-border areas.

Adapting community farming practices is an issue that requires resources for training. As such, local authorities can rely on initiatives of the Songhai National Centre of Porto Novo (Centre national Songhaï de Porto Novo) in Benin, an “indigenous centre for sustainable and ecological agriculture” that helps subsistence farmers to convert to small and medium-sized enterprise production and product processing. The centre is supported by the FAO and promoted as good practice in other countries.⁴⁴

Funding is available from the NBA, under the Niger Basin Water Charter, for civil society organisations or “village community” projects.⁴⁵

Improve regional consultation and the organisation of cross-border actions within the Niger Basin Authority

As part of its Climate Investment Plan (CIP), the Niger Basin Authority identifies and plans numerous projects to improve resilience to climate change in the river valley. Many of these projects are co-funded by international donors, including the World Bank⁴⁶ and the African Development Bank. They are also part of an NBA strategic plan for 2013-2022, on which border communities can rely to carry out flood prevention projects (construction of dykes, de-silting of the river, etc.).⁴⁷

43 <http://www.bj.undp.org/content/benin/fr/home/presscenter/articles/2016/08/14/sept-mesures-pour-renforcer-la-r-silience-des-populations-de-malanville-et-karimama-aux-changements-climatiques-.html>

44 <http://www.fao.org/news/story/fr/item/203987/icode/>

45 Le fleuve Niger et son bassin: aménagements, gouvernance et stratégies d'adaptation au changement climatique, Sandrine Vaucelle, in Cahiers d'Outre-Mer, n°270, avril-juin 2015, pp267 <https://journals.openedition.org/com/7458>

46 <http://www.banquemondiale.org/fr/news/feature/2015/10/27/nine-countries-rise-to-collaboratively-build-climate-resilience-in-the-niger-river-basin>

47 NBA Strategic Plan for 2013-2022 http://www.abn.ne/images/documents/PS/plan_strategique.pdf

NBA Strategic Plan for 2013-2022

Strategic focus 1: Water as a lever for economic development

- Development of a multi-purpose control structure
- Restoration of a multi-purpose control structure
- Development of a hydroelectric plant
- Restoration of a hydroelectric plant
- Development of an irrigated area
- Restoration of an irrigated area
- Development of rain-fed agriculture
- Development of off-season farming
- Development and sustainable management of fisheries
- Development/restoration of pastoral hydraulics
- Pastoral management and livestock transhumance measures
- Development of eco-tourism related to water
- Transport development
- Development of access to drinking water (ADW)

Strategic focus 2: Preservation of basin ecosystems

- Strengthening hydrometric networks
- Decision-making tools
- Flood protection dykes
- Forest management measures
- Reforestation, agroforestry, promotion of renewable energies other than wood
- Protection of banks and ponds
- Measures to reduce soil erosion and de-silting
- Action to capitalise on invasive species
- Protected area management measures
- Awareness raising measures on waterborne diseases
- Development of adaptation strategies

Strategic focus 3: Innovative and sustainable financing

- Studies and development of financing mechanisms

Strategic focus 4: Co-operation with states and partners

- Operationalization of NBA management tools
- Dissemination and implementation of the Water Charter

Strategic focus 5: Organisational performance

- Tools and monitoring and evaluation procedures of the implementation of strategic documents
- Capacity building measures

In addition, a World Bank project is focusing on building the institutional capacity of the Niger Basin Authority.⁴⁸ The objective of the “Niger River Basin Management for Africa” project is to strengthen the NBA institutionally and financially so as to improve its capacity to implement its mandate and to foster regional co-operation and planning of water resource management in the Basin. A key issue is the implementation of the Water Charter, particularly Annex 2 on water management regulation for large dams. Concerted planning is needed at the regional level so that the hydraulic works planned upstream do not disturb the downstream river flow, and there is better information on the river flow provided by the countries upstream to the countries downstream to manage

48 “Niger River Basin Management Project for Africa” project on the World Bank database: <http://projects.worldbank.org/P149714/?lang=en&tab=overview>

flood risks. However, it seems that the measures decided within the context of NBA regional consultation are difficult to implement at the local level,⁴⁹ hence this project to strengthen governance.

The strengthening of the NBA's institutional and organisational systems and the operationalisation of the selected financing mechanisms should be tested with the implementation of the Fomi hydroelectric dam project in Guinea.

Exchange of good practices with the Senegal River Basin Development Authority (Organisation de mise en valeur du Fleuve Sénégal)

The Senegal River Basin Development Authority (OMVS) is a river basin organisation with a world-renowned water resources governance model and development programmes. The World Bank highlights and promotes its actions as “good practices” to replicate. Such an exchange of experience with the Niger Basin Authority would make sense, given that these two major African rivers share a number of issues⁵⁰ such as the potential for irrigated agriculture, rain and recession, hydroelectric potential, economic potential, fragility of ecosystems and vulnerability to climatic variations.

Indeed, the OMVS proposes a model of shared water management within a framework of joint co-operation. It houses the permanent secretariat of the African Network of Basin Authorities.

This co-operation framework, created in 1972, plays an important role in calming conflicts with neighbouring countries around water resources; for example, in 1989, following the dispute between Mauritanian farmers and Senegalese farmers, which caused dozens of deaths and displaced populations.⁵¹

Since its creation, the organisation has laid down strong principles:

- The river and its tributaries are international property;
- Their resources are exploited in a shared and supportive way, with financial participation that corresponds to the uses of each resource;
- Any work on the river and its tributaries is common property.

Inter-state co-operation led by the OMVS is thus quite unique and obligated to be results-based and shared. For some, such co-operation enabling strong solidarity in access to water and the development potential it affords would contribute to African integration,

⁴⁹ Interview with Mr. Lawali Dambo, Geography professor at the University of Niamey

⁵⁰ Study of the Senegal River by Initiatives for the Future of Great Rivers: <http://www.initiativesfleuves.org/fleuves/senegal/>

⁵¹ Voyage on the Senegal River, Erik Orsenna for Initiatives for the Future of Great Rivers: <http://www.initiativesrivers.org/wp-content/uploads/2018/04/01-SENEGAL.pdf>

just like the integration around the pooling of coal and steel⁵² in Europe. Today the flow of the river is now almost entirely regulated and there are no longer problems with flooding.

In March 2002, the organisation started executing the Development and Management of Waters Master Plan (SDAGE) and then signed the Senegal River Water Charter in May. Management and exploitation companies are taking charge of the Diama dams (Diama Management and Exploitation Company - SOGED and the Manantali hydroelectric plant (Manantali Energy Management Company - SOGEM).⁵³

The development of the river is, therefore, jointly decided and carried out by companies contracted by the OMVS. The implementation of the policies made at the regional level is more effective and efficient at the local level. A discussion on the OMVS institutional model with the NBA, which faces these types of problems, could be useful.

52 Voyage on the Senegal River, Erik Orsenna for Initiatives for the Future of Great Rivers: <http://www.initiativesrivers.org/wp-content/uploads/2018/04/01-SENEGAL.pdf>

53 https://www.notre-planete.info/actualites/2433-fleuve_Senegal

This practical guide is published by the Sahel and West Africa Club Secretariat (SWAC/OECD).

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Please cite this work as: OECD/SWAC (2020), Border Cities and Climate Change: A Practical Guide to Legal and Financial Levers, Rev. ed. Paris.

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Border cities and climate change

The Lomé (Togo) – Cotonou (Benin) Coastal Corridor

This case study describes the Lomé-Cotonou cross-border axis, a corridor of coastal cities containing 1.7 million inhabitants.¹ For ECOWAS, it is of strategic importance for regional integration. Along this axis, Lomé (the capital of Togo), forms a cross-border agglomeration with Aflao (Ghana), Aného (former capital of Togo) and Hillacondji (in the municipality of Grand Popo).

The transport corridor serves other large cities such as Abidjan (Côte d’Ivoire), Accra (Ghana) and Lagos (Nigeria), in addition to Lomé and Cotonou. It is also the focus of the Abidjan-Lagos Corridor Organisation (ALCO), a sub-regional institution that supports policies for development, health and the free movement of people and goods.

The two agglomerations reviewed in this area are coastal agglomerations that are both affected by coastal erosion.

Barrier beaches on the Benin coastline have created lagoons², the largest of which forms Lake Nokoué that separates Cotonou and Porto-Novo, the country’s two largest cities³. This has contributed to the settlement of over 50% of the population of Benin is concentrated in just 10% of the country’s land mass — along its southern area.

¹ www.afdb.org/fr/news-and-events/afdb-commits-us-40-8-million-to-reinforce-the-lome-cotonou-road-and-protect-it-against-coastal-erosion-16634.

² Landscapes of West Africa, A Window on a Changing World, USAid/USGS, p. 74, <https://eros.usgs.gov/westafrica>.

³ According to www.africapolis.org, in 2015 Cotonou had over 1.5 million inhabitants, and Porto-Novo over 570 000 inhabitants.

As in any tropical climate, the cities experience two rainy seasons, with the heaviest starting in April and petering out in July, followed by a period of less severe rains from early September to end November. It is constantly hot, with the mean maximum temperature in the shade averaging 30°C in the afternoon, and a mean minimum temperature of 23°C in the morning. The start of the year sometimes sees the arrival of the Harmattan, a dry wind from the Sahara that can push the morning temperature in Lomé down to 19°C.

The choice of the Lomé to Cotonou corridor as a cross-border region

The corridor connecting Lomé to Cotonou and running to the Benin-Nigeria border is an interesting subject for study given the of cross-border agglomerations within its scope: Lomé-Aflao and Aného-Hillacondji.

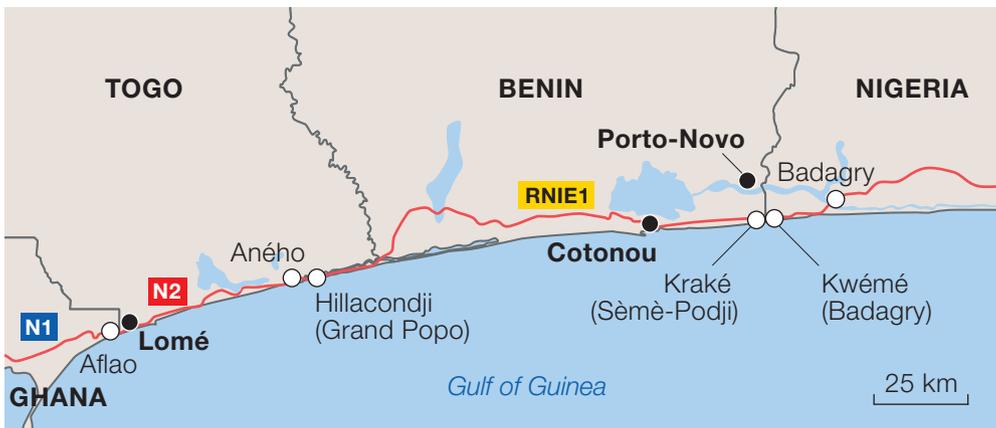
Lomé-Aflao: In 2015, there were over 1.7 million inhabitants in the Lomé-Aflao agglomeration. The two cities are separated only by a fence marking the border, which ends before the beach. The border crossing point is on the N2 road near the coast.

Aného-Hillacondji: There are around 44 000 inhabitants in the Aného-Hillacondji agglomeration. It runs from the Gulf of Guinea coast to the Gbagan Lagoon. A one-stop border post (OSBP) has been built in Sanvee Condji, in the municipality of Aného, along the N2/RNIE1 main highway. There are still, however, two border posts located either side of the border.

The eminently cross-border city of Lomé, has almost completely absorbed Aflao (Ghana) as a district of its agglomeration and the coastline where Aného and Hillacondji (Grand Popo) are located is criss-crossed by numerous flows of people and goods.

This corridor, which is of significant importance for transport, runs along the coast, where it is affected by the dual challenges of coastal erosion and coastal floods — these need to be taken into consideration in the development of regional infrastructure.

The Lomé-Cotonou corridor



Source: Transfrontier Operational Mission (MOT)

Satellite images of Aflao-Lomé and Aného-Hillacondji



Source: MOT based on Google Maps

Cross-border co-operation frameworks

Aflao (Ghana) and Lomé (Togo): Cross-border relations between Ghana and Togo were strengthened by the permanent opening (31 July 2017) of the border crossing in Kodjoviakopé (a district of Lomé) to facilitate the movement of people and trade. The security situation on both sides of the border has also improved since. Nevertheless, the framework for cross-border co-operation between Lomé and Aflao remains unclear.

In the domain of decentralised co-operation, **Aného (Togo) and Hillacondji, Grand Popo (Benin)** have a twinning arrangement. In addition, there appears to have been a cross-border reconciliation between the representatives of Aného and the representatives of the GI-Mono municipal association (Groupement Intercommunal du Mono), which Grand Popo is part of, and which has signed a decentralised co-operation agreement with the Yvelines département in France. Grand Popo has also signed a partnership agreement with Saint-Louis (Senegal).

Since 2012, Benin has had a solid domestic cross-border co-operation policy, the National Policy for the Development of Border Spaces (Politique Nationale de Développement des Espaces Frontaliers - PNDEF) led by the Beninese Agency for the Integrated Management of Border Spaces (Agence Béninoise de Gestion Intégrée des Espaces Frontaliers - ABeGIEF). Initiatives undertaken by the ABeGIEF in Grand Popo have included the inauguration of the central police station in October 2014, and the cross-border Yêkê-Yêkê festival organised in 2017.

The municipality of Grand Popo is a member of the Beninese association of border municipalities (Association Béninoise des Communes Frontalières - ABCF) that was formed in 2014. The association seeks to promote the interests of its member municipalities in a number of ways, including: helping to develop border spaces, playing an active role in the management of cross-border territories, acting as the interface between the border municipalities and the ABeGIEF via reliable information systems, promoting local preventive diplomacy, and encouraging and playing an active role in local cross-border co-operation initiatives.⁴ The association held its first general meeting on 20 October 2017.

The 2017 creation of the Transboundary Biosphere Reserve in the Mono Delta should also be noted. The reserve involves the Beninese-Togolese cross-border territory and the agglomeration of Aného-Grand Popo.

⁴ www.abegief.org/?Association-Beninoise-des-Communes

Cross-border co-operation and climate change issues

Lomé and Aflao: the municipality of Lomé is vast and highly populated, producing substantial amounts of waste. The municipality had been unable to overcome issues of hygiene and sanitation from this waste independently and hence entered into co-operation with financial partners, on a decentralised basis.

The two cities are exposed to the risks of rising sea levels and coastal erosion, with Lomé on the list of the 15 places in Africa most threatened by global climate change.⁵

Risks of coastal erosion and coastal flooding in the Lomé-Cotonou corridor

Risks on the West African coast.

The coastal areas of West Africa account for one-third of the population and over half of the region's GDP⁶, and are rich in natural resources (marine and land). Fishing is a key business, and the “blue economy” has strong economic potential for this highly populated zone, which includes very large and attractive agglomerations — around 105 million people are concentrated into 5% of the surface area of the coastal countries⁷.

Nevertheless, these coastal agglomerations are also threatened by pollution, the development of unsustainable infrastructure and irregular settlements in flood plains, and climate change. Yearly incidences of coastal flooding can affect up to 500 000 people according to World Bank estimates.

In several areas, coastal erosion is significant. The shoreline of Benin has the form of a long sand belt, but this has shrunk by several hundred metres in the past 40 years, at an average rate of 10-15 metres a year⁸. In Togo, the coastline shrinks by five metres every year, whilst erosion of 23-30 metres has been recorded in some areas of West Africa.

Coastal territories can also be threatened by phenomenon such as storm surges, landslides, and the destruction of coastal mangrove ecosystems (between 20% and 30% of mangroves have been destroyed or damaged in the past twenty-five years⁹). What they have in common are the instability of the barrier beach and the ecological importance of certain elements such as sand, heathland and mangroves.

5 www.thinglink.com/scene/569481464014438400?buttonSource=viewLimits.

6 www.banquemonde.org/fr/news/press-release/2016/04/21/the-world-bank-and-france-partner-to-strengthen-the-climate-resilience-of-west-africas-coasts

7 www.banquemonde.org/fr/news/infographic/2016/09/01/saving-west-africas-coastal-assets

8 Fact sheet by Alexis CHAIGNEAU from the Institut de Recherche pour le Développement in Benin.

9 www.banquemonde.org/fr/news/press-release/2016/04/21/the-world-bank-and-france-partner-to-strengthen-the-climate-resilience-of-west-africas-coasts.

Coastal erosion stems from a number of factors, which are primarily natural. Erosion is caused by rainfall runoff during the African monsoon period, winds carrying sand, and waves and strong currents in the Gulf of Guinea that lead to long-shore drift. Nevertheless, the natural cycle causes not only the erosion of beaches during periods of strong swells and storms (from May to September in Benin, for example), but also sand accretion that restocks the beaches during the rest of the year, in periods when waves regimes are weaker.

There are a number of human activities that contribute to the shrinking West African coastline:

- The building of dams, which limit sediment input from rivers, such as the Nangbeto dam (1987) on the Mono river in Togo, and which also borders Benin;
- Harbour constructions that change coastal currents and long-shore drift, such as the port of Lomé (Togo). Lomé port is causing a build-up of sand to the west of the sheltered area and environmental damage to the east;
- Sand mining on barrier beaches for the construction sector in both legal and informal quarries. Although this practice is now banned in Togo and Benin, it still continues informally¹⁰;
- The construction of hard coastal protection structures (groynes, riprap), which change natural sediment transport, such as manmade dikes on the Togolese coast (1970-80). While the construction of hard coastal structures prevents coastal erosion, it also accelerates this erosion downstream.

The swell, the beach and the backshore form a system, and if one component is altered, the system is thrown off balance. Other more sustainable solutions consist of back-filling sandy beaches, installing drains to evacuate water and dry sand, thereby making them less vulnerable to erosion, and replanting mangroves and heather to stabilise sand. These methods are nevertheless expensive to maintain.

A solution adopted from urban planning is to organise buffer zones for periods of flooding. This involves designating a number of areas of land as non-occupiable, and managing urbanisation and irregular settlements on these sites.

¹⁰ Interview with Alice Hertzog, Doctoral Researcher in Urban Anthropology working in collaboration with the Swiss Agency for Development and Cooperation.

Risks on the Lomé to Cotonou coast

Coastal erosion is one of the most important issues requiring cross-border management across the Lomé-Cotonou corridor.

The corridor from Aflao-Lomé to Nigeria is the most threatened region in West Africa because of the west-east current that runs from Ghana to Togo and Benin¹¹. Between Cotonou and Nigeria, this erosion can be alarming in places. Along a 6 kilometre section to the east of Cotonou, the coastline has retreated by over 100 metres in 10 years. As a result, many dwellings have been submerged, causing significant population displacement. Hillacondji's fishing village for example has disappeared and it is estimated that over 1 400 people were displaced between 2002 and 2011 as a result of this coastal erosion¹².

The construction of the port of Lomé caused the Togolese shoreline to recede in particular. Work on protecting the coastline in the municipalities east of Togo, especially the installation of riprap (pieces of angular rock of various shapes and sizes packed in gabion baskets on a granite base) on the beach at Aného, caused coastal erosion to worsen. The medium-term risk is the disappearance of the municipalities of Aného and Grand Popo.

The shoreline up to the autonomous port of Cotonou, on the other hand, has high sand accretion. This is a result of the port's development, which changed the ocean circulation and caused accretion of up to 25 metres a year.

Flooding in the city of Cotonou is due to (lowland) swamps and poor waste management around the lake, which increases flood risks by obstructing water flow. Notably, the city's colonial district was built on a plateau out of the reach of the water.

To the east of the port of Cotonou, eight to nine groynes were built between 2009 and 2013, helping stabilise the coastline in this area but shifting the problem further along.

The municipality of Aného and the Hillacondji-Grand Popo spit of land between the Atlantic Ocean and the Mono River are also threatened by coastal erosion. Indeed, Hillacondji and Grand Popo are in danger of disappearing in the medium term if work is not undertaken to protect the coast.

The section of the coast between Lomé and Cotonou is an essential part of the Abidjan-Lagos corridor, which is considered to be a priority for the African

¹¹ Interview with Yves du Penhoat and Alexis Chaigneau from the Institut de Recherche pour le Développement in Benin.

¹² Interview with Alice Hertzog, Doctoral Researcher in Urban Anthropology working in collaboration with the Swiss Agency for Development and Cooperation, cf. research by the Universities of Liège, Arlon, and Namur (Belgium), and Parakou (Benin) (P. Ozer, F. Delongueville, Y.C. Hountondji).

Union's Programme for Infrastructure Development in Africa (PIDA) and the ECOWAS regional programme for transport facilitation. Road development projects need to take account of the risks of coastal flooding and erosion along the densely populated strip of coast that is home to major infrastructure, large industries and significant economic hubs.

African Development Bank project for Lomé-Cotonou road rehabilitation and coastal protection

Benin/Togo : Lomé-Cotonou road rehabilitation and coastal protection Phase II Building resilient infrastructures to face climate change

On December 16th 2016, the African Development Bank (AfDB) approved a total of USD 40.8M of loans and grants to the Republics of Togo and Benin to finance the upgrading into a four-lane 30-kilometre road section linking the capitals of both countries, as well as an important coastal protection project. Located on the major axis linking Togo and Benin, the Avépozo-Aného road not only carries high traffic volume but is also particularly vulnerable to coastal erosion. Through this project, the Bank aims to improve the road level of service and the logistical chain, and strengthen the climate resilience of infrastructure in coastal areas in Togo and Benin. The project will consolidate regional integration and improve living condition of 1.7 million people living in the project area.

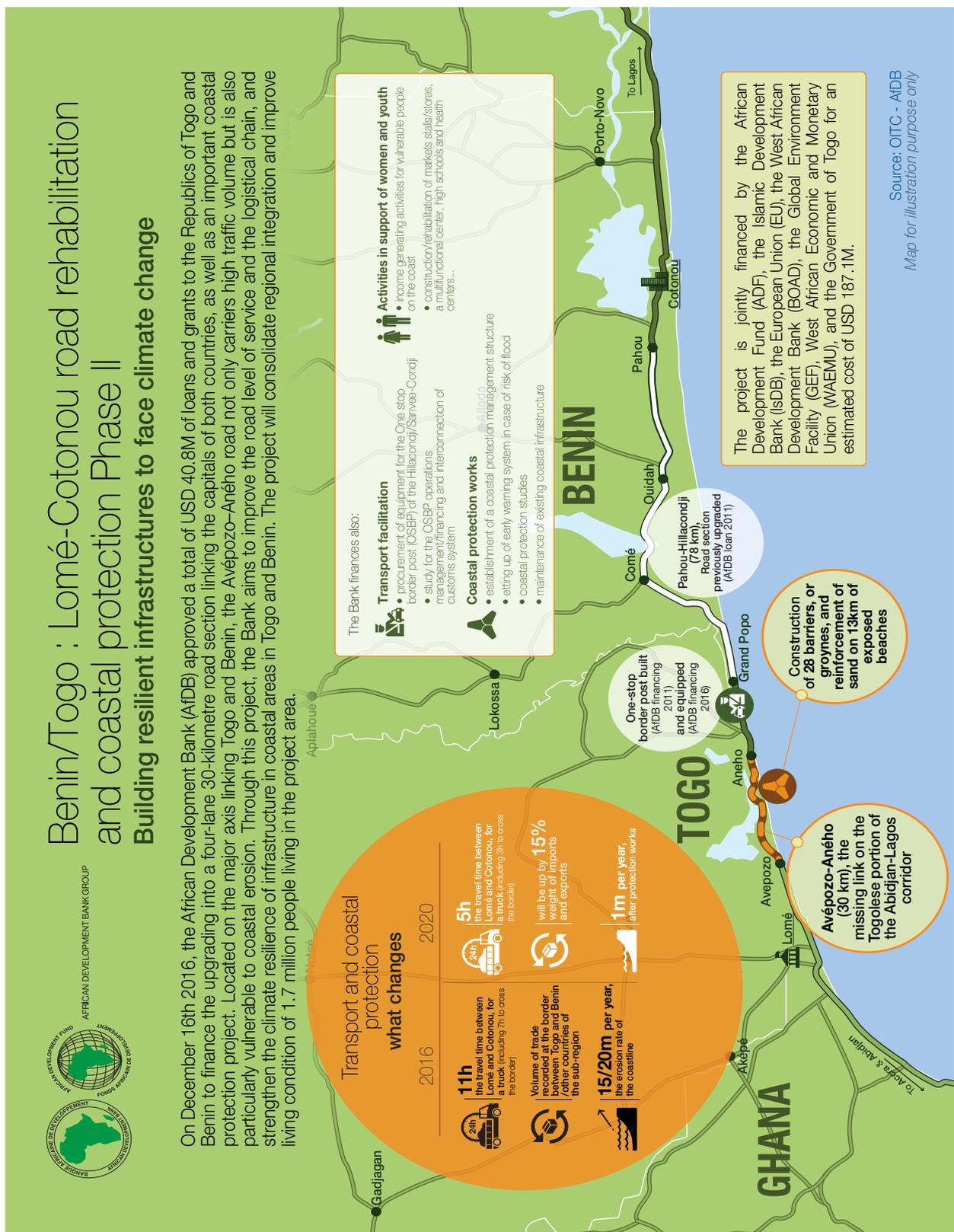
Transport and coastal protection what changes



The Bank finances also:

- Transport facilitation**
 - procurement of equipment for the One stop border post (OSBP) of the Hillacondji/Sarvee-Conzji
 - study for the OSBP operations management/financing and interconnection of customs system
- Coastal protection works**
 - establishment of a coastal protection management structure
 - coastal protection studies
 - setting up of early warning system in case of risk of flood
 - maintenance of existing coastal infrastructure
- Activities in support of women and youth on the coast**
 - income generating activities for vulnerable people
 - construction/rehabilitation of markets, stalls, stores, a multifunctional center, high schools and health centers...

The project is jointly financed by the African Development Fund (ADF), the Islamic Development Bank (IsDB), the European Union (EU), the West African Development Bank (BOAD), the Global Environment Facility (GEF), West African Economic and Monetary Union (WAEMU), and the Government of Togo for an estimated cost of USD 187.1M.



Source: OITC - ADB
Map for illustration purpose only

Source: African Development Bank, www.afdb.org/en/news-and-events/afdb-commits-us-40-8-million-to-reinforce-the-lome-cotonou-road-and-protect-it-against-coastal-erosion-16634.

Territorial vulnerabilities and the ability to adapt

Climate change is expected to cause sea levels to rise significantly in the region, along with swell intensification, increasing the risk of coastal erosion and coastal flooding.

The methodology developed by the ESPON CLIMATE report “Climate Change and Territorial Effects on Regions and Local Economies in Europe”¹³ can be used to identify different types of vulnerability in a region and characterise their adaptive capacities in order to assess the potential for adaptation.

Firstly, the risks of coastal erosion and coastal flooding create physical vulnerability in that sea floods can damage manmade infrastructures such as roads, as well as dwellings, especially fishing villages that are located near to the coast and can be ill-suited to deal with the risks of irregular conditions.

The coastal corridor is also environmentally vulnerable given that mangroves, lagoons and reefs form an essential coastal natural capital capable of providing ecological services. They protect and stabilise the shoreline by mitigating the impact of coastal floods and preventing landslides. They also contribute to the marine ecosystem that, if managed sustainably, is a source of economic development¹⁴ from activities such as fishing and tourism.

Consequently, coastal regions are also economically vulnerable. The expected annual cost of damage from coastal flooding by 2050 is estimated to be around 11 billion USD¹⁵, while the cost of protecting the coastline is approximated to be 1.5 billion USD and could be split between the coastal countries. In Togo, lost economic opportunities stemming from erosion are estimated to have amounted to the equivalent of 2.29% of GDP in 2013.

Furthermore, receding coastlines and sea flooding make the region socially vulnerable. The survival of coastal populations depends on fishing, as a source of both income and food and the shrinking coastline eats away at property, causing fishing communities to move. More extreme weather events and subsequent natural disasters — storms followed by flooding and landslides, for example — are on the rise. Every year, half a million people are faced with the dangers caused by flooding and coastal erosion.

This above analysis is used to assess the region’s economic and institutional capacities to recover and manage extreme weather events and continual

¹³ ESPON Climate: <https://www.espon.eu/programme/projects/espon-2013/applied-research/espon-climate-climate-change-and-territorial-effects>.

¹⁴ World Bank Knowledge Sheet – WACA No. 9 on Coastal Natural Capital and the Economics in the Coastal Zone: <http://documents.worldbank.org/curated/en/742321498134663818/pdf/116600-BRI-10561-WACA-KS9-Coastal-Eco-ENGLISH-PUBLIC-v2.pdf>.

¹⁵ World Bank Knowledge Sheet – WACA No. 9 on Coastal Natural Capital and the Economics in the Coastal Zone: www.banquemonde.org/fr/news/infographic/2016/09/01/saving-west-africas-coastal-assets.

climate evolutions. Do they have appropriate policies and planning in place? Can they rebuild infrastructure and continue to produce wealth?

Which adaptation issues should be the focus of cross-border co-operation projects?

There are numerous adaptation issues, from observing flooding and coastal flooding to planning and regulating coastal constructions in order to improve their resilience via early warning systems, raising awareness of vulnerable populations, and investing in nature-based solutions such as restoring sand bars and mangroves.

Given that many of these issues are faced by all countries along the West African coast, investments can be shared, and the projects in question can lead to exchanges of best practices.

In particular, the main aim of cross-border co-operation should be consultation between countries to ensure that solutions taken by any one state to combat the risk of flooding and coastal flooding on its coastline do not in turn create or increase risks for the coastal regions of neighbouring countries.

Accordingly, the introduction or strengthening of early warning systems can help to improve the risk management process. Options for action could include¹⁶ developing knowledge platforms, identifying the most vulnerable areas, and introducing training and public awareness campaigns to strengthen the capacities of institutions and populations.

Cross-border co-operation projects have been organised in the **field of observation and warning systems**. In 2013, a video-based surveillance system was put in place in the municipality of Grand Popo¹⁷ (Benin), and it currently supplies three to four years of continuous measurements. There are no ports located in the area under surveillance, meaning that the effect of the swell as a result of climate change can be isolated. This “Early Warning Service” project was financed by the United Nations Development Programme (UNDP) in order to predict cases of coastal flooding. Another project between Benin and Nigeria called the “West African Coastal Observation Mission” was financed by the West African Union.

Nevertheless, the major challenge lies in creating a cross-border initiative at the regional level to **deal with coastal risks in an integrated territorial approach rather than in a fragmented manner**. This approach is already supported by some donors, such as the World Bank and its West African

¹⁶ www.uneca.org/sites/default/files/PublicationFiles/blueeco-policy-handbook_en.pdf.

¹⁷ Interview with Yves du Penhoat and Alexis Chaigneau from the Institut de Recherche pour le Développement in Benin.

Costal Areas Management programme (WACA), which highlights that “given the transboundary nature of the region’s ecosystems, the potential downstream effects of infrastructure, and the importance of the coastline for all sectors, optimal solutions to reduce the risk along West Africa’s coasts can be reached only through multisectoral action and multinational co-operation. Every national and regional development plan in West Africa should take coastal risks and adaption to climate change into consideration”.¹⁸

However, in the absence of a regional forum for dialogue on the subject of coastal erosion, there is no consultation on projects, which has the potential to lead to poor adaptation processes, i.e. climate change adaptation actions by one country that create new risks for its neighbours, thereby transferring the vulnerability to neighbouring countries. It is therefore necessary to have regional dialogue on the issue, and co-operative governance between coastal states. Co-operation beyond national borders would also allow for shared financing on a much larger scale than the funding available to individual states.

The state of cross-border co-operation

There are several cross-border agglomerations on the West African coast between Ghana and Nigeria that attract cross-border flows, including Lomé, Aflao, Aného, Hillacondji and Cotonou. The latter, which is less than 100 kilometres from the borders with Togo and Nigeria, attracts cross-border commerce from both of these countries.

As a result, there are large numbers of Nigerian residents who travel to Cotonou’s markets. Most are Beninese that live in Badagry, Nigeria, on the border strip.¹⁹ The cross-border area of Sémé-Podji-Badagry is built on networks of families, cultures and languages that extend through to Cotonou’s market.

There is a pull between Lomé and Cotonou, the countries’ capitals, both of which represent large markets. Exchanges involve small goods such as small electronics and consumer items like clothing and farm products. The main trend is the export of vegetables from Togo to Benin, and starches from Benin to Togo. Flows are also heavily dependent on prices, meaning that the region from Lomé to Cotonou operates like a large market. Transport and border crossing costs are given little consideration by the inhabitants, who can cross the border easily. It is simple to travel between Lomé and Cotonou, the road is in good condition, and there are increasingly fewer problems when it comes to crossing the border.

¹⁸ Extract from a document from the World Bank WACA Programme: <http://documents.worldbank.org/curated/en/624481467995659649/pdf/101185-REVISED-PUBLIC-WACA-KS3-Managing-Coastal-Risks-April-2016.pdf>.

¹⁹ Interview with Alice Hertzog, Doctoral Researcher in Urban Anthropology working in collaboration with the Swiss Agency for Development and Cooperation.

However, the problem of erosion in Togo, coupled with the fact that the highway is near the sea, means that the Togolese government has had to invest a lot of money in road reinforcement. The road is very important for cross-border trade and there would be serious economic consequences for Benin if it were to be submerged, given that the country is considered to be a “warehouse state”²⁰ in that it depends on transshipment activities for its wealth. As a result, a Togo-Benin co-operation project to protect this road corridor would be opportune, and this need should be identified within the framework of integrated territorial planning approaches for the coastal corridor.

What is the state of cross-border co-operation between these regions? What type of governance?

There is a legal framework that could be used for cross-border co-operation between the municipalities of Badagry (Nigeria), Cotonou (Benin), Lomé (Togo) and Aflao (Ghana) in the areas of climate, environment and agriculture. It is based on an analysis of the place of border cities in the political and national governance system (the state of decentralisation in Nigeria, Benin, Togo and Ghana); as well as an analysis of the legal framework for cross-border inter-community, i.e. a review of the cross-border legal tools and structures based on the domestic laws in force, and for cross-border co-operation in sectoral climate, environment and agriculture policies.

Legal framework of Nigeria-Benin-Togo-Ghana cross-border co-operation:

The decentralisation process is relatively advanced in Nigeria, Benin and Ghana. In the case of the last two countries, it has been in place for a relatively long time, as is governed by texts going back to the 1990s. The main texts are in place and the process is characterised by a clear legal framework and approach. Nigeria provides a very comprehensive framework through its constitution and its annexes precisely describe the roles and responsibilities of communities. In comparison, Togo has never implemented its decentralisation process, most of the principles of which were adopted in texts passed in the years 2006-08.

That said, Ghana, which is a member of the Commonwealth and a former British colony, has a decentralisation process which, although complete, is very different to its neighbours in that it offers a place reserved by the 1992 Constitution to traditional chiefdoms.

Benin has a Compendium of Laws on Decentralisation, while Togo and Ghana only have laws published in the Official Gazette of the Republic, and Ghana uses the structure of domestic legal order based on the English doctrine of

20 Igué, J. and B.G. Soule (1992), *L'Etat-Entrepot Au Bénin*, Karthala, Paris.

precedents. These laws, together with constitutional texts (11 December 1990 for Benin, 27 September 1992 for Togo and May 1992 for Ghana, respectively), govern the framework thereof. In Nigeria, reference should be made only to the Constitution of 29 May 1999, which provides for the missions of the local authorities.

In practice, the four states apply their legal frameworks relatively imperfectly. In Togo, which still does not have local powers in place capable of implementing decentralisation, the first local elections for over 30 years were planned, initially for 2014 before being postponed until 2016 and then combined with the Parliamentary elections in July 2018. Benin, for its part, cannot rely on the organisation of regular local elections giving rise to deliberative and executive bodies elected following a transparent and fair process. As for Ghana, the domestic system is such that 30% of the members of the municipal council are appointed by the state, admittedly after consultation with the main local stakeholders, but, in addition, political parties are excluded from local elections. This practice needs to be remedied for effective and efficient decentralisation to occur. Moreover, it runs counter to the letter and spirit of the country's constitution. In Nigeria, the constitution leaves legislation specific to local authorities to the discretion of the federal states that are within their jurisdiction — legislation that is unfortunately inaccessible and unknown.

Local authorities in Benin are organised and established in their structures and responsibilities. Co-operation tools and structures are provided for, in particular to serve co-operation with foreign authorities. Problems in Benin appear to be related to the ongoing implementation of some sector policies at the national level, which should have been transferred to the municipalities even though this is not yet the case. In Togo, the framework remains purely theoretical, even if one can already envisage the tools and powers that need to be developed at the local level. Local life is characterised by a community approach, recognised by the constitution and which remains present. The traditional chiefdoms, “guardians of customary authority” (Article 143 of the Constitution), act as decentralised authorities at the local level, despite the fact that their appointment and induction are in accordance with the customs and traditions of the locality (Article 144 of the Constitution and Act No. 2007-002 of 8 January 2007 on traditional chiefdom and the status of traditional chiefs in Togo). The place of traditional chiefdoms, halfway between local recognition and national designation, leaves little room for the development of local authorities, *stricto sensu*. The state undoubtedly considers that it is giving voice to legitimate local representation. The situation is exactly the same in Ghana where local life is also characterised by the community approach, with the role of traditional chiefdoms recognised by the constitution in a bid to keep the chiefs confined to their traditional role. However, Ghana's approach is also relatively centralised and centralising, and there are very few “devolved” services through which the assemblies

have genuine decision-making power. In reality, their situation depends on their capacity to mobilise resources other than those allocated by the state. In Nigeria, the general principles governing local and regional authorities are set out in the amended 1999 Constitution, since the specific legislation of each of the 36 federated states, providing in particular for additional powers for the authorities within its jurisdiction, is inaccessible. This situation, whereby the legislation governing local authorities changes from one country to the next, disrupts legislation from decentralisation.

In addition, while Benin and Nigeria can claim to hold regular local elections²¹, resulting in legislative and executive bodies elected through a transparent and fair process, in Togo the local councils and executives are still appointed in contravention of the constitution, and in Ghana political parties are excluded from local elections. Yet the principle of local elections and a multi-party system is the very foundation of effective and efficient decentralisation, which in turn is a prerequisite for the success of cross-border co-operation projects.

Only **one level of decentralised local authority** is present in Nigeria, Benin and Ghana. These three countries have **municipalities, common law municipalities, and municipalities with special status**, respectively (alongside three “Metropolitan Assemblies” for Accra, Kumasi and Sekondi-Takoradi with over 250 000 inhabitants, and four “Municipal Assemblies” for Tamale, Tema, Cape Coast and Koforidua with over 95 000 inhabitants) **Togo** is different, however — alongside its **urban** and **rural municipalities**, and the special status of the city of Lomé, there are also **prefectures and regions** (Article 141 of the Constitution).

There are also decentralised levels that have supervisory power over decentralised authorities. This supervisory power, which is at the level of federal states in Nigeria, at the municipal, prefecture and regional level in Togo, at the departmental level in Benin, and at the regional level as well as at the centre of decentralised districts in Ghana, will have concrete and practical implications for cross-border co-operation between local authorities. In particular, these will cause differences in the mandatory inspections of authorities’ actions that need to be organised, with all the time constraints and other impositions that they involve.

The planned legal action framework concerns tools and structures that can benefit the cross-border co-operation of local authorities in Nigeria, Benin, Togo and Ghana (Table 1). In this respect, it should be observed that, given the different domestic legal traditions, the way in which the four border countries approach co-operation structures is unlikely to be the same. While legislation in Benin and Togo lists these structures, the Nigerian Constitution and the

21 Although these are held on different dates in the Nigerian federated states, and the terms of office of local elected officials differ from state to state.

Ghanaian framework, inspired by the British model, leave it up to the federal states (for Nigeria) and, beyond that, leave a certain amount of freedom to the local authorities, to organise their cross-border initiatives independently, often via the private sector.

In addition, the texts relating to the division of powers provide fields of action for local authorities. The joint actions of the decentralised Beninese, Nigerien, Togolese and Ghanaian authorities on climate, environment and agriculture will need to be examined ([Table 2](#)).

Since cross-border co-operation must involve entities sharing competences, it is important to emphasise that in addition to their own jurisdiction, the legal frameworks of the four countries make it possible to envisage transfers of competence in a number of areas that may or may not be enumerated in legislation. For the local authorities in Togo, these are, “local and territorial development, urban planning and housing; infrastructure, equipment, transport and communications; energy and hydraulics; environmental protection and natural resource management; trade and crafts; education and vocational training; health, population, social action and civil protection; sports, leisure, tourism and culture” (Article 40 of Act No. 2007-011 of 13 March 2007).

Concerning the local authorities in Nigeria, the federal states may transfer decentralised power to any authority they may deem appropriate. Beninese municipalities may exercise “under the responsibility of the supervisory authority, other attributions that fall within the jurisdiction of the State” (Article 82 of Law No. 97-029 of 15 January 1999 on the Organisation of Municipalities in the Republic of Benin). In Ghana, where the District Assemblies have few “devolved” powers, the constitution has opened up possibilities of decentralisation through Article 240. (2) (b) that “Parliament shall by law provide for the taking of such measures as are necessary to enhance the capacity of local government authorities to plan, initiate, co-ordinate, manage and execute policies in respect of all matters affecting the people within their areas, with a view to ultimately achieving localisation of those activities”.

For the rest, it is conceivable for the municipalities of Benin to have “recourse in particular to state services, state companies and/or agencies, public institutions, public/private businesses and/or implementing agencies, non-governmental organisations, authorised Beninese legal associations, management committees, development partners, private companies, etc.”, in order to “delegate, be assisted, concede, lease, subcontract or contract” (Article 108, Section 8: Procedures for exercising the competences of Law No. 97-029 of 15 January 1999 as regards the Organisation of Municipalities in the Republic of Benin).

In terms of Togolese legislation, “... central administrations, services under national jurisdiction as well as the decentralised services of the State contribute, through their support, to the realisation of the economic, social and cultural development projects of the local authorities. This support shall be provided under the conditions defined by agreement between the authorities concerned, under the authority of the representative of the State. (...)” (Article 8 of Act No. 2007 – 001 of 8 January 2007 on the organisation of decentralised territorial administration in Togo).

In this manner, the governments of Benin, Togo and Ghana, and the Nigerian federal states can play a role in cross-border co-operation initiatives in order to provide any of the various competences that may be required. The presence of supervisory authorities performing mandatory inspections concerning the legality of the local authorities’ actions, combined with the fact that the latter have little leeway in terms of determining the base, the basis and the rate²² of local taxes and the collection thereof (except in Nigeria where the local authorities collect their taxes themselves), could make this association indispensable, especially given that in Togo — to date — no financial transfer in favour of local authorities has been put in place, which explains why local investment is very low.

Lastly, cross-border co-operation requires stable borders that have been agreed upon by border countries. In this respect, it should be emphasised that there is no territorial conflict between Togo and Benin. Nevertheless, two procedures for the delimitation of their common border are under way, the completion of which will make it possible to deploy cross-border co-operation activities in these same regions.

The first intervention aims to remedy the inconsistencies inherited from the delineation of the existing borders by the colonial power. Experts from the two countries meet regularly with a view to finding a consistent and definitive delimitation, and a process for the installation of markers is under way. The second demarcation process, which is a bit more complicated and therefore likely to take longer, concerns the extension of the continental shelf of Benin and Togo, as well as the delimitation of their future maritime border. To this end, a Joint Mixed Committee for the Extension of the Continental Shelf of Benin and Togo has been established. It held its fourth meeting at the end of 2017.

²² The Togolese local councils set the rate of certain local taxes within the limit of the ceiling determined by the finance law.

Tools and structures for cross-border co-operation:

	CT NIGERIA	CT BÉNIN	CT TOGO	CT GHANA
TABLEAU 1				
Outils et structures de la cross-border co-operation à la frontière Nigéria-Bénin-Togo-Ghana susceptibles d'être utilisés en transfrontalier				
Outils et structures de droit public	<p>1. Accord (art.22 de l'annexe de la Constitution de 1999 Second Schedule Legislative Powers Part 2)</p> <ul style="list-style-type: none"> • Fondement juridique : une convention qui entre en vigueur après approbation de l'autorité de tutelle • Pas de personnalité juridique • Membres : collectivités nigérianes et étrangères • Objet/ actions : à des fins de recherche scientifique et technologique. 	<p>1. Convention de coopération (art.176 et suivants de la Loi n° 97-029 du 15 janvier 1999 portant organisation des communes en République du Bénin)</p> <ul style="list-style-type: none"> • Fondement juridique : une convention qui entre en vigueur après approbation de l'autorité de tutelle • Pas de personnalité juridique • Membres : collectivités burkinabés et étrangères • Droit applicable aux partenaires (Recueil des lois sur la décentralisation béninois) • Objet/ actions : « la réalisation et de la gestion d'équipements et de la création de services d'intérêt et d'utilité intercommunaux ». <p>2. Organismes de coopération (art.177 et suivants de la Loi n° 97-029 du 15 janvier 1999 portant organisation des communes en République du Bénin)</p>	<p>1. Convention de coopération (art.20 et suivants de la Loi n°2007-011 du 13 mars 2007 relative à la décentralisation et aux libertés locales, Chapitre IV : « De la coopération décentralisée », ainsi que art.7 et 8 de la Loi n°2008-010 du 27 juin 2008 portant coopération entre les collectivités territoriales)</p> <ul style="list-style-type: none"> • Fondement juridique : une convention • Pas de personnalité juridique • Membres : collectivités togolaises et étrangères • Droit applicable aux partenaires : les lois précitées sur la décentralisation • Objet/actions : actions de coopération dans les limites des compétences des collectivités territoriales et dans le respect des engagements internationaux de la République togolaise ; 	<p>1. Joint Committees (prévus en droit interne par l'art. 32 de l'ACT 462 LOCAL GOVERNMENT ACT of 1993)</p> <ul style="list-style-type: none"> • Fondement juridique : une convention • Pas de personnalité juridique • Membres : collectivités ghanéennes (possibilité de les ouvrir aux collectivités étrangères ?) • Droit applicable aux partenaires : les lois sur la décentralisation • Objet/actions : actions de coopération dans les limites des compétences des collectivités territoriales et dans le respect des engagements internationaux du Ghana ;

CT NIGERIA	CT BÉNIN	CT TOGO	CT GHANA
	<ul style="list-style-type: none"> • Fondement juridique : une convention qui entre en vigueur après approbation par décret pris en conseil des ministres et sur proposition du ministre chargé de l'administration territoriale • Personne morale de droit public • Membres : collectivités béninoises et étrangères • Droit applicable aux partenaires (Recueil des lois sur la décentralisation béninois) • Objet/ actions : « la réalisation et de la gestion d'équipements et de la création de services d'intérêt et d'utilité intercommunaux ». <p>3. Organisations internationales de villes ou organismes décentralisés étrangers (art.178 et 179 de la Loi n° 97-029 du 15 janvier 1999 portant organisation des communes en République du Bénin)</p> <ul style="list-style-type: none"> • Base légale : une convention d'adhésion • Personnes morales de droit public • Membres : collectivités béninoises et étrangères 	<ul style="list-style-type: none"> • Engagements « à réaliser ou à conserver, à frais communs, des ouvrages ou des institutions d'utilité commune ». <p>2. Entente (art.7 et 11 de la Loi n°2008-010 du 27 juin 2008 portant coopération entre les collectivités territoriales)</p> <ul style="list-style-type: none"> • Fondement juridique : une convention • Pas de personnalité juridique • Membres : collectivités togolaises et étrangères • Droit applicable aux partenaires : les lois précitées sur la décentralisation • Objet/actions : « des objets d'utilité commune relevant de leurs domaines de compétence ». <p>3. Accords de jumelage (art.20 et suivants de la Loi n°2007-011 du 13 mars 2007 relative à la décentralisation et aux libertés locales, Chapitre IV : « De la coopération décentralisée »)</p> <ul style="list-style-type: none"> • Fondement juridique : un accord de jumelage • Pas de personnalité juridique 	

CT NIGERIA	CT BÉNIN	CT TOGO	CT GHANA
	<ul style="list-style-type: none"> • Droit applicable aux partenaires : droit international/ le recueil des lois sur la décentralisation béninois/ le droit du siège. 	<ul style="list-style-type: none"> • Membres : collectivités togolaises et étrangères • Objet/actions : actions de coopération dans les limites des compétences des collectivités territoriales et dans le respect des engagements internationaux de la République togolaise. <p>4. Organismes publics de droit étranger (art.21 de la Loi n°2007-011 du 13 mars 2007 relative à la décentralisation et aux libertés locales, Chapitre IV : « De la coopération décentralisée »)</p> <ul style="list-style-type: none"> • Fondement juridique : une convention d'adhésion • Personnes morales de droit public • Membres : collectivités togolaises et étrangères, organismes nationaux et étrangers, de droit privé et de droit public • Droit applicable aux partenaires : droit international/ les lois sur la décentralisation togolaises/ le droit du siège. 	

	CT NIGERIA	CT BÉNIN	CT TOGO	CT GHANA
Outils et structures de droit public avec participation d'acteurs privés		<p>1. Organisations internationales de villes ou organismes décentralisés étrangers (art.178 et 179 de la Loi n° 97-029 du 15 janvier 1999 portant organisation des communes en République du Bénin)</p> <ul style="list-style-type: none"> • Base légale : une convention d'adhésion • Personnes morales de droit public • Membres : collectivités béninoises et étrangères, organismes nationaux et étrangers, de droit privé et de droit public • Droit applicable aux partenaires : droit international/ le recueil des lois sur la décentralisation béninois/ le droit du siège. 	<p>1. Organismes publics de droit étranger (art.21 de la Loi n°2007-011 du 13 mars 2007 relative à la décentralisation et aux libertés locales, Chapitre IV : « De la coopération décentralisée »)</p> <ul style="list-style-type: none"> • Fondement juridique : une convention d'adhésion • Personnes morales de droit public • Membres : collectivités togolaises et étrangères, organismes nationaux et étrangers, de droit privé et de droit public • Droit applicable aux partenaires : droit international/ les lois sur la décentralisation togolaises/ le droit du siège • Conditions d'adhésion : dans les limites des compétences des collectivités territoriales togolaises, avec l'autorisation du gouvernement et dans le respect des engagements internationaux de la République togolaise. 	

	CT NIGERIA	CT BÉNIN	CT TOGO	CT GHANA
Outils et structures de droit privé gestionnaires de service public	<p>Contrat (art.22 du Second Schedule <i>Legislative Powers</i> Part 2, de la Constitution de 1999)</p> <ul style="list-style-type: none"> • Fondement juridique : une convention qui entre en vigueur après approbation de l'autorité de tutelle • Pas de personnalité juridique • Membres : collectivités nigérianes et étrangères • Objet/ actions : à des fins de recherche scientifique et technologique. 	<p>Sociétés d'économie mixte ou agences d'exécution, organisations non gouvernementales, associations de droit béninoise habilitées, comités de gestion, sociétés privées (art.108 de la Loi n° 97-029 du 15 janvier 1999 portant organisation des communes en République du Bénin)</p> <ul style="list-style-type: none"> • Membres : tout groupe de personnes physiques et morales, nationales et étrangères • Droit applicable : droit privé interne (béninois ou étranger) et international • Objet/actions : à but non lucratif ou lucratif, exercice des compétences des communes en conformité avec les stratégies sectorielles, les réglementations et normes nationales en vigueur. Dans l'exécution des opérations qui découlent de leurs compétences, les communes béninoises peuvent, sous leur maîtrise d'ouvrage, déléguer, se faire assister, concéder, affermer, soustraire ou passer des contrats avec de tels organismes de droit privé. 	<p>Personnes morales de droit étranger ayant pour objet l'exploitation d'un service public ou la réalisation d'un équipement local (art.21 de la Loi n°2007-011 du 13 mars 2007 relative à la décentralisation et aux libertés locales, Chapitre IV : « De la coopération décentralisée »)</p> <ul style="list-style-type: none"> • Membres : personnes physiques et morales, nationales et étrangères ; les collectivités territoriales peuvent soit acquérir des actions ou obligations, soit recevoir à titre de redevances, des actions d'apports ou parts des fondateurs émises par lesdites sociétés dans les conditions fixées par la réglementation en vigueur • Droit applicable : droit privé interne et international • Objet/ actions : à but lucratif • Conditions d'adhésion : dans les limites des compétences des collectivités territoriales togolaises, avec l'autorisation du gouvernement et dans le respect des engagements internationaux de la République togolaise. 	<p>Joint commercial Activity (prévus en droit interne, entre les collectivités ghanéennes par l'art. 33 de l'ACT 462 LOCAL GOVERNMENT ACT of 1993)</p> <ul style="list-style-type: none"> • Membres : personnes physiques et morales, nationales et étrangères (à autoriser par l'État) • Droit applicable : droit privé interne et international • Objet/ actions : à but lucratif • Conditions d'adhésion : dans les limites des compétences des collectivités territoriales ghanéennes, avec l'autorisation du gouvernement, en répartissant les coûts et les bénéfices entre les collectivités membres.

	CT NIGERIA	CT BÉNIN	CT TOGO	CT GHANA
TABLEAU 2	Compétences des collectivités locales prévues par la Constitution	Compétences propres et transférées (exécutoires 15 jours après transmission des actes à l'autorité de tutelle ²³ pour contrôle de la légalité)	Compétences propres et transférées (exécutoires après transmission des actes à l'autorité de tutelle ²⁴ pour contrôle de la légalité ; les actions de coopération entre collectivités s'exercent sous le contrôle de l'État)	Compétences dévolues et/ compétences partagées avec l'État
Développement local, aménagement du territoire, urbanisme et habitat				
Communes (district ghanéen)	<ul style="list-style-type: none"> • Construction des égouts et autres voies publiques, des parcs, des jardins, des espaces ouverts ou des installations publiques qui relèvent de la compétence de l'assemblée de l'État fédéré • Établissement, entretien et réglementation des parcs de stationnement et des équipements publics 	<p>Le mode de gestion des propriétés communales et l'élaboration de tous les documents d'urbanisme sont soumis à l'autorisation préalable de la tutelle</p> <ol style="list-style-type: none"> 1. La commune élabore et adopte son plan de développement. Dans ce cadre : <ul style="list-style-type: none"> • Élaboration des documents de planification nécessaires : <ul style="list-style-type: none"> - le schéma directeur d'aménagement de la commune ; - le plan de développement économique et social ; - les plans d'urbanisme dans les zones agglomérées ; - les règles relatives à l'usage et à l'affectation des sols ; - les plans de détails d'aménagement urbain et de lotissements. 	<ol style="list-style-type: none"> 1. Élaboration du plan communal d'aménagement du territoire ; 2. Élaboration et mise en œuvre du programme de développement de la commune ; 3. Consultation sur les orientations, les programmes et les projets de développement nationaux, régionaux et préfectoraux concernant la commune ou ayant une incidence sur elle ; 4. Gestion du domaine communal ; 5. Établissement et exécution des schémas directeurs d'urbanisme et des plans d'urbanisme de détail de la commune ; adressage des voies ; 6. Préparation et exécution du programme local de l'habitat ; 	<p>Compétences partagées :</p> <ol style="list-style-type: none"> 1. Logement 2. Planification et développement urbains 3. Planification régionale

23 Pending actions subject to the prior approval or authorisation of the supervisory authority.

24 Idem

	CT NIGERIA	CT BÉNIN	CT TOGO	CT GHANA
		<ul style="list-style-type: none"> 2. Délivrance des permis d'habiter et des permis de construire ; 3. Contrôle permanent de la conformité des réalisations et des constructions avec la réglementation en vigueur. 	<ul style="list-style-type: none"> réalisation des opérations de lotissement, délivrance des permis de construire ; 7. Délivrance des autorisations d'occupation du domaine public communal. 	
Régions togolaises			<ul style="list-style-type: none"> 1. Planification et adoption du programme de développement de la région, en cohérence avec les orientations du plan national ; 2. Élaboration du plan régional d'aménagement du territoire ; 3. Coordination des actions de développement entre les préfectures du ressort territorial et/ ou avec d'autres régions ; 4. Aides et mesures incitatives pour le développement de l'industrie et des petites et moyennes entreprises ; 5. Création et gestion des services publics régionaux ; 6. Élaboration de l'atlas de développement régional ; 7. Consultation sur les plans directeurs d'aménagement et d'urbanisme élaborés aux échelons de la commune et de la préfecture. 	

	CT NIGERIA	CT BÉNIN	CT TOGO	CT GHANA
Environnement²⁵ et gestion des ressources naturelles				
Communes (district ghanéen)	<ol style="list-style-type: none"> Développement de l'agriculture et des ressources naturelles, autres que l'exploitation des matériaux 	<ol style="list-style-type: none"> La délimitation des zones interdites à l'urbanisation dans les périmètres réputés dangereux pour des raisons naturelles ou industrielles ; La création, de l'entretien et de la gestion des cimetières et des services funéraires ; La création, l'entretien des plantations, des espaces verts et de tout aménagement public visant à l'amélioration du cadre de vie. La commune veille à la protection des ressources naturelles, notamment des forêts, des sols de la faune, des ressources hydrauliques, des nappes phréatiques et contribue à leur meilleure utilisation. 	<ol style="list-style-type: none"> Exploitation des carrières locales de matériaux de construction ; Protection des zones réservées au maraîchage et à l'élevage ; Réglementation relative à la protection de l'environnement, concernant en particulier la circulation et les équipements des véhicules à moteur, les lieux publics, les rassemblements de personnes, les machines et équipements en fonctionnement dans les communes y compris les appareils de radiodiffusion et de télévision, la possession d'animaux ainsi que la production de fumées et de substances incommodes ou toxiques ; Création et entretien des espaces verts ; Action de prévention et de lutte contre les feux de brousse ; Gestion rationnelle des ressources forestière et halieutiques du territoire communal. 	<p>Compétence partagée :</p> <ol style="list-style-type: none"> Protection de l'environnement Agriculture, forêts et pêche <p>Compétence propre :</p> <ol style="list-style-type: none"> Protection incendie

²⁵ Togo has adopted Law No. 2008-005 of 30 May 2008 on the environmental framework law. However, the implementation of this law is the exclusive responsibility of the State and its institutions.

	CT NIGERIA	CT BÉNIN	CT TOGO	CT GHANA
Régions togolaises			<ol style="list-style-type: none"> 1. Appui au développement sylvo-agropastoral ; 2. Protection de la faune et de la flore ; 3. Participation à la gestion et à l'entretien des parcs, réserves et sites naturels à vocation régionale ; 4. Élaboration et mise en œuvre de plans régionaux de protection de l'environnement. 	
Santé et hygiène				
Communes (district ghanéen)	<ol style="list-style-type: none"> 1. Prestations et maintenance des services de santé 2. Établissement et entretien de cimetières, de lieux de sépulture et de maisons pour les démunis ou les infirmes 	<ol style="list-style-type: none"> 1. La préservation des conditions d'hygiène et de la salubrité publique, notamment en matière : <ul style="list-style-type: none"> de prospection et de distribution d'eau potable; de périmètres de sécurité sanitaire autour des captages, forages et puits, d'assainissement privé des eaux usées ; de lutte contre les vecteurs des maladies transmissibles d'hygiène des aliments et des lieux et établissement accueillant du public; de déchets industriels ; 	<ol style="list-style-type: none"> 1. Construction et gestion des dispensaires, des unités de santé de base et des dépôts pharmaceutiques ; 2. Adoption des mesures d'hygiène et de salubrité dans le périmètre communal, lutte contre l'insalubrité ; 3. Organisation et gestion d'activités d'assistance aux nécessiteux et de secours aux sinistrés ; 4. Contribution à l'organisation de la protection civile et de la lutte contre les incendies ; 5. Création et entretien des cimetières. 	<p>Compétence partagée :</p> <ol style="list-style-type: none"> 1. Sécurité sociale <p>Compétences propres :</p> <ol style="list-style-type: none"> 1. Soins de santé de base 2. Protection sanitaire 3. Planning familial 4. Gestion de centres d'assistance sociale 4. Collecte et enlèvement des déchets 5. Gestion des cimetières et crématoriums

	CT NIGERIA	CT BÉNIN	CT TOGO	CT GHANA
		<p>2. Élaboration de la réglementation concernant l'assainissement individuel (latrines, fosses septiques, puisards) et initie toutes mesures de nature à en favoriser la promotion ;</p> <p>3. La réalisation, l'équipement et les réparations des centres publics de santé et de promotion sociale, des infrastructures publiques culturelles de jeunesse, de sports et de loisirs, au niveau de l'arrondissement du village ou du quartier de ville. La commune assure en outre l'entretien de ces centres et infrastructures.</p>		
Régions togolaises			<ol style="list-style-type: none"> 1. Appui à la gestion des centres hospitaliers régionaux ; 2. Création et gestion des centres de santé, d'infirmerie et de cases de santé ; 3. Mise en œuvre à l'échelon régional d'une politique de prévention des maladies ; 4. Conception et financement de projets de promotion et de réinsertion sociale des populations démunies, dans le cadre de la lutte contre la pauvreté ; 5. Élaboration de plans régionaux d'intervention d'urgence et de gestion des risques. 	

	CT NIGERIA	CT BÉNIN	CT TOGO	CT GHANA
Eau et assainissement				
Communes (district ghanéen)	<p>Compétences du niveau fédéré transférées ou susceptibles d'être transférées aux collectivités locales :</p> <ol style="list-style-type: none"> 1. Electricité et établissement dans l'État fédéré de centrales électriques 2. Production, transmission et distribution d'électricité dans des zones non couvertes par un réseau national de distribution dans l'État fédéré 3. Établissement dans l'État fédéré de toute autorité pour la promotion et la gestion des centrales électriques établies par l'État. <p>Compétences propres :</p> <ol style="list-style-type: none"> 1. Fourniture et entretien des installations publiques, des égouts et de l'élimination des ordures 	<ol style="list-style-type: none"> 1. La fourniture et la distribution d'eau potable ; 2. La collecte et le traitement des déchets solides autres que les déchets industriels ; 3. La collecte et le traitement des déchets liquides ; 4. La gestion du réseau public d'évacuation des eaux usées et du réseau d'évacuation des eaux pluviales ; 5. Des ouvrages d'aménagement des basses fonds et de protection contre les inondations. 	<ol style="list-style-type: none"> 1. Consultation sur les plans d'adduction d'eau ainsi que sur les plans d'électrification concernant le territoire communal ; 2. Édification des bornes fontaines, des puits et des forages de la commune ; 3. Établissement et mise en œuvre des plans d'élimination des ordures et déchets ménagers, des déchets industriels, végétaux et agricoles ; organisation de la collecte, du transport, du traitement et de la disposition finale des déchets ; 4. Collecte et traitement des eaux usées ; 5. Gestion et entretiens des bornes fontaines, des puits, des forages et des réseaux d'eau ; distribution de l'eau potable. 	<p>Compétences propres :</p> <ol style="list-style-type: none"> 1. Eau et assainissement 2. Approvisionnement en eau
Régions togolaises			<ol style="list-style-type: none"> 1. Construction et entretien des barrages et forages ; 2. Consultation sur les plans d'adduction d'eau ainsi que sur les plans d'électrification intéressant la région. 	

	CT NIGERIA	CT BÉNIN	CT TOGO	CT GHANA
Services marchands et investissements économiques				
Communes (district ghanéen)	<p>Compétences du niveau fédéré transférées ou susceptibles d'être transférées aux collectivités locales :</p> <ol style="list-style-type: none"> Développement industriel, commercial et agricole <p>Compétences propres :</p> <ol style="list-style-type: none"> Recommandations à la commission de l'État sur la planification économique ou à tout organisme similaire sur le développement économique de l'État fédéré Établissement, entretien et réglementation des abattoirs, des aires d'abattage, des marchés, des parcs de stationnement et des équipements publics contrôle et Réglementation de la publicité extérieure, boutiques et kiosques, restaurants, boulangeries et autres lieux de vente de nourriture au public, blanchisseries et licences, réglementation et contrôle de la vente d'alcool. 	<ol style="list-style-type: none"> La construction, de l'équipement, des réparations, de l'entretien et de la gestion des marchés et des abattoirs ; Toutes mesures de nature à favoriser le tourisme sur le territoire communal et à encourager les opérateurs économiques intéressés à entreprendre des activités dans ce domaine ; Des investissements visant à promouvoir l'installation et le développement des activités économiques sur le territoire communal, notamment par l'aménagement de zones artisanales et de zones industrielles. 	<ol style="list-style-type: none"> Construction et gestion des marchés et des abattoirs locaux ; Établissement, suppression ou changement des lieux des foires et des marchés ; Promotion de l'artisanat local, des petites et moyennes entreprises ; Organisation et gestion des foires ; Promotion du tourisme et aménagement des sites touristiques d'intérêt local. 	<p>Compétences partagées :</p> <ol style="list-style-type: none"> Agriculture, forêts et pêche Développement et promotion économique locaux Commerce et industrie Gestion des abattoirs

	CT NIGERIA	CT BÉNIN	CT TOGO	CT GHANA
Régions togolaises			<ol style="list-style-type: none"> 1. Promotion de l'artisanat ; 2. Création et organisation des foires et marchés d'intérêt régional ; 3. Établissement, suppression et changement des foires et marchés ; 4. Définition, élaboration et adoption du programme de développement économique et social de la région ; 5. Promotion du tourisme, notamment aménagement et gestion des sites touristiques d'intérêt régional. 	

What cross-border projects and initiatives?

The issue of coastal erosion has been taken into account by institutional actors such as the West African Economic and Monetary Union (UEMOA), which has a Regional Programme to Combat Coastal Erosion. The World Bank has been able to finance projects such as the one entitled «Coastal Erosion and Climate Resilience Building in West Africa» which concerned Côte d'Ivoire, Ghana, Togo and Benin²⁶, in connection with international discussions on Habitat III.

In 2016, the African Development Bank supported a project for the rehabilitation of the Lomé-Cotonou road and provided for the construction of coastal protection, with 28 groynes designed to slow sand transit, the refilling of the spaces between the groynes with sand to reconstitute the coastal beaches, and reforestation initiatives.²⁷

In a more integrated approach, the UEMOA Council of Local Authorities has launched several initiatives for territorial diagnosis and cross-border planning in several West African cross-border sites. Integrated Transboundary Development Schemes (Schémas d'Aménagement Transfrontalier Intégré - SATI) have been put place in the area covered by the Regional Integration Initiative for the Sahel (IIIR Sahel), in the Dendi-Ganda network, and in the Lomé-Cotonou coastal corridor. An initiative to plan and structure projects to implement the sustainable and resilient development of the Abidjan-Lagos corridor is also being prepared.

Moreover, a regional strategy against coastal risks has been proposed within the framework of the World Bank's WACA programme, which supports this regional integration²⁸ and aims to be a forum for mobilising technical and financial development partners on issues of adapting coastal ecosystems, for sustainable coastal development²⁹ (green and blue economies) and supporting local economies³⁰.

What are the obstacles for stakeholders?

There are several types of obstacle. First and foremost, there is a lack of knowledge of the risk of flooding, coastal erosion and coastal flooding as

26 <http://habitat3.org/wp-content/uploads/TOGO-RAPPORT-final-HABITAT-III.pdf> (p. 25 point 15).

27 https://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/Multinational_%E2%80%93_RE_Projet_de_r%C3%A9habilitation_de_la_route_Lom%C3%A9-Cotonou_Phase_2_et_de_protection_c%C3%B4ti%C3%A8re_Benin-Togo__APRV.pdf (p. 24 point 3.2.7).

28 Website of the World Bank WACA Programme <http://www.banquemondiale.org/fr/programmes/west-africa-coastal-areas-management-program>.

29 Recommendations of the WACA Programme for the sustainable development of the West African coast: <https://www.worldbank.org/en/programmes/west-africa-coastal-areas-management-program#2>.

30 WACA Programme Fact Sheet – A Partnership for Saving West Africa's Coastal Assets: <http://documents.worldbank.org/curated/en/807231467995813259/pdf/101176-FRENCH-PUBLIC-WACA-Brochure-Avril-2016.pdf>.

a result of rising sea levels, and the worsening effects of storms. Indeed, although there are scientific institutions responsible for projects researching these risks, the dissemination of information to political and technical decision-makers at the local level is not always ensured.³¹

The other major obstacle to concrete cross-border co-operation projects on this issue is the lack of institutional capacity for carrying out planning processes. There is a problem with the availability of qualified technical teams and the presence of consulting engineers for vulnerability diagnostics, risk mapping, territorial planning and urban planning documents that are effectively prepared and executed.

RECOMMENDATIONS

Establish a permanent consultation framework for coastal projects in order to avoid environmental damage downstream in neighbouring countries, or organise multi-country coastal protection projects using nature-based solutions (restoration and reinforcement of coastal ecosystems such as barrier beaches, mangroves, coconut groves).

Put in place regional measures to combat sand extraction and ensure the effective discontinuation of this practice at the national and local level, such as organising more controls and diversifying supply for building materials.

Encourage the construction of climate-resilient and environmentally friendly infrastructure (green ports³², use of renewable energy technologies, etc.).

Support the development of long-term land use plans at the local level.³³ These planning documents will have to take account of climate change, direct development towards areas less exposed to climate risks and rely on nature-based solutions. Above all, they must be effective.

Raise awareness of climate risks among populations and stakeholders in order to support changes in the use of land at risk, in particular by building on the value systems of local communities.

31 Interview with Yves du Penhoat and Alexis Chaigneau from the Institut de Recherche pour le Développement in Benin.

32 www.uneca.org/sites/default/files/PublicationFiles/blueeco-policy-handbook_fre.pdf.

33 <http://documents.banquemonde.org/curated/fr/241611467990948068/pdf/101188-FRENCH-PUBLIC-WACA-KS6-Effets-du-changement-climatique-sur-l%C3%A9rosion-du-littoral-Avril-2016.pdf>.

This practical guide is published by the Sahel and West Africa Club Secretariat (SWAC/OECD).

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Please cite this work as: OECD/SWAC (2020), Border Cities and Climate Change: A Practical Guide to Legal and Financial Levers, Rev. ed. Paris.

*Graphic design: Daniel Krüger,
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