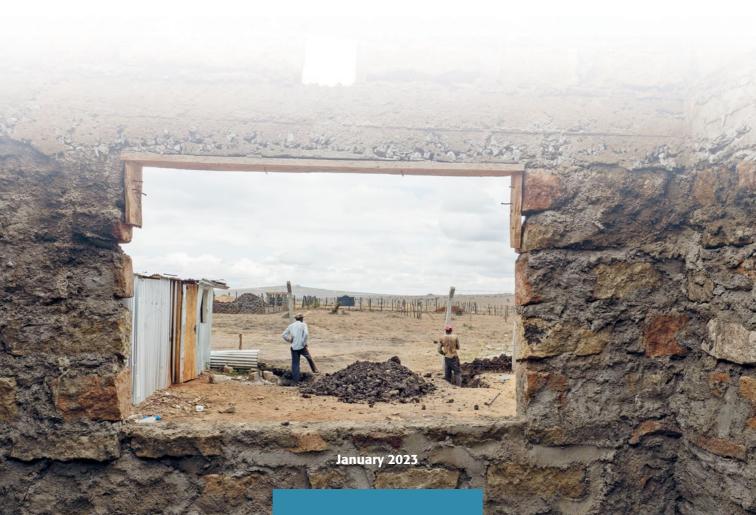
Ordinary changes in land use linked to urbanisation in the global South

Housing, capitalisation, agricultural changes



Ordinary changes in land use linked to urbanisation in the global South

Housing, capitalisation, agricultural changes

Work on this report and the research project behind it was led by **Bérénice Bon (IRD, UMR CESSMA)**, Claire Simonneau (Laboratoire Techniques Territoires et Sociétés and UMR Géographie-cités), Éric Denis (UMR Géographie-cités) and Philippe Lavigne Delville (IRD, UMR SENS).

The **team of research associates** who contributed to the project through the case studies and research seminars included: Myriam Ababsa (IFPO), Adeothy Adegbinni (UNSTIM), Armelle Choplin (University of Geneva), Valérie Clerc (IRD, CESSMA), Jean-Philippe Colin (IRD, SENS), Gabriel Fauveaud (University of Montreal), Julie Gangneux-Kebe (ENSAN, CRENAU), Pierre Kandem (University of Poitiers), Faten Kikano (University of Montreal), Murad Kalaldeh (Al Balqa'a Applied University, Jordan), Auréa Pottier (IRD, SENS), Sina Schlimmer (IFRI), Adama Sow (UCAD) and Jean-François Valette (Université Paris 8, LADYSS).

Other contributions include written and oral comments from: Valérie Andriamanga, Amel Benkahla, Mathieu Boche, Mathieu Bonnefond, Perrine Burnod, El Hadj Thierno Cissé, Jean-Pierre Chauveau, Hubert Cochet, Jean-René Cuzon, Patrick D'Aquino, Véronique Dorner, Benoit Faivre Dupaigre, El Hadj Faye, Jean-Luc François, Alix Françoise, Hélène Julien, Éric Léonard, Michel Merlet, Mamy Rakotondrainibe, Charlotte Ravaux, Hugo Roy, Irène Salenson, Sidy Seck and Marc Totté.

The diversity of participants in this study and scope of their concerns and personal positions are reflected in this wide-ranging and comprehensive report.

The study report was presented at an extended feedback meeting on 28th March 2022, attended by members of the 'Land Tenure and Development' Technical Committee. It does not necessarily reflect the views of the French administration. This document also exists in French and can be downloaded from the 'Land Tenure and Development' portal (www.foncier-development.fr).

PRÉFACE

gricultural, pastoral and forest lands all over the world are under threat. They are disappearing at a much faster rate than we think, and at scales that far exceed demand from urban and population growth.

Much of the data on changes in land use are based on the extension of built-up land, on 'visible' signs of housing. But they do not capture the diverse actors involved or the logics and processes at work when land uses change. To fully understand the massive upheavals in the use of cultivated land and conversion of natural spaces for housing, we need to look at what is happening at plot level. Changes in land use do not always involve construction – the conversion process can take a long time and go through different stages: gradual fragmentation, fallow periods, enclosure and temporary use for other types of activity (market gardening, orchards) may all be precursors to construction. Even if nothing seems to be happening on a plot, the first transaction may herald a shift to a different type of land use and ultimately a permanent loss for agriculture or biodiversity.

This study by the 'Land Tenure and Development' Technical Committee is based on nine empirical case studies from Africa and Asia. It is a timely invitation to turn our attention to these land dynamics and the logics that drive them, because land conversions have just as much (if not more) impact on the environment and rural resilience than the higher profile issue of large-scale investments. This is a matter that urgently needs to be addressed as it is already shaping the future of rural and peri-urban territories, with some land conversions happening far from existing urban areas in anticipation of planned public developments and the expected arrival of new cities.

This book clearly describes the processes at work in land conversions, the practices followed by different actors, and the institutional, political and economic conditions that facilitate them. We must all heed the findings of these nine case studies, which provide concrete illustrations of the consequences of these processes. How can we curb these land conversions, which are mainly driven by a few groups of actors seeking to capture land rents? How can they be better managed and regulated so that legitimate housing needs do not lead to deliberate or unintentional processes of exclusion and dispossession? How can they be turned into opportunities to fund local authority budgets and finance local development? What mechanisms would be needed to use the capital gains they generate for the public good rather than boosting private investors' profits or increasing the financial capital of certain economic and political elites?

Finding appropriate responses to these issues will require joint responses to the various challenges facing affected territories, and a move away from sectoral approaches. This report suggests a number of possible avenues: creating the conditions for better local governance and decentralisation so that local authorities can fund themselves from a virtuous tax system rather than speculative and often poorly supervised operations; considering and prioritising the needs of the most vulnerable so that 'sales in a context of agrarian distress' are no longer their only option; thinking about insurance policy instruments to enable disadvantaged groups to cope with life's accidents. Or even putting in place mechanisms for consultation and participation so that opposing interests can be addressed through negotiation (even if it is asymmetrical) rather than power struggles and conflict.

This book is part of the Land Tenure Committee's continuing contribution to reflections on land policies. Its particular focus is on those 'grey areas' where institutional tinkering and 'ordinary' actors' practices are irreversibly changing the shape of rural landscapes. How can rural actors help change national and local legislation so that their legitimate land rights are recognised and secured, when certain local and national authorities or economic actors continue to control and capture the huge capital gains generated by operations arising from changes in land use?

Many countries are experiencing multiple crises that are likely to be exacerbated by the effects of climate change and population growth. It is imperative to address the issues raised in this book, not only to safeguard food sovereignty, preserve social links and protect natural and cultivated biodiversity, but above all, so that these countries can leave a healthy environmental legacy for future generations to come.

Gilles Kleitz, Executive Director of Sustainable Development Solutions (SDS) – L'Agence française de développement (AFD)

CONTENTS

- 7 **Summary**
- 9 Introduction
- 15 PART 1. Measuring urban sprawl: intense and diffuse urbanisation in the global South
- 15 Estimating likely land conversions
- 17 The disconnect between demographic growth and urban expansion
- 19 Identifying changes in land use
- 21 The need to include fallow land in urbanisation measures
- 25 PART 2. Upstream conversion processes: land sales and decisions to change rural land uses
- 26 Diverse types of rural land and actors
- 27 Long-term changes in rural societies and land tenure practices
- 30 The logics behind rural landholders' actions
- 31 Continuity and change in agricultural land uses
- 33 Hybrid strategies combining agriculture, land sales, and/or land and property development
- Multiple types of rural land sales: distress sales, potential and official dispossessions, trade in plots
- 36 State urban development programmes and metropolitan planning as major drivers of change
- 40 Local urban development schemes stimulate land conversions in different ways
- 41 Private land and property developers as catalysts of change
- 43 PART 3. Land acquisition and distribution
- 44 Land transfers by public authorities
- 45 Convergent national and international investors in land acquisitions
- 47 Individual initiatives, household projects, modest buyers
- 52 Types of multiple ownership and links with corporate affairs
- 52 Pooling money to access land

- 55 PART 4. Downstream: What is being done with converted land?
- 56 Parcelling and subdivision operations
- 59 Economic advancement through property development and self-builds
- 62 Sit tight and wait: land as speculative capital
- 64 Procedures for authorising and formalising changes of use
- 66 Insecurity and land conflict
- 66 Summary

71 PART 5. Regulatory and monitoring issues and tools

- 73 Updated analytical frameworks for thinking on public policies
- 74 Regulation: the need for an enlightened, shared vision and reflection on the conditions for effective public action
- 75 Different regulatory approaches and levels
- 76 Recognising and resolving contradictory public actions
- 78 Recommendations
- 78 Strengthen dialogue between research and public action on land management in rural/urban interfaces
- 81 Engage with conflicting interests: negotiation is preferable to power struggles and conflicts, even if it is asymmetrical
- 82 Developing legal regulations that support social and environmental justice
- 82 Use planning and forecasting instruments to harmonise different sectoral approaches and timeframes
- 83 Support local management capacities
- 86 Bibliographic references
- 96 List of boxes
- 97 List of figures
- 98 List of photos

Summary

his report considers the ways in which land use is changing in developing countries, and how these changes are linked to urbanisation It uses the term "land-use conversion" to describe the transformation of cultivated or natural spaces into land that is destined for economic purposes other than agricultural activities, such as property development, self-builds, hoarding or speculation. The different stages of the conversion process are considered: changes in ownership, acquisition of land rights, land transactions, plot divisions, productive use through construction and property development (housing estates, building projects of various sizes, etc.), and fallow land (demarcated parcels that remain undeveloped). These changes are taking place on different types of land, from cultivated fields to common areas and environmentally sensitive spaces. The sequencing of the stages and the actors involved in land conversions vary according to the context in which they occur.

Large-scale land conversions generated by major development and infrastructure projects, industrial and extractive activities, and large-scale land grabs in rural areas have been widely examined over the past decade. But little has been written about how ordinary actors – residents, local land rights holders, local economic operators, local elected officials – acquire plots of land and change the way they are used in order to build houses, develop economic activities or accumulate capital. Even though this is a huge phenomenon, the different regulatory frameworks and public actors behind it have yet to be clearly identified.

These changes in land use are the result of dynamics that began several decades ago with urban development at various scales, changes in local legal norms governing access to rural land, the growth of rural and urban land markets, and the increasing role and power of private and financial actors in urban planning, land delivery and property production.

Observers of the dynamics of urban sprawl can see that land use is changing on an unprecedented scale (Part 1). Global observations show that built-up areas are generally increasing faster than demographic growth, although there are strong regional contrasts. And urban growth is not limited to existing cities: it also affects villages, which are being urbanised in more diffuse ways that are rarely recorded in official censuses. On a finer scale, it is important to determine how much land is being kept on hold as fragmented areas of fallow, and to understand the production logics behind this. It would be reductive to simply regard urban sprawl as the built environment encroaching upon natural or uninhabited areas: the fact that losses of agricultural and natural land now outstrip demographic growth means

that we can no longer think about 'urbanisation' solely in terms of the continuous extension of existing urban areas. The dynamics involved are complex, multiform and changing, with land increasingly valued for its economic functions, as a safe haven and as a medium for money creation.

These land conversions involve a wide range of actors, logics and processes (Part 2 and Part 3). The report shows that they are not dual processes of urban and land production by rival rural and urban actors operating in formal and informal sectors, but a continuum of practices, actors, dynamics and competing interests. They involve multiple actors who may simultaneously or successively adopt contrasting practices (such as maintaining an agricultural activity and selling some of their land). This complex, shifting continuum is shaped by territorial dynamics (demographic pressure, environmental conditions), public policies (development projects, national land trajectories, property banking, financialisation of urban and land production), socio-economic and legal changes (evolving local land norms, climatic pressures on agriculture and fragile areas), and sometimes by social or individual trajectories (emergent middle classes, hopes and aspirations) that can develop particularly rapidly in countries in the global South.

Decisions to change land use are influenced by a combination of factors. Agriculture is becoming a less attractive and less profitable activity, insecure tenure may drive people to transfer their rural land rights, and the actors who acquire them may need land for housing or as a savings vehicle. Changes may also relate to large public projects and housing developments, or neo-liberal reforms of land and property production that open up the sector to private interests. They therefore involve a whole range of actors with different economic and sociopolitical profiles and unequal resources (available capital, access to credit, knowledge of regulations and capacity to influence them). But the balance of power is complicated, and cannot be read solely in terms of urban actors dispossessing rural actors of their land (Part 2).

The circuits through which money flows upstream and downstream of land sales play a key role in these processes. The growth of bank credit is a major factor, although there are marked regional differences in the links between land markets and mortgage lending. In many cases, land is increasingly used as collateral for savings and speculative investments, and as a safe haven in the context of deregulation. A good deal of land is sold, bought, resold and divided into small plots but left largely undeveloped and uncultivated – which means that built-up land is not the only indicator of losses from the natural or cultivated environment (Part 3). Many land transactions and conversions are driven by the anticipated economic gains to be made from urban sprawl (involving a continuum of actors with very heterogeneous capital resources), but we also show the significant role that micro-transactions and parcel size play in these processes (holdings divided into micro-plots). Our findings in this respect complement previous studies on large-scale land grabs.

These different forms of land conversion have marked impacts on the dynamics of urbanisation, and issues such as **environmental degradation**, **socio-economic inequalities and the need for social protection**, **pressure on family farms and the sterilisation of fertile land**, **financial risks at many levels**, **and the burden on authorities to provide infrastructures and services. Some of these issues could be addressed through regulation (Part 4)**. The range of public policy sectors concerned means that these regulations cannot rely solely on classic tools for planning, zoning and protecting agricultural areas. The socio-economic and financial dimensions of these land conversions must be tackled head-on, along with the possible trickle-down effects on economic actors, interactions with the natural environment, coherence between different levels of public action, and the real capacities of regulatory actors.

Introduction

his report considers the ways in which land uses are changing in the global South, and how these changes are linked to urbanisation. It follows on from previous work by the CTFD, particularly the White Paper on land governance and security of tenure in developing countries (2009),¹ the study day on urban land held on 27th June 2017, and publications on large-scale land acquisitions (2016).

Asia, Africa and Latin America jointly accumulated 128,000 km² of urbanised land between 2000 and 2015, accounting for 73% of all changes in land use around the world during this period. Urban sprawl is increasing at the fastest rate on the African continent, where built-up areas have almost doubled since 1990, and at the slowest rate in Europe (Pumain, 2020).

These changes in land use are taking place in a context of increasingly fragile natural environments, growing demand for housing and greater need for land assets. But as built-up areas and fallow land add to the effects of climate change, urban development must be balanced against the need to protect the environment, conserve water resources, safeguard groundwater recharge, and preserve plant cover. Rural initiatives need to take account of the growth of non-agricultural activities and increasing uncertainty about the reversibility of certain activities and climatic hazards. The **study objective was to document these dynamics** and identify key principles for action to better protect natural resources and agricultural areas.

These changes in land use raise major issues and involve ever-increasing amounts of land. On the one hand, the commodification of land and changes in land use are key components of economic growth: they are concomitant with economic growth and are encouraged by emergence and infrastructure policies and reforms aimed at integrating the land, property and banking sectors into international financial circuits. On the other hand, these changes raise questions about the diversification of economic activities in rural areas and the transformation of agricultural activities and rural livelihoods. They are the most obvious concrete manifestation of urban transition in most developing countries. Studying them enables us to question the trajectories of urbanisation, especially its impact on environmental issues, and efforts to protect the environment and biodiversity and mitigate the effects of climate change. Implementing the Sustainable Development Goals, especially SDG 11 and the New Urban Agenda, will require reflection on the "lands in the making" studied in this report.

^{1.} https://www.foncier-developpement.fr/publication/gouvernance-fonciere-et-securisation-des-droits-dans-les-pays-du-sud/.

In this paper, the term "changes in land use" refers to the conversion to residential use of previously natural or cultivated land. We wanted to examine the practices observed on the ground through field surveys or satellite images, rather than consider public decisions about classification or zoning – although these do play a role in conversion dynamics. The studies focus on changes that are linked to urbanisation, land uses connected with housebuilding and property development, and land hoarding or speculation related to nearby urban centres or the prospect of an advancing urban front. The studies do not cover land conversions for national- or regional-level infrastructure (roads, etc.) or linked to productive activities.² We wanted to look at the land conversions undertaken by ordinary actors (residents, local land rights holders, economic actors, local elected representatives, etc.), the different economic, socio-political and interpersonal resources they use to make these changes, and how they navigate their variable, negotiated and sometimes very tenuous relationships with positive law.

This approach enables us to look at land dynamics in a new way. Much of the analysis in recent years has been informed by pervasive neoliberal policies and the spectacular growth of international financial flows in urban production (Aveline-Dubach *et al.*, 2020). These perspectives are important, given the radical changes that occurred in the frameworks for public action from the early 1980s onwards in the North and the early 1990s in the global South, as liberalisation and privatisation reforms reduced public spending, and decentralisation allowed the market to play an increasing role in the production and management of cities. These institutional changes facilitated new forms of capital accumulation in metropolitan areas and encouraged the financialisation of urban production, with new financial engineering techniques transforming land assets into financial assets. Urban spaces now compete to attract global financial flows, and urban property has become a significant speculative tool. Local leaders use city branding to capture these flows and channel them into daring urban projects and innovative new cities (Vishwanath *et al.*, 2013; Cirolia and Berrisford, 2017; Croese, 2018).

The links between changes in macroeconomic and institutional frameworks and the physical production of urban spaces identified in these studies support the argument that any analysis of land dynamics should also pay close attention to property and financial markets. David Harvey was one of the first to cast a more critical eye over these dynamics, highlighting the resulting dispossessions, deepening inequalities and widespread loss of State control over land (Sassen, 2014). There is now a significant scientific output on large-scale projects, free trade zones and new towns, expropriations for SEZs and infrastructures, and land grabbing by transnational actors.

However, these relatively broad analyses do not capture the local nuances of such change (Aveline-Dubach *et al.*, 2020). Cities in the global South, and especially in Africa, are under-represented in urban studies, which therefore miss important local variations in three key aspects of the shift towards more neoliberal and entrepreneurial land dynamics.

First, central and local governments in the global South still play a major role in land governance. Many post-colonial nations still hold large land reserves; and many use legislation on State lands to guide new urban developments and sometimes to capture land rents (Lorrain, 2017; Denis, 2011). Empirical research has also shown that some local and national government actors use their influence and political connections to intervene in the running and marketing of urban development projects (Labbé and Musil, 2017; Fauveaud, 2020).

^{2.} See in particular the CTFD's work on special economic zones (SEZ).

Second, the appropriation of land resources – at different scales and by a wide range of actors – is still a major issue in these territories. Land continues to play a key role in savings and sometimes in access to credit, and is therefore highly sought after (Denis, 2017; Bertrand, 2021; Bertrand and Bon, 2022). Rural research still tends to focus on land tenure rather than property investment, although some studies on rural land appropriation in the global South have started investigating the connections between urbanisation and land commodification and speculation. But these land dynamics are still examined through the prism of 'land grabbing' (Aveline-Dubach, 2017) and the dominant role played by transnational and government actors. There have been recent calls to sharpen the focus on urban demand and the endogenous logics driving diffuse acquisitions of small, more fragmented parcels, which are less visible than large-scale property development and infrastructure projects (Steel et al., 2019). When the focus shifts away from land grabbing, other factors that make land an attractive acquisition need to be identified, and more ordinary and mainstream dynamics taken into account (Choplin, 2020; Karaman et al., 2020). This shift can be seen in land and urban studies in India, a country whose size and 300 million-plus city dwellers make it a favoured laboratory for research on these issues. Recent studies on land conversions on the rural outskirts of Indian metropolises show that land acquisitions and conversions are instigated by small agricultural landowners, traditional village authorities, intermediaries, entrepreneurs and local land agents, who negotiate land access, the formalisation of land transactions and changes in land use with State officials (Cowan, 2018; Gururani and Dasgupta, 2018; de Bercegol et al., 2021). None of the actors involved in this kind of land-based 'vernacular capitalism' (Upadhya, 2020) have access to transnational capital. How they negotiate, calculate risks and anticipate capital gains has received less attention than the behaviours of large firms and government actors. The financial flows and changes in land use observed are closely linked with agrarian ownership structures, environmental conditions and local actors' interactions with representatives of the State (Mukhopadhyay et al., 2020; Vijayabaskar, 2020). Studying them can therefore shed light on the dynamics of popular housing, land and territorial investment trajectories, and conversions of micro-parcels.

The third point is that the legal status of land is central to these processes of change. Land ownership comes in many (often limited or partial) forms and can be transferred in numerous ways, creating multiple avenues for changes in land use: from the rapid dispossession and eviction of certain occupants to popular resistance, political or symbolic prohibitions, or legal delays to projects. Land tenure in developing countries is still largely analysed through the prism of customary rights, especially in Africa, although we are being encouraged to think of it more in terms of bundles of rights on a continuum of hybrid or negotiated legal practices structured by multiple norms. Studies show that rural land markets are vibrant, that concepts of land rights are changing, that there is a complex interplay between formality and informality, and finally, that urban demand plays a role in the commodification of rural land (Lavigne Delville et al., 2017). All of which point to the need for more crosscutting urban and rural studies.

These studies show the importance of linking analysis of local land dynamics with globalisation and the financialisation of economies, **without over-emphasising the influence of global phenomena on local change**. The aim here is to fill the gaps through a methodology based on case studies and scales of analysis that consider how political regimes and local economics of capital accumulation and circulation affect changes in land use. This detailed examination of how market relations are established combines urban and rural approaches, setting aside the 'moral aspects' of urbanisation and the commodification of rural land (Bertrand, 2021, p. 23), and focusing instead on the issue of inequalities in an attempt to

reach a nuanced understanding of who wins and who loses as land is converted to new uses connected with urbanisation, especially housing.

This book takes an empirical approach that considers the diverse interests and complex spatial configurations involved in these land conversions – unlike previous dualistic analyses of the land dynamics of urbanisation, which often overstate the role that urban interests play in determining rural people's continued access to land, and the absorption of customary land rights into official or positive law. We focus on different stages of the conversion process: the acquisition of land rights, market transactions (when they occur), plot division and subsequent property development (housing projects, self-builds, etc.) and fallow land that is no longer used for agricultural purposes but remains undeveloped. The aim is to understand when, where and how changes in land use take place, and to identify the actors involved in these processes, possible strategies to resist these conversions, situations where several uses coexist (such as urban agriculture and housing), the timescales for these differentiated uses, and their anticipated returns. The hypotheses are that the social impacts of these conversion processes depend on the actors involved and, above all, on the stage at which they intervene. A major determining factor of social impacts is whether conversion takes place before or after rural landholders have transferred (or lost) their rights.

The approach we have chosen looks beyond the urban-rural divide and focuses on territorial dynamics. It even sets aside the concept of 'peri-urban territory', which is hard to pin down and therefore rather difficult to grasp. While these conversions often highlight the friction between rural and urban environments and their associated uses (agricultural versus extractive activities; protected spaces, forests and deserts versus housing, production and service activities, land capitalisation, etc.), it is no longer appropriate to think of urbanisation solely in terms of its previous manifestations through systematic peri-urbanisation or even the uniform conversion of agricultural land into built-up areas or development plots. Land can become a concrete vehicle for financial assets, a means of accessing credit, financialising urban production, transforming landscapes in an unprecedented way, and renewing and generalising forms of urban sprawl. In this sense, the issue is no longer a matter of containing urban pressure by setting limits or cordons around cities.

The dynamics observed are complex, multifaceted, and driven by actors with different sources of legitimacy. The overlap between rural and urban goes well beyond classic 'periurban' areas: cities still contain agricultural land, and metropolitan actors may have little or no direct influence on land purchases by non-agricultural actors (for continued agricultural use or as a savings and investment vehicle). Money, and how it is invested and circulated, is a key issue. This report focuses on the practices, negotiations and power relations in land conversions, rather than the rights theoretically provided by land 'papers', although these do play a role in land conversions.

Our methodological approach is based on analysis of the dynamics of urbanisation at a sub-regional scale. It draws on recent contributions from remote sensing and international programmes that enabled us to assess these changes according to specific morphological criteria and harmonised national statistics. The report is also based on empirical case studies conducted by a group of researchers who specialise in the territories concerned (see the table below).³ The findings of these case studies, which used a common set of research questions, are presented in Volume 2 of this report along with synthetic and analytical maps.

^{3.} Although the global health crisis meant that it was rarely possible to conduct specific field surveys for this research programme, the case studies are all based on in-depth, empirical findings (previous surveys) and long-term knowledge of the areas concerned.

TABLEAU 1: Case studies conducted for this research

Territory	Title/topic	Researcher	
Senegal, Dakar region	Land conversions related to the new town of Diamniadio	Philippe Lavigne Delville, Adama Sow	
Benin, Cotonou metropolitan area	Land fragmentation and markets in a fragile urban and coastal corridor	Claire Simonneau, Adeothy Adegbinni, Hugh Dato	
Côte d'Ivoire, rural outskirts of Abidjan	Parcelling projects undertaken by village landholders	Jean-Philippe Colin, Auréa Pottier	
Kenya, rural fringes of Nairobi. Kitengela (Kajiado County) and Thika (Kiambu County)	Investor practices in rural land markets for private agricultural or semi-arid and pastoral land	Bérénice Bon	
Tanzania, rural outskirts of Dar Es Salaam	Actors, processes and mechanisms for regulating peri-urban land markets	Sina Schlimmer	
Jordan, periphery of Greater Amman	Agricultural and pastoral land conversions by private housing cooperatives	Myriam Ababsa, Murad Kalaldeh	
Lebanon, camps on the border with Syria (Dalamieh)	Emergence and extension of Syrian refugee camps on agricultural land	Faten Kikano	
India, Pondicherry region (Bahur)	Economics of micro-plots	Éric Denis	
Burma, Yangon	Land markets and access to common land for public housing	Valérie Clerc	

The case studies vary. In order to move away from monographic studies, our aim was to highlight crosscutting processes, common types of land conversion and recurrent chains of action and practices. We also wanted to consider how processes vary according to the degree of demographic pressure, intensity of demand for housing, and the forms of property production, banking capital and household access to credit, timescales of emergence policies (large-scale projects, major infrastructures), level of integration into the global economy, and the attractiveness of and openness to transnational investments.

The first part of this report looks at recent measures of urban sprawl and the dynamics of urbanisation explored through spatial analysis. It highlights the disconnect between slowing urban population growth and the expansion of built-up areas, and concerns about soil sterilisation on fallow or uncultivated but unbuilt land, which is accelerating on every continent. Irrigated and communal grazing land is being replaced by collections of small plots with very basic facilities that are left uncultivated for varying lengths of time, and kept or resold with a view to future urban and residential development. The top layer of the soil may be sold, making the change of use irreversible.

The second, third and fourth parts focus on how land uses are changed, identifying the actors, practices and processes involved in three stages of conversion: decisions to change land use (Part 2), transfers or acquisitions of rights (Part 3), and subsequent land uses (Part 4). This sequencing allows us to open the 'black box' of conversions and analyse the links between transfers of land rights and changes in use. It shows that there is no single model; these linkages can take various forms as conversion may take place before or after rights are transferred and can unfold in several stages – parcelling, sale, construction, etc. It also shows that the built environment is not the only marker of what is extracted from natural or cultivated settings, as many land transactions and changes in land use are driven by the sterilisation of unused land and the expected economic returns from urban sprawl.

These sections reveal a wide range of actors with very unequal capital who find themselves competing for control of the land that is to be converted, the conversion process, and the income that it generates. They suggest that land is being financialised from the bottom up, as flows of financial capital are activated upstream and land sales take off downstream, thanks in part to the expansion of bank credit and land being used as a profitable savings vehicle. Land serves as a safe haven in contexts of financial instability, high inflation and lack of access to banking.

This part of the book also highlights the importance of micro-transactions at the plot level and the division of holdings into micro-lots. These processes are occurring alongside large-scale rural land grabs, which the academic literature has mainly studied in relation to international capital flows and large-scale projects that lead to the eviction of local communities. We can see that there are different types of urban configuration. For example, land conversions in areas close to fast-growing urban centres are mostly a response to collective or individual demand for building lots for city dwellers. The potential profitability of these land markets makes them an attractive target for speculators, and certain practices suggest that property development and speculative land accumulation are becoming professionalised. Other conversion zones are concentrated around infrastructures (the 'road effect') and major project sites that may be far from urban centres. Some case studies also identify urban expansion processes that do not lead to an influx of outsiders, in situations where the buyers come from surrounding towns or villages that are expanding and changing.

The final part of the book highlights the diverse regulatory issues associated with these land conversions, which cannot be addressed by a compartmented approach that focuses on a single land or zoning policy. Our findings also show that many local landowners enter the land market in an attempt to exert some control over anticipated shifts caused by climate change, as a strategy to diversify economic activities in the agricultural sector, or because they fear that land will be taken over by the State or other powerful actors. Insecure land tenure and precarious incomes drive people to sell their land rather than risk losing everything in a poorly compensated pre-emption, pointing to the links between urban transition, agriculture and environmental issues. Land conversions reinforce existing socio-economic inequalities and unequal access to resources, and generate new forms of inequality. The report closes with a number of proposed principles for action by public bodies and cooperation agencies, and the conditions needed for effective support for these territorial transformations.

PART 1

Measuring urban sprawl: intense and diffuse urbanisation in the global South

he scale and modalities of urban sprawl are a hotly debated topic. Earlier analysis was limited by the observation methods available at the time, but advances over the last decade now allow us to use remote sensing data and the recent redefinition of urban agglomerations according to globally harmonised morphological criteria to better effect. We can:

- >> accurately measure the extent of urban and rural agglomerations;
- >> take account of the changes, increasing density and variations in land use from urban 'hyper-centres' to the 'deep countryside';
- >>> re-evaluate statistical records of urban populations in the global South, which previously relied solely on national censuses whose definitions varied from continent to continent and according to political biases in the categorisation of settlements;
- >> determine the spatial orientations of these major demographic shifts and redistributions;
- >> estimate the types and amounts of land likely to be converted, and model future changes in land use.

Estimating likely land conversions

Recent studies have used the trends observed between 1980 and 2010 to estimate the global amount of land likely to be converted to different uses. These studies are also a reminder that urban settlement is an extremely efficient form of land use: the majority of our planet's inhabitants live in built-up areas that occupy just 0.6% of the earth's surface.

Nevertheless, it is alarming to consider Gao and O'Neill's calculation (2020) that the total amount of urbanised land could rise from 1.1 million km² in 2010 to 3.6 million km² by 2100, representing a 1.8 to 5.9-fold increase in urban areas around the world.

Europe gained 15,000 km² of built-up urban land between 2000 and 2010, and urban areas on the African continent increased by a further 17,000 km² in this period. Chen *et al.* (2020) estimate that in 2040, some 50% to 63% of new built-up areas will be on previously cultivated land, and 30% to 44% on former forest and grassland, with an impact on overall agricultural production of 1% to 4%.

Box 1

REDEFINITIONS OF URBAN AREAS, AND NEW SOURCES OF URBAN DATA

Definitions of urban areas vary from country to country, and even within the same country when different administrations recognise urban status in different ways. This means that the national census and the ministries in charge of cities may view urban areas differently. Some examples of national variations in what censuses regard as cities are shown below:

- >> Kenya: 2,000 or more inhabitants;
- >> Tanzania: no numerical values for size and density, city status is more determined by political and economic functions and having large numbers of residents involved in non-agricultural activities;
- >> Benin: 10,000 inhabitants or more;
- >> Senegal: 10,000 inhabitants or more;
- Côte d'Ivoire: 10,000 inhabitants or more, but the census also includes units of 4,000-10,000 inhabitants where most residents are engaged in non-agricultural activities, and certain administrative centres.

The OECD report (2020) estimates that 80% of small African cities fall outside urban classifications, along with some large agglomerations with over 500,000 inhabitants.

According to the results of the research programme on subaltern urbanisation in India (Denis and Zérah, 2017), urban growth largely consists of the multiplication of localities with over 10,000 inhabitants that remain classified as villages. For example, the state of Bihar in northern India contains many villages with populations of between 10,000 and 60,000 people. In the southern state of Kerala, 1,072 local units with a population of over 10,000 were still classified as villages in the last census in 2011

In 1993, Moriconi-Ebrard showed how the use of UN-Habitat data, which are very patchy, led to biases in comparative urbanisation studies (Moriconi-Ebrard, 1993). He created the globally harmonised Geopolis database for his thesis on the spatial distribution of urbanisation between 1950 and 1990. This is the most accurate database in terms of counting urban populations, but it does not allow for precise monitoring of the expansion of built-up areas. The Geopolis program uses cartographic records, aerial photographs and satellite images to determine the extent of built-up areas, and relies on census data to count populations. This methodology, which is applied worldwide, uses two criteria to compare the dynamics of urbanisation: (i) agglomerations with at least 10,000 inhabitants, and (ii) gaps of no more than 200 metres between any two buildings. In Africa the database is updated with the Africapolis programme,⁴ and in Brazil with the Brasipolis database.⁵ In India, the research programme *Suburbin: subaltern urbanization in India*⁶ also used the Geopolis method.

^{4.} https://africapolis.org/en

^{5. &}lt;a href="https://www.fct.unesp.br/#!/pesquisa/brasipolis/apresentacao/">https://www.fct.unesp.br/#!/pesquisa/brasipolis/apresentacao/

^{6.} https://suburbin.hypotheses.org/

Other databases are available to monitor the spread of built-up areas around the world in a diachronic and harmonised manner, such as *Modis Land Cover Data* (MODIS LC), *Climate Change Initiative Land Cover Data* (CCI-LC), *Global Human Settlement Layer* (GHSL), and *LandScan Settlement Layer* (LandScan SL).

The Global Rural Urban Mapping Project (GRUMP) uses NASA satellite data to model increases in built-up land, resource consumption, and losses of agricultural land and forests due to urban expansion over a 30-year period. The resolution of the estimates is highly aggregated and can therefore only give broad trends, which significantly underestimate the dynamics of dispersed urbanisation and the emergence of small towns and large villages.

After 2016, the World Bank, the OECD and the European Union agreed to propose harmonised data on urbanisation, and selected three forms of human settlement with varying degrees of density: cities (majority of the population in an urban centre), urban clusters and suburbs, and rural areas and villages or scattered populations.

The European Commission supports the development of the GHSL database. This provides free, easily accessible data obtained from interpretations of satellite images of the morphological extension of the built environment with a resolution of 40m or 250m; plus a population grid based on municipal- and district-level population data with a resolution of 250m, and synthesised data with resolution set at 1 km.

Data on the *Degree of Urbanization* is provided for the years 1975, 1990, 2000, 2015 and 2018. These link population data and the footprint of built-up areas, and are presented according to three levels of density: urban centres (geometric grid of 1 km resolution with at least 1,500 inhabitants per km² and a minimum total population of 50,000); urban clusters (contiguous cells of at least 1 km² and 300 inhabitants per km² and a total population of 5,000); and finally, the rest, i.e., rural areas.

The disconnect between demographic growth and urban expansion

All the measures point to an increasingly marked disjunction between slower demographic growth in agglomerations and the continued acceleration of urban sprawl, particularly in developing and transitional countries, and China in particular (Denis, 2011; Shatkin, 2017; Aveline-Dubach, 2016). In other words, the expansion of built-up areas is increasingly dissociated from the function of living, leading to the de-densification of urban areas. In many cases, the main driver of urban expansion is the potential financial value of buildings rather than their use for various functions. Population dynamics still affect the way that cities expand, but demand varies considerably according to national and local contexts.

Figure 1
DISTRIBUTION OF URBAN BUILT-UP AREAS IN KM² IN 1990, 2015 AND 2020

	Urban built-up			Variation 1990 to 2015		Urban population change
	1990	2000	2015	in km²	in %	
World	394,842	465,745	569,942	175,099	44.3	42.2
Africa	32,826	43,230	62,138	29,312	89.3	101.7
Asia	138,813	171,802	226,471	87,658	63.1	39.5
Europe	100,075	108,485	118,627	18,552	18.5	1.6
Latin América and Car.	34,113	40,269	45,739	11,626	34.1	47.2
Northern America	81,555	93,809	107,888	26,333	32.3	35.8
Oceania	7,470	8,165	9,097	1,628	21.8	52.8

© Denis

There is no linear correspondence between the physical expansion of built-up urban areas and variations in demographic growth in different countries and continents between 2000 and 2015. Land artificialisation and new property developments are driven by many other factors apart from demographic growth. Land fulfils numerous economic functions that do not directly relate to population, and housing responds to different segments of demand. Changes in land use connected with urbanisation do not only occur in spaces around large metropolitan areas; they also happen in smaller areas, small towns and large villages. However, the tools for harmonised processing of satellite imagery are not good at capturing these diffuse trends. For example, half of all city dwellers in India live in towns with under 100,000 inhabitants, and villages are becoming urbanised as residents stay put rather than moving to metropolitan areas. Similar processes are under way in Egypt, whose ecumene is entirely urbanised and more densely populated than urban areas in Europe. The country currently faces an unprecedented standoff over land as the regime pushes through an elitist and speculative redistribution of the most habitable fringes of the desert.

Several major regional trends can be identified. In South-East Asia, for example, residential migration is driving strong growth in cities and a decline in rural populations, which is also due to the changed status of rural agglomerations as urbanised villages become more densely populated. Diffuse urbanisation processes are under way in rich agricultural areas with very high population densities, such as the deltas (see in particular Fanchette's work in Vietnam, 2015).

Latin America is the most urbanised continent in the global South. Even though most countries on this continent have completed their demographic and urban transitions, land is still being converted for residential development to provide homes for the middle classes and the poor, and for speculative purposes.

In Africa, strong population growth in rural areas is driving change at the local level, in urban centres, metropolitan areas and also in secondary towns. The urbanisation rate in sub-Saharan Africa measured by population rose from 31% in 1990 to 50% in 2010 (OECD, 2020). Urban pressure is spread across many small towns and a few large cities whose footprint is rapidly extending to form 'metropolitan regions', such as Khartoum in Sudan, or Luanda in Angola (OECD, 2020)..

Senegal has much higher urban densities than the other African countries covered by the case studies in this report. Its urban population is concentrated in the three largest coastal agglomerations of Dakar, Saint-Louis and Mbour; falling sharply in the rest of the country, which has only two agglomerations of 10,000 inhabitants and low rural population densities. The map of Kenya shows that its urban growth is also concentrated in cities with more than 200,000 inhabitants (Moriconi-Ebrard et al., 2016).⁷ However, urbanisation in secondary towns and villages should not be overlooked, especially the urban area of Nakuru, which now has over 500,000 inhabitants and is expanding very rapidly, increasing its footprint by 60% between 2010 and 2016 (Willkomm et al., 2020). Benin has relatively few mediumsized agglomerations of between 50,000 and 500,000 inhabitants. These accommodate just 20% of the country's urban population. At the other end of the scale the two largest conurbations, Cotonou and Porto-Novo, are absorbing the small and medium-sized towns that have emerged around them, forming a single agglomeration separated by just a few hundred metres of land awaiting development. Côte d'Ivoire is another country with high demographic concentration and spatial expansion (the capital, Abidjan, covers eight times more land than the country's second largest agglomeration).

In West Africa, the distance between urban centres with over 10,000 inhabitants is a third of what it was 40 years ago. It is therefore important to consider the growth of small towns, where the conversion of land to non-agricultural, mainly residential, uses is particularly intense.

Identifying changes in land use

These studies on changes in land use reveal various trends, from built-up areas extending along communication routes to breaks in land use densities and territorial continua as agricultural parcels are fragmented and local production systems dismantled (Mering *et al.*, 2010, in West Africa). Looking at secondary towns in Kenya that are experiencing very strong spatial and demographic growth, Willkomm *et al.* (2020) not only observe a shift from agriculture to construction between 2010 and 2019, but also changes in agricultural use, with certain crops being grown more intensively to meet increasing urban demand. They note that it is mainly small farms that are disappearing, and highlight the potential negative effects of land fragmentation on the long-term sustainability of agricultural activities.

Analyses of the different forms of urban expansion have identified several patterns, ranging from the consolidation and densification of old outskirts as in Lagos (Wang and Maduako, 2017) to the rise of more recent continuous urban areas that are quickly absorbed into extensive urban sprawl, as in the Harare region (Kamusoko and Chikati, 2017) and around smaller Ghanaian agglomerations (Kpienbaareh and Luginaah, 2019).

^{7.} www.africapolis.org

There are also studies on the ways that ecosystems are affected and changed by the extension and densification of peripheries; particularly the problems caused by land artificialisation, resource extraction, the overexploitation of sand quarries, and access to water (see, for example, Morshed *et al.*, 2020 on Dhaka). Environmental scientists have explored the link between rainfall data and proximity to urban centres (Leblois, 2021, in Africa), and analysed the links between urban sprawl and increased pollution.

Box 2

AFRICAPOLIS REPORT ON CHANGES IN LAND USE (OECD, 2020)

This report focuses on in-situ urbanisation in rural areas, citing the examples of Rwanda, a small country where villages have grown as migration has declined, and Togo, where existing villages in peri-urban areas around Lomé are expanding and new villages proliferating in a surge of unplanned construction (homes, garages, small apartment complexes, workshops, etc.). The report shows that new urban agglomerations are emerging in different ways across the continent.

Urban networks are particularly dense in Nigeria and Egypt and, to a lesser extent, in Ethiopia, South Africa and Algeria. Five major urban clusters in North Africa, the Nile Basin, the Ethiopian Highlands, the Great Lakes and South Africa cover 10% of the total land area of the continent. The corridors of the Sahel and the steppes and savannahs between Somalia and Mozambique are least affected by urban growth, while South Sudan, Ethiopia and Mozambique have seen the highest increase in the number of urban areas since the 1950s. Behind this increase, the report notes that the reclassification of rural land as urban makes it increasingly difficult to distinguish between rural and urban areas. The emergence of agglomerations within larger metropolitan areas also poses certain problems. For example, the number of agglomerations in Egypt, Kenya, Libya and Rwanda has fallen, but existing agglomerations have grown and merged into conurbations.

The report also notes a marked increase in the footprint of border towns, and 'saturated' territories in countries like Rwanda and Burundi, where there is intense competition for rural resources and between agricultural and urban needs.

Finally, it identifies 'local forms' of urbanisation and patterns of urban growth: linear coastal settlements, clusters of linear growth, spontaneous traditional settlements, dense development outside settlements, planned clustered settlements, scattered settlements, absolute dispersion (as in south-eastern Nigeria), and agglomerations of scattered constructions, which are greatly underestimated in urbanisation data.

The need to include fallow land in urbanisation measures

Our local surveys lead us to believe that measuring urbanisation solely in terms of the expansion of built-up areas significantly underestimates its effects on land use. This report highlights the importance of fallow or wasteland – parcels that have been taken out of agricultural or pastoral areas and even forests or natural wetlands, but which are not immediately used for construction and thereby artificialised. A considerable amount of land is hoarded in expectation that its value will increase as demand rises when a new town is built nearby (even in unlikely landlocked areas far from existing urban centres). This expectation stimulates land transactions while the lots remain undeveloped.

More work needs to be done on this, by identifying researchers on rural areas and agrarian systems who can spot subtle signs that agricultural land may be about to be left fallow (declining investment in inputs, scarce water resources, etc.). In short, the morphological approaches and databases developed to measure urbanisation around the world do not capture many of the land conversion processes that ultimately end in urban use. These databases rely solely on detecting buildings, but it should be possible to use cartographic inventories of unused land to better anticipate future urban developments.

Our case studies show that we can identify a range of areas that have been taken out of agricultural use and natural environments and are contributing to irremediable land fragmentation through urban sprawl. This can be done by manually processing aerial and satellite images of new access roads, divisions into micro-lots, the installation of basic services and fencing, land and subsoil extraction and processing sites, workshops, and more subtle markers of private subdivisions of unoccupied land. However, this approach needs to be systematised with remote sensing experts.

Fallow land may be an indicator of abandoned farmland or land purchases awaiting short- or long-term conversion. The former owner may sometimes continue to farm the plot, and the purchaser may temporarily upgrade it by converting it to orchards, etc., and rent it out while waiting for a significant rise in land prices. Infilling irrigation channels or reservoirs and removing fertile topsoils for brickworks renders the land irreversibly fallow.

In many cases, public statistics barely capture land that is left fallow, divided into microplots and put on the market, as its use is not reclassified. It may stay classified as agricultural land because subdivision for building purposes is not permitted, although the changes may be noted in agricultural land censuses. In the Indian case study, these subdivisions are (partly) counted as long fallow land (see Box 4 below) – a rapidly growing category that now makes up 3.7% of the Indian ecumene. Cultivated land occupies 45.3% of the ecumene, and has done so for the past 50 years as a significant proportion of common grazing land is cultivated. India has only been able to increase its agricultural production through more intensive cultivation and by extending its irrigated areas (before 2010). Almost all agricultural land is harvested more than once a year.

Box 3

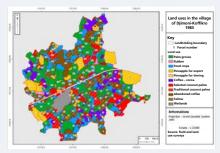
PROCESSED SATELLITE IMAGES OF MICRO-LOT DIVISIONS BETWEEN
2010 AND 2020 FOR THE CASE STUDIES IN KENYA (BON, THIS REPORT),
INDIA (DENIS, THIS REPORT) AND CÔTE D'IVOIRE (COLIN AND POTTIER,
THIS REPORT)



Kitengela, Kenya, 2010



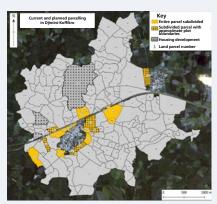
Kitengela, Kenya 2020



Djimoni-Koffikro, Côte d'Ivoire, 1983



Bahour, India, 2003, 2011 and 2016



Djimoni-Koffikro, Côte d'Ivoire, 2021

Box 4

EXAMPLES FROM INDIA OF COUNTING FALLOW LAND OTHER THAN CURRENT FALLOW

These data are from the Ministry of Agriculture's Land Use Information Statistics System, which provides some information on set-aside. They show a significant increase in the amount of land set aside for long periods. These statistics should be compared with field work findings.

Example 1 – Case study of Bahour, a village on the outskirts of Pondicherry city in South India (Denis, this report)

The data are for Pondicherry district.

- 2010-2011: 21,023 ha arable land / 11,951 ha non-agricultural uses / 1,236 ha long fallow land
- 2014-2015: 18,549 ha arable land / 12,165 ha non-agricultural uses / 1,432 ha long fallow land
- 2018-2019: 19,301 ha arable land / 12,466 ha non-agricultural uses / 1,880 ha long fallow land

Example 2 - Case of Panipat district in Haryana state

Panipat is a fast-growing city in the Capital Region, 70 km from Delhi. It is the terminus of one of the regional metro corridors being built to connect Delhi with cities in the Capital Region.

The data are for Panipat district.

- 2010-2011: 190,747 ha cultivated land / 17,402 ha non-agricultural uses / 157 ha long fallow land
- 2014-2015: 162,108 ha arable land / 18,749 ha non-agricultural uses / 388 ha long fallow land
- 2018-2019: 184,619 cultivated land / data not available / 619 ha long fallow land

PART 2

Upstream conversion processes: land sales and decisions to change rural land uses

and use conversions linked to urbanisation are the result of multiple processes generated by different logics and actors. We used a three-stage approach to chart these practices (sales, purchases, changes of use) and develop a typology of conversion processes.

The most common changes in land use connected with urbanisation involve monetised transfers of land rights. The commodification of land (transition from inalienable status where land is transferred outside the market through inheritance, loans, etc. to transfers through market transactions) may predate urbanisation and involve transfers of rights to land that will be used for agriculture, but it is often associated with urbanisation because urban demand leads to commodification. Changes in land use are therefore linked to urban and rural land markets, land speculation, and the use of plots as cash reserves. These are not new themes; they are documented in rural anthropological and socioeconomic literature, and studies such as those compiled by Le Roy and Le Bris (1986) revealing the 'disputed' nature of local spaces and speculative local land practices in Abidjan, Mexico and Ouahigouya (Burkina Faso). Every layer of society is affected as land commodification and marginal speculative practices continue to gain momentum under the combined influence of urban demographic pressure, macroeconomic changes caused by globalisation and financialisation, social changes triggered by the education of rural and urban youngsters, and local economic changes (Bertrand, 2021). The rise of the middle classes stimulates these practices in many countries. Customary land tenure systems in Africa continue to be reinvented, particularly in rapidly changing areas, according to hybrid logics based on the socio-economic needs of family or lineage groups and whatever room for manoeuvre is left by the systems that regulate land tenure. Finally, these changes in land use affect large tracts of land, sometimes take subtle forms, and may extend well beyond urban areas. They also occur long before new urban developments materialise. In order to understand them, we need to take a broader view than that afforded by a dualistic vision of urban development and land production facilitated by official and unofficial channels and formal and informal investments.

The focus here is on **ordinary land conversions organised by local actors (residents, local land rights holders, local actors involved in property development and land acquisitions)**. This often happens through incremental land production, which we believe is a very important

but under-documented topic, especially when compared with the scientific output on largescale projects, free trade zones, new towns, expropriations to create special economic zones and infrastructures, and land grabbing by transnational actors. Indeed, land conversions by ordinary local actors account for a considerable number of changes in land use whose spatial and financial scales have yet to be measured. Looking at our case studies, these ordinary land conversions appear to be just as significant as the changes brought about by major projects.

Our approach therefore considers the diverse practices, actors and dynamics at work in these processes. In analytical terms, it reveals a continuum in these actors (with no automatic distinction between different categories of actor), and strong competition between them for access to land and control of the conversion process and the income it generates. The multiple actors involved may also simultaneously or successively follow contrasting practices (such as maintaining an agricultural activity and selling some of their land). This complex, shifting continuum is shaped by territorial dynamics (demographic pressure, development projects), socio-economic and legal changes (evolving local land tenure norms, climatic pressures on agriculture and fragile areas), and sometimes by social or individual trajectories that are particularly rapid in the global South (the emergence of middle classes, actors' hopes and dreams).

Diverse types of rural land and actors

This section considers the upstream processes of conversion, their spatial dimensions, the actors involved and their motivations. Who drives or paves the way for changes in land use and land sales? Why do they do this, what are their motivations? What types of territories are involved, and what are the timeframes for these changes?

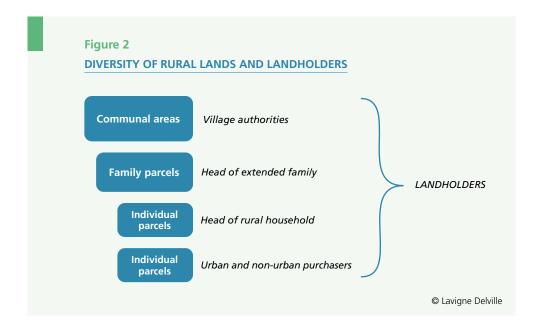
Conversion processes involve different types of rural land. It may or may not be cultivated, and its soil type and fertility will differ according to the natural environment and the intensity of demographic and urban pressure in the region. Its agronomic and economic value will also vary: some land will have been developed, while other land will support villages, fallow land, pastures and agricultural crops. In some territories (West Africa, Jordan, India), massive new urban developments have materialised on customary and even sacred land (Adegbinni, 2018).

Finally, this land is controlled at various levels according to local modes of land appropriation: individual, family (at the level of more or less extended domestic groups) and collective (see Figure 2 below). Some land may have already been transferred to external actors for agricultural production (irrigated plots, orchards, market gardens, etc.) or for speculative purposes. Rural landholders may therefore be village authorities, family representatives, or individuals (rural or urban and/or originating from but not living in the villages concerned).

Land sales and changes of use reflect spatial logics that cannot all be ascribed to the effects of advancing urban fronts.

Our case studies cover different situations, from neighbourhoods in rapidly changing metropolitan areas (Benin) to places far removed from urban centres (Côte d'Ivoire and India). Access to urban centres is also a key factor driving developments along major roads and around infrastructures.

Land conversions in some of the territories studied are linked to urban development plans and macroeconomic development strategies. Areas that are designated as development hubs may be relatively far from urban centres, such as the Diamniadio urban hub in the



Dakar region of Senegal, which is connected to the centre of Dakar by major infrastructures (a motorway and regional express train).

Major public projects stimulate speculative buying around the project site, often prompted by expectations of 'good deals' to be made (Bertrand and Bon, 2022) and privileged information about new or reactivated State projects or public-private partnerships. For example, there has been intense land speculation in the Glo-Djigbe area north of the Cotonou conurbation, which was designated as the site for the international airport over 10 years ago (Magnon, 2013).

Pressure on land may also build far away in the hinterland, gradually triggering subtle changes well before the urban front advances. This pressure is driven, as in India, by a "shared belief in (...) the imminent advent of an urban transition and the possibility of emancipation from local allegiances (castes, extended families, clans...)" (Denis, 2016). In the next section we identify the logics or triggers of changes in land use.

Long-term changes in rural societies and land tenure practices

Although changes in land use seem to be happening very quickly and to have accelerated in recent years, they are nevertheless linked to long-term processes of structural change in rural societies. These processes affect local legal norms, the commodification of land, the conditions for local economic activities, and the prospects open to rural youth.

Firstly, local legal norms in rural areas are affected by the huge upheavals caused by demographic growth, market integration, religious conversions, and young people's desire for greater autonomy. To varying degrees, these are leading to the reconfiguration of domestic units, particularly the fragmentation of large family units (where they existed) and the emergence of the household (possibly polygamous) as an economic unit (Quesnel and Vimard, 1996; Raynaut

and Lavigne Delville, 1997) that can still operate while the family landholding continues to be managed by the extended family group. The rules of inheritance are also changing, leading to the division of family holdings rather than transfers of undivided estates, and thereby facilitating the individualisation of land rights. In certain regions women are gradually being allowed to inherit some land (under Muslim law, women inherit a half-share).

These processes of individualisation may go hand in hand with the commodification of land, and may be longstanding or new, depending on the rural society concerned. They are driven by many factors, such as integration into market chains, distress sales, conversion strategies, adjustments related to the fragmentation of inheritances, offers from external actors, etc.⁸

As rights are individualised and land is commodified, bundles of rights (with separate administration and use rights) tend to shrink and become similar to property rights. Holders of land rights start to behave like landowners, and holders of agricultural use rights sidestep the regulations, as in the camps that have been set up in Lebanon on land currently zoned for agricultural use. These changes in legal norms are also the result of decades of land reforms favouring private ownership. In Kenya, for example, the land tenure regime governing Maasai land has gradually shifted towards private ownership, initially communal and then individual. These reforms are driving transactions today.

Some countries still have multiple land ownership regimes. Mexico has three coexisting regimes of public, private and social (*ejidos* and *communidades*) ownership. When the 'certification' of individual rights was introduced in 1992, it became possible to privatise *ejidos*, and property developers used this opportunity and social housing reforms to establish large land reserves on the outskirts of Mexican cities, at very low cost. Nevertheless, privatisation remains a slow process in Mexico, and most property development takes place on private land (Valette, 2020; Geneste *et al.*, 2022).

Box 5

LAND REFORMS AND SALES OF PASTORAL LAND IN JORDAN

Most commercial practices around land sales in Jordan (Ababsa, see this report) flow from the 1953 land reform (conversion law), which opened up the possibility for tribal leaders who only held use rights to register pastoral land (miri) as private property (mulk).

Most urban expansion has occurred on land that is classified as *miri* – State-owned pastoral land on which tribes were granted rights of use. Actors who only held use rights to this land have sold large tracts of it, signing contracts (*hujja*) with buyers in front of two witnesses. Although they are unofficial, these land rights are recognised by the public authorities when disputes arise during land regularisation or re-housing programmes.

These sales practices are further encouraged by the new Land Ownership Act of 2019, which cancelled all use rights to pastoral land *(miri)* and converted them to full ownership rights.

^{8.} For sub-Saharan Africa, see Colin (2017).

The development of land markets9 in certain rural areas is linked to these changes in legal norms, but does not necessarily happen in tandem with the legalisation of land rights. Land markets sometimes develop quickly, and the actors who are supposed to be the quarantors of inalienable rights to customary land holdings, community land (Jordan, Côte d'Ivoire) or even sacred land (Benin) may ignore their inalienability or find a way round it when they are first sold. A recent study on rural land markets in West Africa (Colin, 2017; Lavigne Delville et al., 2017) found that demographic pressure, changes in agricultural techniques, the monetarisation of rural economies, and the increased economic value of land with the transition from subsistence farming to market-oriented farming were driving a shift towards market transactions. Changes in local land tenure regulations in regions such as West Africa are influenced by generational change and villagers returning from urban or international contexts where land has already been commodified (Colin, 2017). But this kind of change is not mechanical. Colin and Lavigne Delville et al. (2017) emphasise its progressive nature: non-market transfers of land rights can subtly evolve into market transfers, for example, when token recognition of land rights becomes dues that are paid first in kind and then money, or when prices that were initially symbolic become based on the amount of land involved or anticipated profits. Similarly, legalisation is not necessarily the trigger for commodification – it sometimes comes at the end of the process. However, this commodification varies from region to region, even within West Africa, and land tenure arrangements within family farms may stay outside the market, even in densely populated areas. This is when urbanisation becomes a driver of commodification.

The individualisation and commodification of land and rights in areas under urban influence are reinforced by the opportunities offered by urban buyers, the influence of urban lifestyles, and the emergence of an aspirational middle class in certain regions. The marginalisation of agriculture and people's fear of losing their land to State or private projects also add to these dynamics. In West Africa, these shifts do not necessarily go hand in hand with complete individualisation, in which case sales are managed at the level of lineage segments that take account of how they will affect the distribution of family land between households (Magnon, 2013; Diongue, 2020). But financial opportunities also give rise to opportunistic sales by young people who normally do not have the right to sell, by holders of use rights that have been consolidated over time, and even by actors with no land rights at all, who swindle buyers and landholders. A comprehensive, process-based reading of the situation is needed (Colin *et al.*, 2022; Colin and Bouquet, 2022).

Agriculture has become a less appealing livelihood almost everywhere due to its dwindling productivity, profitability and predictability. This noticeable decline is driven by two major factors: the fragmentation of land through inheritance, which makes small farms unviable; and the liberalisation of agricultural sectors, which pits local farmers against more productive or subsidised agriculture (Mazoyer, 2001). Another factor is climate change, and its effects on access to water (as in Benin and India, for example).

^{9. &}quot;Land markets are sets of market transfers of rights over land. A market transfer (or market transaction) occurs when there is a transfer of ownership or use rights from a transferor to a transferee in return for due consideration established according to a system of equivalence: the price. The concept of price does not necessarily entail the use of money: access to land that is exchanged for a share of the output, or even for labour, can be described as a market exchange. The transfer may involve different rights, such as rights of appropriation or use, and therefore does not necessarily involve all the rights on the plot" (Colin, 2017 p.6 d'après Colin, 2004).

On another level, the emergence of camps on agricultural land in different parts of Lebanon can be directly ascribed to geopolitical tensions in the Middle East; which are also a direct explanatory factor for large-scale camps in Kenya, Thailand, Sudan and other parts of the world (Agier, 2014).

Finally, **younger generations in rural areas** are better educated but have less land than their elders, particularly in sub-Saharan Africa. As a result, they are developing new survival strategies. Social and economic relations between cities and the countryside are intensifying around land investments as rural people buy plots of urban land, and local people who have succeeded in the city invest in agricultural land, palm groves or livestock (Rangé, 2019). New land claims and individualised social protections are emerging and being put to the State by social advocates and village activists (Bertrand, 2021) – as seen in case study on Diamniadio in the Dakar region (Lavigne Delville and Sow, in this report).

The logics behind rural landholders' actions

Rural landholders are the first to be affected by the changes described above. Landholders, customary owners, and holders of agricultural or pastoral use rights are being evicted from their land or participating in land sales and land use conversions.

The fact that these actors do not have legally recognised rights weakens their position in the urbanisation process. They are at risk of eviction – either by the State, which regards itself as the legal landowner and evicts them before subdividing the land, with or without compensation; or by developers who have obtained land titles from the State. But the image of rural actors as powerless victims of urbanisation is not entirely accurate, since a lack of legal status does not necessarily equate to insecure tenure. Furthermore, rural landholders may be active participants in the land market regardless of whether they have legal documents to their land, either selling agricultural land or parcelling and subdividing their land themselves in order to sell it as housing lots.

Therefore, rural actors are not passive in these processes; they participate in them to very varying degrees and for very varied reasons. The decision to convert and possibly sell land is driven by 'offensive' and/or 'defensive' rationales (Yung and Bosc, 1999). On the 'defensive' side are distress sales, sales to protect the vendor from likely dispossession, and sales of plots that have become too small to be shared between heirs; on the 'offensive' side are sales that will enable the vendor to reinvest in remunerative activities. The impacts of selling agricultural plots depend on the size of the available land holdings, the size of the family, the conditions of the sale (favourable or unfavourable) and opportunities for profitable reinvestment. Families who divide their land themselves in order to sell it generally keep most of the income from the conversion, while those whose land is expropriated receive compensation, which is often derisory.

This section attempts to identify the wide range of rationales at work at the individual and territorial level, which may be combined, superimposed or successive. We start by emphasising the fact that agriculture does not totally disappear in these processes, and then discuss the multiple forms of engagement in sales, highlighting the ambiguous nature of consent within these transactions.

Continuity and change in agricultural land uses

The picture that emerges from our studies is more complex than one of land uses simply changing from agriculture to other purposes. It shows that farmers often adjust their activities in nuanced responses to territorial change and markets for agricultural produce.

Urban and peri-urban agriculture is a major activity in the global South. Its scale has been recognised by international organisations since the 1990s, and in 2010 the FAO calculated that it produces 15% of the world's food (FAO, 2010). It is so important for food production that it not only continues despite urban sprawl on peripheral agricultural land, but may even be expanding in some places (Aubry, 2013). Hamilton (2014) estimates that 266 million households are involved in urban agricultural production in the global South, and the FAO estimated that 40% of urban households in sub-Saharan Africa were engaged in urban agriculture (FAO, 2012). Although these reports use different definitions of urban agriculture, they all note much higher rates of combined agricultural and urban land uses in the global South than in Northern countries. Rather than disappearing completely, agricultural activities in city centres and the outskirts of urban areas are being transformed.

The spatial and functional relations between cities and agricultural areas in both the South and the North increasingly operate around a complex 'agri-urban system', with belts of agriculture and market gardens around cities being replaced by mosaics of intermingled uses (Poulot, 2014; Aubry, 2013; Ba and Aubry, 2011).

It is important to note that changes in land ownership or status do not necessarily lead to immediate changes in land use. This is illustrated by the case study on Djimini-Koffikro, 80 km from Abidjan in Côte d'Ivoire (Colin and Pottier, this report), where customary landowners often subdivide their land and continue to cultivate it. Parcel boundaries shift and individual fragmentation increases, but there is no immediate change in the use of the land.

More intensive peri-urban production

Advancing urban fronts may also lead to the intensification of certain types of agricultural production, particularly market gardening, which is linked with demand from new urban markets.

Urbanisation does not always trigger a wholesale or immediate discontinuation of agricultural land uses. This is sometimes due to policies to support the agricultural sector. For example, research by GRET in Myanmar (Boutry et al., 2016) found that although speculators mainly target rice fields, there were few changes in land use before 2015 due to government policies to support rice-growing areas. This is also the case on the outskirts of Nairobi, where market gardens continue to serve the urban market, large horticultural estates still produce for export, and cash crops (coffee, tea, pineapple) are still grown thanks to subsidies from certain counties. Investors and speculators in these territories tend to target non-irrigated land used for agropastoral activities. There are numerous publications on these adjustments and reconfigurations of food production in various African contexts (Kuusaana and Eledi, 2015; Thornton, 2008).

Continued interstitial and specialised urban agriculture

Rather than disappearing from agglomerations, agriculture may be transformed and adapted as certain types of production are intensified, individual farms are relocated, and particular plots are secured and then surrounded by built-up land. Empirical research conducted in Bobo Dioulasso, Saint-Louis, Manila (Robineau *et al.*, 2014) and Antananarivo (Defrise *et al.*, 2019) identified various examples of this (see Box 6).

Agricultural food production in confined areas focuses on items that are in demand in urban markets. For example, Antananarivo-ville produces 95% to 100% of the watercress consumed in the city, despite concerns about its safety (Aubry, 2013).

Box 6

EMERGENT AND RESILIENT URBAN AND PERI-URBAN AGRICULTURE IN TOGO, VIETNAM, BURKINA FASO AND MADAGASCAR

Pulliat (2017) shows that while pressure from urbanisation in Thailand and Vietnam is changing agricultural practices in peri-urban areas of Bangkok and Hanoi, it has not – yet – significantly changed how land is used. Surrounding areas (hinterland) are being integrated into urban systems rather than being replaced by them. The urban market and demand from Bangkok's emerging middle class is stimulating diversification into high value-added foodstuffs (fruit, poultry, pork, dairy products) and the development of production chains and labels that meet high health, safety and quality criteria, while urban and peri-urban agriculture is expanding despite the intense pressure on land. In Hanoi, it is taking hold in unbuilt areas on the outskirts of the city and pieces of agricultural land that have been expropriated but have yet to be urbanised (such as An Khanh). Campaigners have also helped establish pockets of quality urban agriculture in green and vacant city spaces.

Robineau's (2013) surveys show that urban farmers in Bobo Dioulasso keep going through a combination of mobility (growing produce in several places, using market garden plots and their own fields to support and feed the family) and informal arrangements with institutional actors and input suppliers that enable them to access the resources they need to farm and maintain certain productive spaces. Livestock are also being raised to meet new urban demand, but this activity usually goes under the radar.

Defrise et al. (2019) show that the amount of cultivated land in Antananarivo city centre is dwindling, but at a slower rate than is generally estimated. Watercress is still grown on low-lying spots in built-up areas, with several crops produced each year. Although land prices might be expected to trigger a rapid decline in agricultural land use in these densely populated areas, where demand for building land is high, agricultural activities mainly continue due the local topography – land is hard to access, regularly flooded and difficult to backfill. The fact that it is held in joint ownership also contributes to its continued agricultural use, as renting land to cress producers enables landowners to signal that it is occupied, generate a limited but regular income, and avoid disputes over possible sales.

Hybrid strategies combining agriculture, land sales, and/or land and property development

Some farmers use hybrid strategies to respond to the varying profitability of their land and local constraints and opportunities. These strategies may involve selling some plots and cultivating others more intensively.

Studies in Togo (Bawa, 2017) show that market gardening and coconut production have intensified due to urban demand and unprofitable plantations being subdivided or sold. The fact that people in Benin and Togo are selling plots in order to buy more land further afield and invest in agricultural equipment, irrigation, inputs or plant protection products suggests that the costlier cultivation techniques required to meet urban demand can trigger land sales to finance investments.

Multiple types of rural land sales: distress sales, potential and official dispossessions, trade in plots

The most common trigger for sales in areas where customary land is being commodified is financial constraints and the need to pay for day-to-day expenses, education, healthcare, emergencies or family events such as funerals and weddings. Emergency and distress sales have been documented since the 1980s and 1990s in West Africa (Colin, 2017), and are becoming more widespread in Kenya, Tanzania and Benin as land sales become commonplace and land prices rise in the outskirts of metropolitan areas.

Lavigne Delville and Sow (this report) and Dato (2020) note that in contexts of legal pluralism and State takeovers of land for major projects, rural landholders may feel at risk of losing their land or having it expropriated for public use with minimal compensation. Intra-



FORMS OF URBANISATION AND AGRICULTURAL LAND IN AFRICA IDENTIFIED BY THE AFRICAPOLIS 2020 REPORT

The latest OECD/SWAC (2020) report on the dynamics of African urbanisation found that urban growth does not always reduce the amount of land available for agriculture. It may be accompanied by an increase in agricultural land, as in Egypt and Sudan, which are introducing new irrigation techniques in desert areas and conserving irrigated agricultural land as built-up areas develop in desert zones. In the Sahel, production on family farms is increasing as agglomerations expand.

Maps of urban growth in Rwanda show that some land control and preservation measures are being taken – buildings are concentrated on the ridges of interfluves that mark the dividing line between two watersheds, with the upper slopes reserved for food crops, the lower slopes for cash crops, and valleys used for irrigated crops.

The al-Rahâd irrigation programme in Sudan is an example of controlled urban growth in irrigated areas. Buildings are clustered in very dense built-up zones, generating spontaneous agglomerations, but irrigated land is kept for agriculture.



Owner of agricultural land near the new city of Diamniadio, Dakar, Senegal, 2019 © Sow

family land conflicts can also lead to insecurity. Field surveys in Benin (Adegbinni, 2015) and Madagascar (Defrise *et al.*, 2019) show that some people sell land soon after inheriting it because they are afraid that other family members will claim it. This can happen to women who inherit land without full family consensus.

Resistance to rural land conversions and sales tends to be low in times of agricultural crisis. In Bahour, India (Denis, this report), problems accessing water and labour and inputs cost are driving farmers to part with land in an area that was once considered the local breadbasket, and to sell rice fields that used to yield three harvests a year.

Some rural actors actively 'trade plots' (an expression borrowed from Benin) in order to make money on the side, buying and reselling holdings or plots as land prices rise on urban fringes. Farmers, customary owners and heirs may also trade plots (Benin), try their hand at property development (India) or act as intermediaries (Côte d'Ivoire) (see below).

Box 8

CONSENT, RESISTANCE AND A SENSE OF INJUSTICE - A REVIEW OF THE ACADEMIC LITERATURE

The question of whether former occupants consent to changes in land use is an important issue, and a critical one when the relationship between old and new land users is constrained or asymmetric. The academic literature shows that the answer is complex and highly dependent on the context. In many settings the users concerned are modest rural actors or urban fringe dwellers with little economic or

political power, and little or no influence over large State or property development projects. Their semi-formal land status is easily revoked, and possible compensation in cash or kind likely to be limited. So how should we interpret their active involvement in land sales?

On the one hand, it is clear that resistance to these conversions has not been very successful. The farmer and citizen movements that do exist in Benin are not very vocal (Simonneau, this report), and protests by villagers and farmers in the Diamniadio region in Senegal have at best only slowed down construction work, despite smallholders' efforts to reinforce fences, make their presence felt, form interest and pressure groups, get their unions behind them, and demand fair compensation that takes account of all the crops and investments they have made in the land (wells, etc.).

On the other hand, several authors stress the need to examine the conditions in which agricultural activities are undertaken in order to understand what makes people willing to sell (Vijayabaskar, 2020). Denis reports that a national survey conducted in India in 2013 indicated that 40% of farmers would leave the sector if other opportunities were available, because intensive agriculture and short crop rotations have depleted soils and water tables. Small farms may become an economic burden as unpredictable monsoons caused by climate change lead to uncertain yields, farmers take on heavy debts to buy inputs, and selling prices are volatile. Vijayabaskar and Menon (2018) talk of 'dispossession by neglect', citing underinvestment in agriculture and the neglect or even destruction of natural capital in the name of 'development' as key factors in land conversions that push farmers to part with their assets or actively participate in land and property deals.

Adegbinni's surveys in Benin show that younger generations are losing interest in agriculture due to growing uncertainties in the sector, particularly poor climatic predictability and inconsistent production. This raises the question of whether landholders freely consent to sales that are made in a context of agrarian distress.

Another factor is people's fear of being dispossessed because their land rights are insecure. The case study from Côte d'Ivoire clearly shows how developers play on this fear and exploit concerns about negligible compensation to convince villagers to sell their land 'before it's too late' (Colin and Pottier, this report).

There is a similar ambiguity in the debates around use of the term 'gentrification' to describe large residential projects in Hanoi. Potter and Labbé stress that the communities affected by these projects do not always feel a sense of injustice. They show that people are rarely displaced by them (housing is generally preserved) and above all, that such projects are seen as providing opportunities in emerging economies, where these economic and urban transitions are embraced, and their effects often regarded as inclusive (Potter and Labbé, 2021).

Another key issue is the 'manufacture of consent', which should be understood in terms of the economic and environmental conditions needed to stay put, the political conditions of contestation, and the overall costs of losing a land asset in contexts where land ownership is not just an economic asset, but also a link to a community

State urban development programmes and metropolitan planning as major drivers of change

The State and public authorities stimulate change at other levels when they make public land reserves available for sectoral policies (housing, industry, transport), use their land prerogatives to privatise land, and recover land by terminating semi-formal rights, making declarations of public utility and evicting occupants.

Land conversions are also driven by large-scale social or 'affordable' housing programmes implemented as public initiatives or through public-private partnerships (Bredenoord *et al.*, 2014; de Bercegol *et al.*, 2021; Gonçalves, 2016; Geneste *et al.*, 2022), see Box 9. These programmes are often accompanied by public policies to reform the conditions for land access and introduce specific financial arrangements for housing production (see cases in India, Mexico, Kenya and Jordan mentioned in this report). Before property development was liberalised, housing developments in West Africa were mainly initiated by the public authorities and implemented by public or mixed economy companies. Nowadays, private development is on the increase.

The case studies from Kenya and Benin show the direct and peripheral changes brought about by **infrastructure programmes**, **decisions to create special economic zones**, **and planning documents** designating development zones – which push up land prices and herald or accompany the arrival of new urbanisation fronts. Former land users/owners then feel pressured to sell up or accommodate other land uses in order to take advantage of rising land prices or avoid the risk of losing land to public requisition orders.

The case study on the village of Djimini-Koffikro (Colin, this report) shows how planning documents can affect local expectations and land conversion dynamics. When the Greater Abidjan master plan was approved in 2016, the location of its boundary 15 kilometres from the village led local people to expect that Djimini-Koffikro "would become the suburbs of Abidjan." This inflated land prices, which have increased twentyfold in 20 years. ¹⁰ Some landowners are subdividing their land in anticipation of changes in land use, surveyors are busy prospecting, and opportunistic economic actors are using the announcement of forthcoming urbanisation to encourage landowners to sell to them. As one opponent of the 'DK Ville nouvelle' project (which a law firm helped the village chief and a private company set up in 2019) observed, "They are trying to scare people into selling to the first person who makes an offer."

In 2007, the central government in India put the estimated housing deficit at 24.7 million dwellings, mostly for low-income households. National and regional state policy programmes were introduced to encourage the private sector to develop the rental and ownership market for so-called affordable housing, and thereby extend the supply of housing and the prospects of home ownership to a wider proportion of society. These schemes allow established property developers and landowners to construct housing on former agricultural land. In some states, first-time buyers have been able to obtain government-backed loans from commercial banks since 2013.

^{10.} Nowadays a 500m² lot will sell for 1 million FCFA (1,500 euros), compared with 50,000 FCFA (75 euros) in the early 2000s.

Box 9

NEW HOUSING PRODUCTION TOOLS ARE DRIVING CHANGES IN LAND USE

So-called 'affordable housing' programmes are accelerating changes in land use in Africa, Latin America and Asia, particularly in countries with emerging economies. These programmes are all intended to meet significant housing needs in contexts where public investment capacity is low, and a nascent middle class with stable incomes is emerging from a relatively precarious population.

These programmes are supported by two sets of tools. The first are mechanisms to facilitate the conversion of agricultural or common land for developers, who are then expected to produce a certain amount of so-called affordable housing in return for facilitated access to land. The second are reforms of the bank financing system to enable low-income households to access mortgages, mainly through State-guaranteed credit. The combination of these two tools facilitates high-volume construction by freeing up land on the one hand, and on the other circulating financial capital from banks to households and from households to developers.

This system does generate huge amounts of housing, but has been criticised for the cheap construction methods used to minimise production costs, the quality of the buildings, the frequent lack of services and facilities (which local governments are supposed to provide), and the fact that housing is still unaffordable for many in the poorest sectors of society (Ababsa, 2020; Bredenoord *et al.*, 2014; de Bercegol *et al.*, 2021; Geneste *et al.*, 2022; Gonçalves, 2016).



Construction on former agricultural land on the outskirts of Delhi, India, 2020 © Bon

Kenya also moved in this direction in 2017, with the announcement of a national social housing programme, a broader reform of household credit, and national and county governments facilitating access to land and changes in land use for investors.

In Mexico, reforms introduced in 1992 in the context of agricultural decline boosted purchases of cheap peripheral agricultural land (Salazar Cruz, 2011) and paved the way for the possible privatisation of lands previously held under the ejido regime, which rendered them unsaleable and indivisible. The 1992 reform also allows members of communities whose land is being privatised to set up commercial land corporations, although developers tend to prefer former public or private agricultural holdings that have already been purchased and subdivided. This is due to longer administrative procedures for plans to develop communal agricultural land, and restrictions on the size of plots that can be developed on collective lands that are being privatised (Ribardière and Valette, 2019). Nevertheless, one of Latin America's largest housing developments, Los Heroes in Tecámac, was built on former communal land that was decommissioned and developed by private investors. These land conversions can be ascribed to a combination of land policies, housebuilding and access to mortgage credit.

In several countries in the global South, **increasingly ambitious new cities and multifunctional new urban developments** are leading to the conversion of massive tracts of agricultural land, fragile coastal zones and other natural areas (Esposito, 2020; Van Noorloos and Kloosterboer, 2018; Watson, 2013). The creation of 'new urban areas'¹¹ in South Asia has seen an upsurge in this type of land conversion in Vietnam, Cambodia and India (Musil *et al.*, 2020; Shatkin, 2017; Vijayabaskar and Menon, 2016), in major projects facilitated by land-based financing mechanisms and transfers of land rights to groups of companies, often in joint ventures that include foreign interests. Many African countries have showcase projects that include high-end housing, business districts, shopping or leisure centres and technology parks, such as the new towns of Diamniadio in Senegal (Diop and Timera, 2018), Eko Atlantic City in Lagos (Acey, 2018; Mendelsoh, 2018), the Route des Pêches tourist complex and Sèmè



Examples of housing developments on the outskirts of Mexico City, 2019 © Valette

City innovation centre in Benin (Choplin, 2020), and Konza City technology park in Kenya (Van Noorloos *et al.*, 2019).

The infrastructures surrounding these new developments are a big pull factor for investors. Special economic zones also tend to have spillover effects on neighbouring areas, increasing land prices and land speculation (as in Madagascar and Senegal; see the CTFD study on SEZs¹²), and creating an undeniable 'road effect' in contexts where most people and goods rely on road transport to move around.

A striking example of this is Kiambu County in Kenya, where several major road infrastructure projects are under way, including the Nairobi to Thika highway (Bon, in this report). According to Kinuthia (2020) quoted by Bon, land divisions increased by over 600% following the announcement of the Eastern bypass project in 2007.

Box 10

CONTESTED STATE TAKEOVER OF LAND IN DIAMNIADIO, SENEGAL

In the mid-2010s the Senegalese government launched an ambitious urban development policy aimed at decongesting the Dakar region and turning it into an international metropolis by creating urban centres on the outskirts of the Dakar-Mbour-Thiès triangle. The centrepiece of this initiative is a new town in the municipality of Diamniadio, 35km from central Dakar, which will contain a mixture of administrative infrastructures, sports facilities, residential areas that will eventually accommodate 350,000 inhabitants, industrial zones, and modern international-level facilities. It is being constructed as a series of successive projects on a 1,500 - 2,000 hectare site registered in the name of the State. The 'Diamniadio Urban Pole' (PUD) was created by decree in 2013 and is managed by the General Delegation for the Promotion of the Diamniadio and Pink Lake Urban Poles (DGPU), which is directly attached to the Presidency of the Republic. This government body acts as the land agency that oversees land control and transfers of land titles to private developers in the hubs, and is also responsible for planning and developing infrastructures and primary public facilities (schools, health, security, etc.) ahead of private developments. The area affected by the Pole is registered as being outside the national domain, and therefore outside the territory of the communes concerned.

The exact delimitation and surface area of the Pole have been much debated, and have yet to be settled. The decree creating the Pole indicates that it will cover 1,664 ha of land, most of which lies in the municipality of Diamniadio, while the map on Google Earth shows an area of 1,995 ha. This uncertainty seems to stem from the decree specifying the management rules for poles, which states that the perimeters of urban poles include "the land covered by the decree declaring it to be in the public interest and the adjoining land deemed necessary for its judicious extension."

It is also worth noting that the Pole is being built on land that had been appropriated by various villages and used for rain-fed agriculture, irrigated market gardens, orchards, poultry farms and housing. Many farmers whose rights to use this land were suddenly called into question and whose land was expropriated refused to vacate their plots, but their individual and collective actions seems to have had little impact on the development.

^{12. &}lt;a href="https://www.foncier-developpement.fr/publication/special-economic-zones-and-land-tenure-global-trends-and-local-impacts-in-senegal-and-madagascar/">https://www.foncier-developpement.fr/publication/special-economic-zones-and-land-tenure-global-trends-and-local-impacts-in-senegal-and-madagascar/

Rather than rolling out gradually around agglomerations, changes in land use connected to these large State programmes tend to cluster in areas designated as development hubs, which are sometimes quite far from urban centres. This is the case with the Diamniadio Urban Pole mentioned in Box 10, which lies 35km from Dakar and is linked to the city centre by major infrastructures (a motorway and regional express train service). Major public projects stimulate land investment and speculation in the surrounding area by economic actors hoping to pull off 'good deals' (Bon in this report, see below), often based on privileged information about new or reactivated State projects or public-private partnerships. An example of this is the Glo-Djigbe area north of the Cotonou agglomeration, which was designated as the site for the international airport over 10 years ago (Magnon, 2013). Land pressures sometimes start to emerge far away in the hinterland, setting off subtle invisible changes well ahead of the urban front, in anticipation of future projects or even the publication of planning documents.

Local urban development schemes stimulate land conversions in different ways

At the local level, parcelling communal or village land paves the way for or triggers conversions.

Parcelling is the division of land into lots in accordance with an official development plan that provides for future roads and public spaces. In clarifying the boundaries and often the owners of plots, parcelling contributes to a process whereby land becomes a good to be traded on the market. Although it takes different forms in different countries (in terms of the procedures and actors involved, and especially the place of customary rights holders), parcelling always generates revenues for the local municipality and opportunities for nepotistic practice. Plots are regularly redistributed among political patrons, accumulated by certain elected officials, and used to pay surveyors and other parcelling professionals (as in Mali, Senegal and various other countries). The 'scramble to subdivide' in many West African municipalities has been identified as one of the consequences of decentralisation reforms that failed to provide local authorities with sufficient financial resources or effective systems for raising local taxes (Bertrand, 2021; Dorier-Apprill, 2005). Compliance with urban planning standards varies, and spaces normally intended for communal services, green spaces and sports fields are frequently taken over or allocated for other uses.

Landowners looking to cash in on urbanisation may 'subdivide' their land themselves in order to sell it off as residential plots, with or without the intervention of a surveyor to define the plot plan.

In Benin, the 'presumed owners' of plots can make a joint parcelling application, in which case operations are overseen by the communes and implemented by government-approved private surveyors and urban planners. This enables households that have acquired land through semi-formal individual transactions to determine the boundaries of their plot and secure their holding (sometimes after a house has been built on it). Until now, the relocation certificates issued after subdivision have provided secure tenure, although stakeholders pay dearly for this procedure in cash and kind – losing on average 40% of each plot to allowances for rights of way, public facilities and rationalisation of the overall parcel division (the so-called 'reduction coefficient'). Delays and abuses in parcelling procedures have been widely criticised since the early 2000s, and attempts to get the State to resume control of subdivisions have been under

way since 2015. A national commission to 'clean up' parcelling operations is now in place, and several mayors and surveyors have been taken to court and jailed (Kakai, 2012; Banon and Jehling, 2020; Simonneau, this report).

Many subdivisions in Senegal are initiated by the mayor's office or endorsed by them in the case of family subdivisions, but a good number are undertaken illegally because of the time required for administrative authorisation. Town halls are also encouraged to make large landholdings available to private developers as part of public 'social housing' initiatives such as the 'One family, one roof' and '100,000 homes' programmes. Land fragmentation and subdivision lead to the unequal distribution of land parcels, which varies according to who initiated the process (town hall, landowners, surveyors or developers). In subdivisions initiated by private developers, former landowners receive plots equivalent to about 10% of what they lost; this compensation can rise to 20% or 30% in order to obtain the landowners' consent to subdivisions initiated by town halls; and is highest in private subdivisions. Parcelling is always seen as a source of revenue for the municipal authorities, but is often also an opportunity for elected officials to line their own pockets or reward backers for their support (Diop, 2012). Town halls are routinely allocated a quota of subdivided plots to be assigned to local land applicants. Young people waiting for land are supposed to be in line for these plots, but are often overlooked in favour of political allies, and it is common for officials to keep a number of plots and sell them for their own profit.

Private land and property developers as catalysts of change

Land transactions and changes of use are also stimulated by private land and property developers, who have a vested interest in these dynamics and may use financial or social pressure to encourage landholders to sell their land. Private actors from various institutions intervene in many stages of land sales and development: surveying, demarcating and evaluating land, preparing subdivision plans and development schemes, and constructing buildings.

Land surveyors provide services for communes, private developers and sometimes landowning families, drawing up inventories and subdivision plans. In Senegal and Côte d'Ivoire, they are paid a percentage of the plots created by communes and private individuals, which makes them key players in the conversion and supply of plots.

Land parcelling specialists. The land acquisition companies observed in Kenya and Tanzania are specialist private operators that build up portfolios of large landholdings which are progressively parcelled out, sometimes formally subdivided, registered, and titled. In doing so they create a considerable amount of building land on the supply side, and put pressure on landowners to expand their holdings. Land acquisition companies have existed since the 1960s in Kenya, and since the 2000s in Tanzania.

Brokers (coxers in Mali, démarcheurs in Benin and Togo, intermédiaires in French-speaking countries, and dalali in Swahili) provide increasingly professional services. In Africa, brokers put sellers and buyers in touch with each other, advise both parties on how to follow or circumvent legal procedures, and ease their passage through the administrative process (Adjahouhoue, 2013; Bawa, 2017; Durand-Lasserve et al., 2015; Glele, 2014). Schlimmer notes that brokers in Tanzania (see this report) often come from the locality, villages or indigenous communities that own the land. They use their contacts and local knowledge to identify potential vendors, and work with urban intermediaries who can identify potential buyers. Increasingly strong

land markets and varied demand from members of the diaspora and other actors has led to the professionalisation of their activities and altered their relationship with local communities. Brokers in India also have to work within the caste system, although Upadhya and Rathod show how lower-caste actors in the Bangalore region are benefiting from changes in local land dynamics (Upadhya and Rathod, 2021). The role played by private brokers and the profits they generate are well documented in Southeast Asian countries, large-scale urban development sites (Leitner and Sheppard, 2018), and work on large-scale land grabs (Sud, 2014).

Finally, **national and international construction companies** have been quick to move into countries that are particularly attractive to investors, once the legal route to the private sector has opened up and growth figures seem sufficiently promising (see next section).

International institutions such as the World Bank encouraged Senegal and Burkina Faso to use financial and land facilities to bring private developers on board with public housing construction programmes, and they have become powerful players in the sector. There have been several property scandals in Senegal, with developers selling plots they did not own on credit and ruining the savers who had trusted them; and the State selling registered land cheaply to government allies who immediately made huge profits selling it to private and public developers at market price.

The case studies show the wide variety of actors involved in land transactions, their different trajectories, professionalisation, access to capital – particularly international capital – and the ease with which they obtain licences (see below). What they also show is how these private actors add to the widespread pressure on rural landholders to sell their land, and to the dumping of officially or unofficially demarcated plots onto land markets.

PART 3

Land acquisition and distribution

ho is acquiring land on urbanisation fronts? Our case studies show that people purchasing plots come from **diverse socio-economic backgrounds**, ranging from individuals and low-income households to companies, cooperatives (of companies or individuals) and public actors. All have **different economic and political opportunities to access rural resources**.

These case studies enabled us to identify the purchasers' profiles and motivations on the one hand, and the conditions of access to plots on the other, taking account of financial flows, access to information and how the transactions occurred.

Acquisitions are taking place in a general context of sharply rising land values, with building land selling for higher prices than agricultural land. These price dynamics may filter out certain types of buyer and reinforce inequalities in access to land and the ability to put it to economic use. The financial value of land depends on several factors, including its proximity to roads and major public or private operations, the presence or absence of services, access to water, and demand.

In addition to having different abilities to access financial capital, buyers also appear at different points in the urbanisation process. The case studies conducted near rapidly expanding urban centres found that purchases in these areas are mainly driven by urban capital and city dwellers' demand for building lots. Some actors make one-off, opportunistic purchases without necessarily having stable economic resources, others repeatedly buy and sell land or start by buying on their own and then join forces with other buyers on a more professional basis, allowing them to accumulate more financial capital and keep buying land. This fluidity makes it hard to classify buyers solely on the basis of their socio-professional profiles.

The case studies also show the interplay between transnational and regional capital flows in major urban development projects. Large public and private operations on city outskirts are powerful catalysts for land sales and purchases in the surrounding area, feeding the economic expectations of diverse investors who bet on local land prices rising in the months or years to come due to prospective infrastructure projects and demand for housing or building lots.

Research in rural areas further from urban centres found that most buyers come from neighbouring towns or rapidly growing villages, and that land transactions in some areas only involve local actors.

This section provides a non-exhaustive typology of the various actors that acquire plots, based on the different ways that they access financial capital, and their main motivations for acquiring land.

Land transfers by public authorities

Some plots are acquired when the public authorities transfer land through sales or concessions. The State or municipal authorities transfer rights to land in their private domain through different types of contract: concessions, long leases or sales to individuals or companies. In most cases these sales follow *ad hoc* negotiations more or less loosely based on the land's market value. In Senegal, for example, transfer prices for private State land have not been reviewed since 2011 – generating huge wealth for beneficiaries of these transfers and impoverishing the State. Government-organised land transfers may also target particular groups, as in Bahour in India, where the regional government purchases private land near villages and divides it into micro-lots that are assigned to lower-caste groups for housing (Dinh, 2016).

These modes of transfer evolve according to changes in the authorities' political and administrative status, the progress of development schemes, and changes in land use and land tenure status, which are often associated with a change of land authority.

In some cases, transfers are akin to (virtually free) land allocations to favoured political or business actors.

Box 11

LAND ALLOCATIONS BY TOWN HALLS IN SENEGAL

Senegal's decentralisation reforms of 1972 led to the creation of rural communities and rural councils whose responsibilities include managing national domain land within rural community boundaries. The State made the communes responsible for managing these unregistered lands, but retains the sole right to register them. This is usually done on the grounds of public utility, although it is quite common for such land to be registered or even sold without a declaration of public utility, despite a ban on transactions involving land in the national domain.

The main method of converting agricultural land into urban spaces in Senegal is parcelling – where communes subdivide land from the national domain without registering it. List (2017) shows how these subdivisions are shaped by different kinds. of 'territorial alliances'. In some cases, property developers, the occasional housing cooperative, State agents and elected municipal officials have been involved in projects where the developers negotiate access to land in the national domain with elected officials, obtain land titles through the State, and then control the distribution of the newly created plots. Landowners are usually compensated with parcels taken out of a small proportion of the parcelled land, and some plots are given to the elected officials, State agents and surveyors who conducted the parcelling process. In some municipal initiatives, elected officials form an alliance with a surveyor in order to organise a parcelling process and negotiate an agreement with the technical services. Most of the plots created are then controlled by the elected officials, who distribute them to young people and their political supporters free of charge or in exchange for the cost of demarcation. They also keep some for themselves as part of their accumulation strategies. In fact, local elected officials own an average of about 20% to 30% of subdivided plots in Senegal, meaning that political actors collaborate in rent capture.

Convergent national and international investors in land acquisitions

Acquiring large amounts of land in urbanisation fronts requires significant financial resources and sometimes involves global relationships. The situation varies from country to country, depending on their openness to international investment and levels of regional funding, particularly for road construction, which is often a draw for investors. These large-scale urbanisation operations bring together public and private economic actors with different legal statuses: groups of property developers, investment fund managers and subsidiaries of companies that mobilise investment funds and bank credit from abroad or from national commercial banks. The advent of major operations changes the profile of land purchasers in the affected territories due to rising land values and the arrival or promise of new infrastructures, which attract urban capital.

Box 12

CHANGING PATTERNS OF LAND CONVERSION AND THE ARRIVAL OF TRANSNATIONAL CAPITAL IN SIHANOUKVILLE, CAMBODIA

There has been an unprecedented acceleration in property investment in Southeast Asia since the 2000s, fuelled by increased investment flows, the growth of foreign direct investment, the financialisation of national economies and the real estate sector, and the rise of new economic players such as China. This is reflected in the implementation of increasingly ambitious real estate projects and the construction of whole new cities.

Recent changes in Sihanoukville, Cambodia, illustrate the changing pace and scale of these property investments, and thus the evolution of land use conversions. This small tourist town, which is also the nation's main port, is now home to several major urban projects developed through cooperation between Cambodia and China as part of the new Chinese international *Belt and Road Initiative*. The Cambodian government wants Sihanoukville to become an economic, logistical and industrial platform like Shenzhen.

This territorial development strategy has completely transformed Sihanoukville. Since 2017, Chinese investments have fuelled the construction of new transport and logistics infrastructures (trains, highways, numerous special economic zones, airport and port expansions), and it is now the country's second most highly populated city. China's interest in the southern region of Cambodia has also led to an explosion of investment by private Chinese property developers in the gaming and tourism industry. The construction of over 150 casinos and development of online gambling have made the Cambodian gambling sector the largest in the region in the space of a few years. These investments have also driven urban megaprojects costing several hundred million or even several billion dollars, and the construction of numerous new cities around Sihanoukville and elsewhere in the region.

These development strategies and large flows of private capital have been the driving force behind the region's "lightning urban development" – a term for the very rapid transformation of secondary cities and the urbanisation of vast, previously predominantly

.../...

rural territories through massive property investments that lead to the production of new living spaces and economic, transport and logistics sites. Most urban developments in Sihanoukville and the surrounding region are occurring in protected areas (natural parks) and coastal settings with poorly defined land tenure systems. This has led to land uses changing very rapidly and on an unprecedented scale. The quick profits to be made from speculation and money laundering through property and gambling are fuelling hunger for land, which is largely structured by the neo-patrimonial and clan-based organisation of the Cambodian State. This works in favour of public and private Chinese actors. Changes in land use are also politically significant, as China's presence in the region is motivated by strategic military and commercial reasons as well as investment interests.

The lightning urban development in Sihanoukville region is not an exceptional case. Urban development in the global South is directly affected by its cities' increasing integration into economic globalisation, the development of private property markets in these cities, the acceleration of South-South investment flows, and the rise of new economic powers such as China. These processes can have a profound impact on how land uses change in the global South, and on the social, economic and political consequences of these changes.

Gabriel Fauveaud, University of Montreal

National land acquisition and real estate companies are playing an increasingly active role in the whole process of purchasing, parcelling and marketing land. Property development in Senegal was historically entrusted to public structures like SICAP (Société immobilière du Cap-Vert) and SN HLM, but the last two decades have seen private developers play a much more prominent role in housing policies and urban projects financed by international aid, partly within the framework of ambitious public programmes aimed at massively increasing the production of serviced land and housing.

Property developers are becoming much more diverse. They now range from family companies and individuals who obtain licences and consolidate their business as each project progresses, to real estate subsidiaries of large groups with access to global capital. The Indian government strategy for producing building lots and housing started to rely more heavily on the private sector in the late 1980s. The liberalisation of foreign investments from 2001 onwards, land reforms facilitating the assembly of building lots, and access to credit for professional property developers further supported this shift. Private operators in the real estate sector began to professionalise their activities, setting themselves apart from other 'businessmen' involved in real estate projects by joining professional associations, developing media profiles, and using foreign investment as a marker of credibility and respectability (Searle, 2016). Large agricultural landowners are also becoming fully-fledged players in property markets, negotiating shares in projects and securing high prices for their land (Balakrishnan, 2019). Our research also indicates that there are many other actors in the sector who play more discreet roles than these large real estate firms and landowners (see Part 4 of this report).

East Africa also has some very active land purchase companies. The Kenyan government started forming and encouraging such companies back in the 1960s, and they emerged more recently in Tanzania in the 2010s. Schlimmer (this report) found that they acquire agricultural

land in Tanzania at relatively affordable prices, then get the land divided into several lots by company professionals or authorised external experts in surveying, valuation, division, and layout plans (which have to be validated by the local authorities). Some companies work closely with local governments, and set up public-private partnerships that enable district councils to recoup some of the profits generated by selling plots. The Kenyan case study (Bon, this report) shows how the entrepreneurs behind these companies use sales to build up their land portfolios and establish their credibility; highlighting the need to consider how these investors professionalise their operations, seizing an initial opportunity and using their sales profits to establish land purchase companies.

All of these actors work closely with intermediaries when negotiating property bases and transferring parcels.

<u>Individual initiatives, household projects, modest buyers</u>

Demand for land on the outskirts of small and large agglomerations is still quite varied as it depends on the actors' socio-economic profiles, needs and economic resources.

Much of the land that is taken out of agricultural production is converted in individual initiatives and modest projects undertaken by households that want to live somewhere cheaper and less congested than the city (Kihato and Royston, 2013; Andreasen *et al.*, 2016). This market for building land sometimes includes very small plots, which enable poor people to obtain housing on metropolitan margins (Hanlon et al., 2019) and can provide opportunities for middle-class actors who don't want to legally register their land transactions (see Bartels, 2019, on Ghana). Levels of services and types of housing tenure in an area can change rapidly, as seen around Ouagadougou (Guigma, 2019) and also in Tunisia (Committee summary 25), where 30% of the total supply of land for housing changes hands without legal registration.



Land acquired by a local developer in Tami Nadu, India, 2017 © Denis

This makes it possible to satisfy demand from the middle classes, which are becoming more precarious and unable to access the increasingly selective legal channels dominated by private actors. The case study from Tanzania (Schlimmer, this report) shows that many middle-class urban actors conduct individual transactions with rural landowners who have inherited land in villages and hamlets or bought it from other villagers. The case study from Jordan (Ababsa, this report) shows how low- and middle-income urban households buy land directly from holders of use rights, without a recognised contract. And a major factor in the sale of agricultural plots in Myanmar (Boutry *et al.*, 2016; Clerc, in this report) was the 2012 land laws, which recognised farmers' right to transfer use rights by selling land and acknowledged the diversity of purchasers.

The case study from Benin shows how the traditional customer base has broadened from high-ranking officials to include traders and people on modest incomes seeking smaller housing plots (Magnon, 2013; Simonneau, in this report).

In many areas covered by our case studies, micro-lots are mainly purchased with individual or joint savings. Some buyers pay in cash, or make several monthly bank transfers to the seller (an individual, family, company, cooperative, etc.) in order to get land at the best price.

In contexts where private ownership is generally encouraged, new instruments are allowing a wider range of households to buy property after a long period when their creditworthiness questioned. Access to credit varies greatly across the countries studied, with providers offering different types of credit for different types of housing. Mortgages are mainly used to construct properties or buy finished houses rather than plots of land, which is prohibited in India. The banking system tends to be used to access housing rather than purchase plots of land, and property products and marketing channels that meet globalised standards are emerging. Kenya does permit loans to buy land, but banks are reluctant to lend to households without solid guarantees and usually grant short-term loans over three to five years, while loans for house building tend to last for 15 years or more. Investors who want to resell plots



Subdivided farmland, acquisitions by low-income households and fallow land in Hlegu, Burma, 2019 © Clerc

without any capital outlay on property development rarely use bank credit to buy land, as this would prevent them from selling it on quickly. In Jordan, credit is mostly reserved for wealthier operators that can afford high interest rates (Ababsa, this report). Most property developers or land purchase companies that sell micro-lots work directly with commercial banks, but they can also turn to other credit organisations formed by church, individual or business cooperatives. In Mexico (Ribardière and Valette, 2017), households can obtain home loans through their formal or declared workplaces, which facilitate assisted home ownership through mortgages from public institutions. Sales in such cases are managed by property developers who operate directly out of these credit institutions. The system for accessing housing operates on the principle that employees have a 'social right' guaranteed by the Constitution, whereby employers have to pay 5% of staff salaries into a specific fund that employees can use to obtain a mortgage from their affiliated institution.

The figures show that 80% of families in India had a deposit account in 2020, although 48% of them had been inactive for at least 12 months (Denis, this report). There is some targeted government support for small land purchases, as seen in the case study on Bahour, where the regional government encourages households who can receive financial assistance to buy micro-lots, which then makes it easier for them to get credit from the bank to build a house. Poorer actors invest in parcels of agricultural land far from villages and hamlets, where they build houses with money from savings, cash, government assistance or various types of loan (from credit agencies, personal acquaintances, local entrepreneurs, etc.). But most micro-lots are purchased by 'non-local' investors who do not build on them. These investors may be farmers who have sold some or all of their land, or people of modest means who buy speculatively and are more interested in the land's resale value than in using it immediately for a residential project.



Fenced subdivided plot on the edge of the lagoon in Togbin, Benin, 2021 © Simonneau

Diasporas also play an important role in both land transactions and the structuring of related services in their countries of origin. They are mainly interested in plots of land or housing that are ready for use, and which can be bought online or through sales intermediaries. Choplin (2020) notes that national property and land acquisition companies in Benin, Nigeria and Togo are adapting to this type of client and the need to provide guarantees. These companies rely on digital sales and secure payment platforms, using mobile apps, Facebook, Twitter, WhatsApp and Skype accounts. They send out drones to monitor sites, use YouTube channels to give advice, and hire specialist lawyers to verify sales agreements and register title deeds. In Kenya, companies that have gained credibility, built up land portfolios and are establishing overseas offices (mainly in the US and England) specifically target members of the diaspora, who are often wealthy. Kenyan commercial banks also have dedicated services for these clients.



Land 70 km from Nairobi purchased in 2018 by a cooperative set up by members of the Kenyan diaspora who live in England and Ireland, 2022 © Bon

Box 13

MIGRATION, DIASPORAS AND LAND TRANSACTION DYNAMICS IN AN INCREASINGLY MOBILE AFRICA

Recent decades have seen dizzying rates of demographic growth on the African continent, and an acceleration in internal and international migration. The groups of migrants that emerge as diasporas in different countries are defined by many psychological, memorial, traumatic, spatial, economic, political and cultural factors (Grossman, 2018). Another important but rarely mentioned cross-cutting factor in their journey is land, particularly its function as real estate. Nowadays, the simple brutal

fact of dispersion (which also temporarily or permanently disrupts land dynamics in the places of departure) is overlaid with a more holistic attitude to dispersion that largely centres around ethnic origin.

The primary attachment to land then feeds into a self-fulfilling prophecy in which individual and collective identity are ultimately embedded in the 'land of the ancestors', the constant thread that runs through diasporas' land trajectories. They may be a simple migration project that mobilises different-sized plots and various types of more or less secure transaction (private sales, sales due to various financial pressures, security deposits, etc.) to individually or collectively enable prospective migrants to pay for the necessary documentation, security deposits, transport costs and contingencies associated with departure, which may include smugglers' fees, etc. (Doevenspeck, 2004; Promsopha, 2013). The initial conditions generally determine what kind of more or less secure transactions the prospective migrant and their family engage in, the extent to which their landholdings are diminished (Peyroux, 2020), and ultimately the strength of the migrant's desire for land during their time abroad. Once they are settled abroad, the idea or even the ideal of 'going home' not only feeds into the definitional weight of the concept of diaspora, but also reinforces the migrant's desire for land, which is simultaneously maintained by various cultural and social ties (ethnic and community groups, associations, tontines, festivals, rites and rituals whose frames of reference are imported from the country of origin and amplified).

The same applies to economic integration through investment in rental or speculative properties (Nkenné, 2020; Tall, 2000), involvement in the migrant community's property dealings (Ndour, 2021), and through the various supply networks that may support the ethnic economy (Ma Mung, 1999), providing particular local products that are closely bound up with their identity and whose production may require certain land arrangements. These differentiated relationships also inform attitudes to holidays (roots tourism, with specific residential infrastructures), retirement (a roof over one's head in old age, supplementary income), and death (wanting to be buried in the 'land of one's ancestors').

The political aspects of land dynamics are also becoming apparent as members of the diaspora increasingly participate in the political life of their country of origin, where certain sought-after positions may only be filled by residents. People's status may also affect their land rights: in certain countries dual nationality is not recognised, foreigners are barred from land ownership (Kamdem, 2015) and newcomers have to use various stratagems and 'deals' to secure their precarious access to land. They are not helped by a financial differential that works in favour of members of the diaspora, who often have dealings with new urban elites and sometimes with forced migrants. Efforts by external partners such as the IOM (with the AVRR programme), UNHCR and other NGOs to receive and integrate forced migrants make them key players in land transactions, particularly when it comes to switching professions from, say fishing or nomadic activities to more sedentary farming (Kamdem, 2016).

Pierre Kamdem, Professor of Geography, Laboratoire Ruralités, University of Poitiers

Types of multiple ownership and links with corporate affairs

We focus on the role of domestic buyers rather than large-scale land acquisitions made with bank or market capital.

The case studies provide numerous examples of people owning multiple properties, with developers selling to first-time buyers, joint owners and family members.

Researchers used quantitative data on registered land titles to develop precise social typologies of purchasers of new land titles. This enables us to use information on their socio-economic profiles, reliance on bank mortgages, and the amounts of land and money involved in these transactions to determine their economic status and social position. Important studies in Mali by Bertrand (2019; 2021) and Camara (2017) used quantitative data from land registers to reveal the number of commercial elites involved in these transactions, sometimes working in competition with State agents and sometimes conniving with them. Bertrand (2019; 2021) shows that 20,000 land titles were registered each year from 2013 to 2015 in the cercle of Kati in the metropolitan periphery of Greater Bamako. The number of new titles registered corresponds to the division of head titles or registration of parcels on new land acquisition fronts and future subdivisions. According to Bertrand (2019; 2021), most people are unable to register land, meaning that ownership is heavily weighted in favour of market capital. These studies finally highlight the link between land acquisitions and commercial corporate affairs, which are motivated by the desire to invest money, grow profits or provide a guaranteed return if the business stagnates (Bertrand and Bon, 2022).

These results tie in with other findings, such as Bawa's (2017) proposed economic stratification of buyers in Togo, which starts with traders and moves up to administrative officials and then developers, while noting the very limited number of women buying land. Twarabamenye and Nyandwi (2012) made similar findings in Rwanda, where the main buyers on the outskirts of secondary towns are local traders, followed by managers and employees of private companies, then civil servants. The analysis of land titles in Kenya generated similar results (Kinuthia et al., 2021), showing that businessmen and land purchase companies were involved in the most transactions. In the outskirts of Yangoon in Myanmar (Boutry et al., 2016), most buyers come from outside the area where the transactions take place. They are often influential individuals with connections in the government, the army or the economic elite, and city dwellers looking for cheap plots of land.

Pooling money to access land

Finally, our case studies examined the role played by co-operatives, groups and associations in cases where money is pooled by associations of company employees, public and private institutions, and groups of individuals. Pooling resources to buy land or finance a housebuilding contract with a developer can lead to a process of individualisation once the property is purchased or the houses are delivered. Members of these cooperatives may be entrepreneurs with large amounts of capital, or people who would have little access to land markets on their own. Pooling financial resources in order to access land or develop property enables many different types of actor to invest in plots at varying distances from urban centres.

In Jordan (Ababsa, this report), cooperatives set up by employees, civil servants and engineers have focused their activities on the outskirts of Amman, where they buy agricultural land on the edge of serviced building areas in the expectation that its value will increase when these spaces are integrated into planned zones. These cooperatives are formed so that members can acquire land for less, avoid paying certain charges on transactions, and reduce the cost of servicing the land. The holding is then divided into micro-lots, each member acquires a lot, and the cooperative is dissolved when the land lots are registered.

In Kenya (Bon, this report), cooperatives known as sacco are very active in urbanisation fronts. They have more diverse profiles than cooperatives in Jordan, are legally protected, and include staff from private businesses (telecommunications companies, banks, etc.), public enterprises, civil servants, individuals, religious groups, professional groups, members of the diaspora, etc. Members of these cooperatives aim to use collective savings and investment to access property in a context of rising land values and charges on transactions and building permits. When land is acquired as an investment, the titles obtained after a holding is subdivided are quickly shared among members of the cooperative or sold on the market. Cooperatives are rarely dissolved after just one investment, and some have built up large land portfolios, buying and marketing lots, and adjusting their land acquisition strategies by focusing on more expensive land that can be sold on to wealthier buyers. People can belong to more than one cooperative (through their company or group of friends, for example) and use different procedures for transferring and saving money, although most funds go through a bank account registered in the cooperative's name. This enables individuals to accumulate several lots of land and participate in various real estate projects. Some of the individuals we met, often young professionals, also form self-help groups to consolidate collective savings, decide on an investment, and sometimes consolidate the group by turning it into a cooperative. Money is pooled in different ways according to the group or cooperative concerned. This may be done through monthly bank transfers or members contributing a share of their salary or



Building works on land purchased by a civil servants' cooperative in Amman, Jordan, 2021 © Kalaldeh

depositing a small amount every Friday, for example. Members often organise their activities through WhatsApp groups.

In Senegal (Lavigne Delville and Sow, this report), housing cooperatives are often formed on a professional basis. They have diversified since the 1970s, and are currently mainly composed of middle-class individuals, civil servants from the same department, workers from the same company, or nationals from the diaspora who have difficulty finding housing on their own. These individuals come together to buy large holdings, and sometimes to negotiate bank loans and contract developers to build dedicated 'housing projects'. Relationships with developers vary – cooperatives may buy a portion of a subdivision, ask the developer to find a plot for them, or come to the developer with the land they want to build on.

In Benin (Simonneau, this report), there is growing collective demand for subdivision and reparcelling by individual owners. This is different from the demand from cooperative structures because it comes in the wake of a series of individual, sometimes long-standing transactions on contiguous land.



Land in Kenya bought and subdivided by a civil servants' cooperative. To date, only one member has started building a house, 2021 © Bon

PART 4

Downstream: What is being done with converted land?

his section considers the downstream side of transactions, looking at what is done with land after a transaction has taken place and plots have been taken out of agricultural use. The case studies show that land is used in various ways, not simply for housing or generating a quick economic return through property development.

Some buyers put money into their land as soon as they have acquired it, investing capital in construction or installing basic amenities, while others leave their plots vacant. All the case studies for this book show an increase in speculative **land acquisitions that become urban spaces, sometimes after very long periods of inactivity**. This is not new in itself (Crousse *et al.*, 1986), but the fact that actors from every strata of society are involved in these practices is unprecedented. The very rich used to buy agricultural land and livestock as an investment, but now mainly buy (peri-)urban land, and have been overtaken by the middle classes in the race for land titles. Low-income households are also acquiring land as a means of saving or making money.

These different uses can be seen in landscapes dotted with individual or collective housing projects at various stages of construction, and visible markers of private ownership and parcelling on vacant plots (cones, barriers, fences, walls, painted signs), which are often used to secure land in areas where speculation and malpractice are rife (double sales, monopolies, etc.).

This diversity of uses makes it hard to control development and protect natural resources in affected territories.

The following pages identify the main uses made of land, and consider the economic value accrued through property development on the one hand, and set aside on the other.



Examples of markers and fences in Kenya: bits of wood, posts, barbed wire, walls, line of trees and gate, 2022

Bon

Parcelling and subdivision operations

The division of public and private land into lots to be sold as building land is a key activity in land conversions. These subdivisions – which are different from land parcelling – are being carried out on a massive scale on urbanisation fronts.

Parcelling refers to the official division of a piece of built or unbuilt land according to an agreed development plan that includes provisions for roads and public spaces, and thus sources of income for public bodies. It therefore implies that the development is officially recognised, and that there is a plan for it. This plan may be summary, and will not necessarily implemented – it may not materialise on the ground, roads that are built may not be maintained, and public spaces may not be developed. The standards that apply to such plans and extent to which they are observed vary greatly, from the simple demarcation of plots to earthworks, road construction, creation of public spaces, and installation of basic services (water pipes, electricity lines, drainage channels, etc.). Some of the case studies found that surveyors are paid in kind, with plots.

In Mali, for example, the production of housing plots was liberalised in the 2000s, bringing an end to the public monopoly on government social housing programmes (Bertrand and Bon, 2022). Landowners have to comply with planning standards, and ensure that the new lots they produce to be sold by the town hall are as agreed with villagers and elected municipal officials. Most projects simply demarcate the allocated parcels without creating land titles for them, even though the communes are supposed to register them in the name of the State. Permits for subdivisions are often based solely on the authorisation for plot demarcation as other components of the land development have not been implemented.

Land fragmentation can also be regularised during parcelling operations, as seen during the restructuring of urban neighbourhoods in Benin in the 1980s and 1990s. So-called parcelling and land consolidation operations allowed parcels and roads to be regulated after the land had been appropriated and even occupied (Simonneau, this report). Land may also be divided during parcelling without prior authorisation by its customary owners, so that it can be sold in lots under registered sales agreements (see Part 2). Comby (2000) observed that purchasers of such plots only own "a sort of share to be developed in future parcelling operations on the consolidated land, which the administration will eventually do to retrospectively provide for roadways and set out a regularised plot grid."



Wall round an uncultivated plot on a subdivided landholding in Togbin, Benin, 2021 © Simonneau

In Côte d'Ivoire, there was a huge surge in the parcelling of agricultural land in the village of Djimini-Koffikro between 1983 and 2021 (Colin and Pottier, this report). In most cases this happened when siblings inherited family land, and preceded any change of ownership through market transfers. To ensure that the parcelling is officially recognised, landholders need to obtain a certificate of customary ownership, approval by the Ministry, and then register the parcels.



Construction on newly parcelled land in Djimini-Koffikro, Côte d'Ivoire, 2023 © Colin

The case study on Kenya (Bon, this report) shows that land is often simply divided into parcels and left undeveloped, without even reserving rights of way for subsequent services. This happens on rural concessions, community grazing areas and private land, and sometimes on holdings a long way from urban centres where water is hard to access and groundwork costs are high.



Walls around two unused plots of subdivided land in Konza, Kenya, owned by entrepreneurs from Nairobi, 2021 @ Bon

Box 14

AN ECONOMY BUILT AROUND MICRO-LOTS

Land that is divided into very small lots is often left unused for long periods. The lots then become commodities that are traded in chain transactions.

Urban studies still tend to largely overlook these transactions and the life cycle of these micro-plots – how they evolve in terms of their use, surface area and financial value. Karaman *et al.* (2020) pick up on certain aspects of the process, and their concept of *plotting urbanism* centres around individual strategies for urban development and more intensive land use linked to these processes of commodification. They also recognise the marked socio-economic differences between the original owners of these plots and their subsequent occupants, but pay less attention to the working-class actors involved in these divisions, or more generally to the investors' social profiles and economic stratification, and the amounts of land and money involved in this process.

Plot sizes in our case studies vary according to their distance from urban centres and the type of project involved. In Kenya, for example, average plot sizes are between 200m² and 350m²; in India the average ranges from 100m² to 150m² and 200m²; in Jordan, housing plots average 300 m²; and in Nigeria, average plot size is between 150m² and 300m² (Joshua *et al.*, 2021). In Benin, plots have become smaller and smaller over the decades: the standard size in colonial settlements was between 625m² and 900m²; nowadays it is 300m² to 400m² in Cotonou, and 500m² in peripheral secondary towns.

Transaction prices are determined by the plot's location, proximity to urban centres, road infrastructures and major projects (planned or completed), the level of land certification (which reflects the level of security), the vendor's socio-economic profile, and anticipated use. Interpersonal factors are also very important in building market value and in the transactions that shape these land markets. For example, land prices in the Togbin district in Benin (Simonneau, this report) are 45 million FCFA (70,000 euros), compared with 3 million FCFA (4,500 euros) in secondary towns such as Bohicon.

Economic advancement through property development and self-builds

Our case studies show how the economic value of land is increased by various property development projects aimed at different groups of clients. These projects range from low-rise self-builds to small turnkey and off-plan houses or properties for the rental market to social housing programmes.

Some of the plots within a single subdivision may be used for house building, while others remain vacant. Developers and builders come from diverse backgrounds, are not all licensed, and can take a long time to complete their projects depending on their available capital.

The study on Bahur in India found small landholders undertaking unauthorised developments on very small housing plots, and developers from the region buying micro plots to build on and then sell. Field surveys (de Bercegol *et al.*, 2021) also show that the



Housing under construction in Mapinga, a suburb of greater Dar es Salaam, Tanzania, 2019 © Schlimmer

developers building low- and high-rise apartment blocks or individual houses on the outskirts of Faridabad, a fastgrowing city about 30km from Delhi. have local roots and often come from the area they are developing. They use their local support networks, land or property assets and capital from their economic activities to build high-rise buildings and gated housing, or to buy and consolidate agricultural land. Most are new to property development. They include local entrepreneurs and traders who are diversifying their activities, and agricultural landowners (not exclusively from the upper agrarian castes) who

have managed to turn themselves into property developers and builders. Rather than selling their land to the highest bidder, they rely on government support programmes to provide the start-up capital needed to subdivide and build on their plots themselves.

Box 15

FARMERS TURNING TO PROPERTY DEVELOPMENT IN THE DELHI REGION OF INDIA

In 2015 India introduced a nationwide home ownership programme known as the Affordable Housing Scheme. The two pillars of this programme, which relied on the productive capacities of the private sector, were reform of the finance system to facilitate residential mortgages for households, and simplified mechanisms for private developers to convert agricultural land. This paved the way for a massive upsurge in so-called 'affordable' housing, enabling first-time buyers to obtain subsidised 20-year loans at an interest rate of only 3%, subject to income and family criteria. Developers are supposed to complete projects within four years, with 20% of the loan paid to the builder at signing and the remainder released in six-monthly instalments over two and a half years. This means that developers obtain all the capital needed for the project in two and a half years, without having to advance it themselves. To facilitate construction, the State introduced tax reductions and exemptions from charges, reduced the price of materials and lowered standards to maximise output. In return for all these benefits, which minimise risk and ensure that high demand can be met quickly, the government sets the initial sale price.

The Gupta family is a typical example of farmers-turned-developers – local people with no education, no English, and insufficient economic resources to go directly into property development, who are now constructing high-rise buildings on their land. Their ADORE project in Sector 86 of Faridabad, some 40 kilometres from Delhi, was initiated by one of three brothers, who had worked as an intermediary for investors and property companies seeking information about available farmland in order to negotiate with its owners. In 2014, he used the knowledge gained from this experience

and what he knew about the Affordable Housing programme to convince his brothers to decline an offer from a company that wanted to buy their land. They felt that they could use the programme to develop their land themselves, as they didn't have to provide any capital for construction, and launched the first phase of the project in 2015. The construction of the first 840 homes was completed in 2018, and the second phase is now under way with two 530-unit blocks under construction. Having optimised their costs, they stand to make an estimated 30% profit on each flat they sell and have amassed a small fortune through this project. In 2020 they were able to use capital gains from other property developments to purchase several plots of agricultural land 30 kilometres from Faridabad..

Rémi de Bercegol, Bérénice Bon, Karen Lévy (surveys conducted in Faridabad in 2019 and 2020)



Buildings constructed by the three Gupta brothers in Faridabad, India, next to their original village home in the centre of the photograph, 2020 © Bon

Affordable housing programmes implemented by small property companies in Mali also rely on government schemes to support bank credit for buyers. The buildings in these programmes are often poorly constructed.

In Senegal, there has been a huge increase in property development in the Bambilor-Sangalkam area on the outskirts of Dakar, where 'Sunday gardeners' from the capital used to buy land for intensive market gardening, poultry farming and orchards. As land use in this area shifts towards residential and housing plots, local land markets are serviced by public and private developers, housing cooperatives, customary owners, the local authority, the State and intermediaries.

Developers in Senegal, Benin and Kenya (see case study atlas) are also building upmarket developments and gated housing aimed at wealthy clients, the upper middle-classes and members of the diaspora.

Some major property developments deliver infrastructures that are directly financed by the project or funded through public initiatives; others may only provide basic facilities. The latter are aimed at lower-income clients who are unable to pay service charges and often have to find their own way of accessing basic services, usually by digging wells and installing solar panels. This can damage the fabric of houses and apartment blocks, and is particularly problematic for high-rise buildings. Examples of this can be seen in the outer suburbs of India, where building density standards are low (reduced requirement for green spaces, minimal spacing between tower blocks, no obligation to provide residents' parking spaces, etc.) and developers are required to complete construction guickly. The extremely low cost of labour in India has significant impacts on the quality of construction: labourers are poorly trained and still use traditional practices that are ill-suited to modern buildings, and because labour is so cheap, property developers limit the use of machinery and cranes whenever possible on the grounds that it is too expensive to rent or purchase them. These construction practices cause numerous defects (multiple leaks, flaking plaster, exposed ironwork and spalled concrete, broken lifts, etc.) and raise serious questions about the stability and durability of the finished buildings.

Finally, the case study from Kenya (Bon, this report) shows that it can take a very long time for land uses to change to housing. This study follows the trajectories of cooperative members, low-income households and businessmen who spent a decade waiting to build and live on their plots, while other cooperatives moved in and built access roads, and various investors, newcomers and local people sank boreholes so that they could sell water to new arrivals in the neighbourhood.



Wells and boundary markers on vacant plots in Kitengela, Kenya, owned by a cooperative, 2021 © Bon

Sit tight and wait: land as speculative capital

Changes in land ownership do not necessarily lead to immediate changes in use. Some buyers put capital into property development as soon as the purchase is completed, while others minimise their investment and may leave the land fallow or divide it into micro-parcels and sell it on, sometimes into a chain of transactions. The latter type of purchaser focuses on the projected increase in the land's market value rather than its immediate use, particularly for housing. These micro-conversions are becoming very widespread in both Asia and Africa.

Some investors in Kenya wait at least two or three years before reselling, while others move quickly and only wait a few months for land values to rise. Land bought for resale is often purchased with cash rather than credit (mortgage), and the proceeds of subsequent sales feed into local economies as they are used to replenish commercial activities in the city, acquire other landholdings, invest in agricultural activities or sink boreholes. Individuals and companies involved in land acquisitions in the rural fringes of Lagos, Nigeria, also wait an average of two to three years before parcelling and reselling or building on land they have bought (Thontteh and Babarin, 2018). Investors in the outskirts of Yangon in Myanmar also

rarely change land use immediately, preferring to wait for land values to rise or to obtain the capital needed for property development (Boutry et al., 2016).

These speculative expectations are based on assumptions that cities will appear, housing will be built, and demand will develop; assumptions that intensify as soon as major public or private operations are announced and regional or national allocations made for road infrastructures. Each case study provides maps which show that these speculative acquisitions are concentrated around major projects, while riskier purchases and more diffuse transactions tend to involve more remote plots with lower land values that may be far from urban centres, around remote villages or in inaccessible natural settings. Land acquisitions and parcelling on rocky substrates with very limited access to water are often organised by mobile vendors as the groundworks for housing operations would be very expensive on this type of land, well beyond the means of local authorities that are nevertheless responsible for servicing the land.

Rather than being resold immediately, land is also used to build capital, to consolidate an inflation-proof nest egg that can be passed on to heirs, used for marriages and as a form of social protection (healthcare, children's education, etc.). In Benin, land is divided into small plots but never officially parcelled out, and is left unbuilt to function as a financial reserve (Simonneau, this report). In Tanzania, land acquisitions on the rural fringes of Dar es Salaam are a 'passive' savings and investment strategy (Schlimmer, this report); parcels are kept as security, to be sold at a later date if the owner needs to raise some money. Land professionals and local government officials often cite speculation as the main reason why individuals and groups from outside the county or village acquire land.

Land is also a favoured form of access to bank credit. Land ownership can therefore provide openings to money creation, as a bank loan secured with a plot feeds into other activities in the urban or rural economy. The link between land acquisitions, bank pledges and mortgages is not new, but it does now involve more numerous and diverse actors. Using land titles for mortgages provides easier access to both commercial credit and loans from cooperatives or money lenders – who may themselves be landowners who are monetising their land capital (as in the case from Bahour in India, see Denis, this report).



Plots markers in Bagamoyo, on the outskirts of greater Dar es Salaam, Tanzania, 2018 © Schlimmer

Our case studies also show the links between the development of market transactions and the privatisation of water or access to natural resources. When plots are left vacant after being purchased, it is very common for the stones on them to be sold to nearby construction sites, or for topsoils on arable land to be used to make bricks. The case study from India shows how this can lead to **the irreversible sterilisation of agricultural land**. Bartels (2019) describes how land in Greater Accra is acquired by investors seeking to appropriate and market water sources, and analyses the consequent inequalities among new residents who are dependent on itinerant and domestic water vendors and wells on other land. They can dig a well if the quality of their soil allows it, but then need to obtain authorisations from people in the surrounding villages, with very little follow-up from the local authorities. Our researchers found landscapes in Benin covered with fences and wells for small temporary market gardens (Simonneau, this report), and boreholes around urbanisation fronts in Kenya, where access to water is used as a selling point for microplots. Holdings that have been bought and subdivided by cooperatives often contain just a few new houses, numerous uncultivated plots, and a couple of wells that the buyers have dug in order to sell the water from them.

Procedures for authorising and formalising changes of use

The procedures for authorising and formalising changes of use are not linear or systematic. They relate to **different levels of the conversion process:**

- >> Transfers of land rights;
- >>> Parcelling and subdivisions (which may or may not comply with current regulations) that lead to change from agricultural to residential use;
- >> **Construction** (building permits).

Each level may be informal, legal, formalised or retrospectively regularised, independently of the other levels; and each may involve multiple steps to authorise and formalise changes of use. These procedures cover a range of stages, practices and situations that may ultimately be legally recorded in the land register.



Micro-lots in Bahour, India, 2018 © Denis

A legal framework is therefore not a condition for the commodification of land and changes of land use: empirical data show that conversions and commodification occur inside and outside legal frameworks. It is also important to distinguish between formalising ownership, formalising changes of use, and legalising these processes.

Médard and Duvail (2020) consider the concept of formalisation in their recent work on Kenya. When talking about the formalisation of ownership or sales contracts, the authors are referring to local authorities' arrangements for issuing documents, which may not necessarily be legal. They use this concept to explore the legitimisation of ownership and changes of use between State control and the market, which is not the same as legalising rights to a plot. Legalisation can reduce transaction costs and buyer insecurity, but it is not linked to the dynamics of commodification as market transfers still take place outside the legal frameworks for registration.

In some cases, transfers of property rights are legalised but changes of use are not authorised or registered according to the ordained procedures. Our case studies found numerous instances of actors registering property titles, but then sidestepping certain aspects of registration and plot demarcation, not registering sales contracts, and not applying for building permits. Even in very formal investment channels, there are some points in the conversion process where mechanisms and procedures are adjusted or circumvented. Authorisation, registration and formalisation may occur downstream of the transaction and/or at the change of use. In Senegal, some of the land allocations made by town halls effectively legalise illegal transactions, many parcelling operations are unauthorised, and building permits are rarely sought. In Bahour in India, land use can be changed without prior authorisation. And in Togo, Bawa (2017) shows that land transactions and subsequent conversions of unregistered rural land in urbanisation fronts are agreed without State intervention, according to customary rules and unauthenticated sales certificates.

The interaction between different political and administrative levels is an important factor in these processes. Decentralisation reforms have often devolved responsibility for the management of local land transactions and conversions to local authorities, while central governments retain responsibility for the regional planning and infrastructure guidelines that stimulate these processes. Our case studies found evidence of nepotism, political power games and local trade-offs between deconcentrated or decentralised authorities. There are also differences in the way that transactions are monitored and archived at different political levels, which can be attributed to the financial dividends generated by managing transactions and formalising changes of use at the local level. For example, requests for changes of use in statutory planning documents are rarely refused once the transfers of property rights have been registered, as charges are frequently made for these changes. Zoning is often used to determine changes in land status, such as when municipal boundaries are extended, a village's administrative status changes to a municipality, or when development zones are demarcated and announced, with land use plans that are often accompanied by a change in land authority.

In Tanzania, for example, new zoning introduced when **villages were reclassified as municipalities** set out the land occupancy rights to be granted to investors, which financial and banking institutions recognise as an assurance that changes of use will be permitted. In Jordan, cooperatives that have acquired and subdivided land on the outskirts of Amman have put pressure on local authorities to change the way the land is zoned and install services on it; while GRET's work on land markets in villages on the outskirts of Yangon in Myanmar (Boutry *et al.*, 2016) shows that land uses are changed under the guise of requests to extend village boundaries.

New land reforms in Kenya distinguish between built-up land and so-called 'non productive' land – or, to put it more bluntly, land that does not generate revenues for national or local political authorities. These reforms target land acquired by investors who have not applied for a change of use or have paid minimal preparation costs and left their land uncultivated, and who have therefore not paid the charges required for changes from agricultural to residential or other uses. Recent legislation limiting the size of transferable plots on peri-urban land favours investors with stable finances who will put capital into developing their land. They can buy bigger holdings, increase the size of transferable plots in accordance with the new reforms, pay for certain facilities and then adjust their market strategies by moving closer to urban centres or areas where the regional government enforces regulations less strictly or simply ignores national recommendations.

Insecurity and land conflict

Many land conflicts on urbanisation fronts arise when agricultural land is registered in the name of urban actors, causing certain members of rural communities to lose out. The issue here is not so much the conservation of agricultural land, as how the income it generates is distributed. In Senegal, for example, the 1964 law on the national domain is supposed to protect rural areas – land is only supposed to be registered in the name of the State, but this rule is widely disregarded. Numerous conflicts are caused by developers using their national or local political connections to obtain land without the agreement of its rightful owners.

More than one of our case studies found that insecurity is an issue for both local and external actors. Local actors see their land legitimacy diminishing, while external buyers may discover that 'their' land has already been sold, and newcomers and investors from elsewhere (working-class and wealthier actors) also face increased competition for access to land and natural resources, especially water.

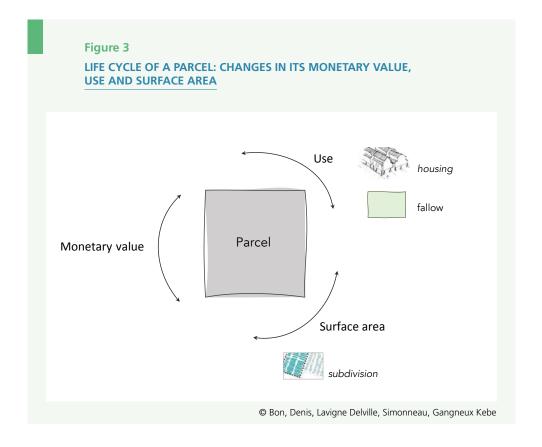
Countries such as Kenya and Benin are starting to digitise procedures, setting up digital platforms to register titles and transactions in order to prevent the same land being sold several times. National governments are also encouraging people to declare changes of land use, although there are regional variations in how this is done. Land agents who work with members of the diaspora support legal procedures to register land titles as they the reduce the risk of buyers becoming embroiled in the increasing number of illegal transfers, and use specialist lawyers to deal with different stages of registration.

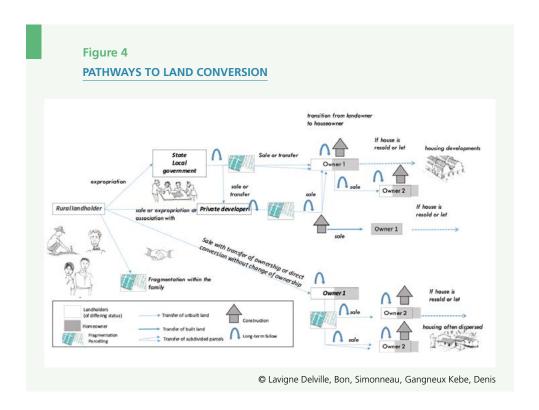
Summary

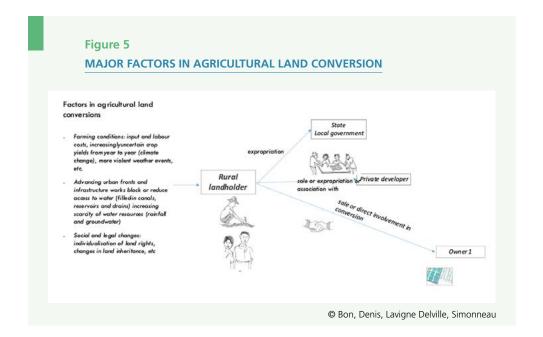
Conversion processes take different forms and are influenced by many factors, such as the location of the land, local legal norms and political and administrative practices, local economies and access to capital, monetary land values, etc. These factors partly depend on national political and economic frameworks, and partly on territorial factors such as proximity to urban centres, infrastructures and forthcoming major projects, or

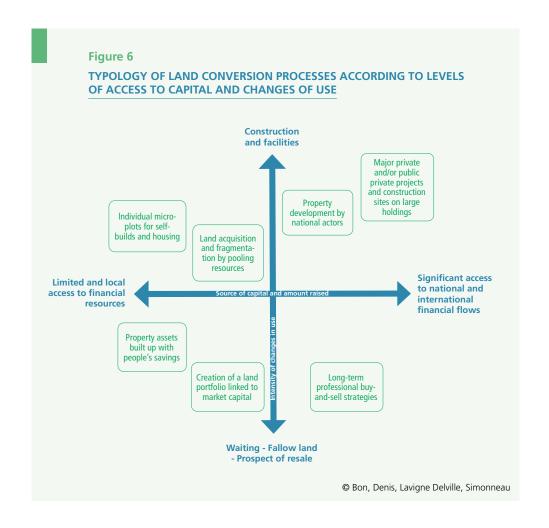
changing agricultural yields, which are themselves subject to environmental change. Landholdings and parcels evolve with land fragmentation and changes in their monetary value, use and surface area.

Figures 3 and 4 below provide visual overviews of these processes. Figure 3 focuses on the ways that rural land uses change according to the actors and chains of action involved (public and private actors; land fragmentation, sales, fallow); while Figure 4 highlights the different levels of access to capital (local, national, international) and highly differentiated changes in use, from leaving land fallow or simply subdividing it to building houses on it and then connecting it to services and infrastructures. As well as showing the marked contrasts between these processes, these figures also reveal the interconnections between large- and small-scale processes, such as when major projects lead to land being left fallow so that it can be resold or built on at a later date (Figure 5).









PART 5

Regulatory and monitoring issues and tools

hese land acquisitions and conversions will continue as urbanisation progresses, with diverse strategies and practices for acquiring and accumulating land and subdividing registered holdings. They involve a wide range of actors with disparate motivations, different economic resources, and unequal capacities to appropriate land resources. There are public strategies in place to regulate affected territories, but they seem to have minimal influence on these land dynamics and do little to address the many socio-economic and environmental issues associated with these largely uncontrolled or easily negotiable land conversions.

- >>> Environmental issues are largely overlooked in urban policies, large infrastructure projects and even calls to protect flood zones, coastlines and other vulnerable areas. Soils and subsoils are essential, non-renewable resources that store carbon, recycle organic matter and filter surface water. Subdividing land restructures the environment as more wells and boreholes are sunk, wood, stones, topsoil and other resources are extracted, surfaces are transformed by new access roads, walls and fences, and land is artificialised by construction or newly cultivated holdings. These practices can contribute to soil compaction, erosion and loss of organic matter, changing water flows and sealing soils in settings where the effects of climatic variability are often very localised. A significant drop in the water table can exacerbate localised droughts, as changes in the soil and subsoil affect microclimates already altered by longer dry spells and shorter and sometimes more intense rainy periods. Preserving woodlands in and around cities helps reduce temperatures in residential areas, where new arrivals often take over the management of wastewater services – which also contribute to groundwater pollution if they are not properly monitored. Reversibility is an important factor in protecting soil fertility and groundwater recharge capacities during urbanisation.
- >>> Inequalities, socio-spatial justice, financial inclusion and social protection are fundamental issues in these urbanisation processes. Land acquisitions and conversions reinforce or generate inequalities between rural landowners and (sometimes predatory) newcomers, and between working-class and wealthier urban actors competing for access to land, facilities and services. Certain practices should not simply be regarded as problematic, but also considered as responses to the socio-economic situation. These responses vary

according to whether the actors want land as an asset to store their savings, as a hedge against inflation (a form of social protection), or for housing. **Public policies rarely examine the socio-economic conditions that facilitate or encourage this land market** – unequal financial capacities amplified by abundant liquidity in urban production and the crisis in an often heavily indebted agricultural sector. But the main drivers of land conversions are economic and financial, reflecting the fact that it is far more profitable to buy, sell and subdivide land than it is to farm it.

- >>> These processes will affect the future of agricultural production and food security and sovereignty. Are sales of agricultural land evidence of agricultural decline and 'agrarian distress'? While the amounts of land vary, small farms are most affected by this emerging trend; and although large farms are better protected, many land conversions lead to the sterilisation of fertile soils. Agricultural activities continue unabated in some areas, while producers in others are adjusting their crops in response to urban influences and demands, and working to maintain soil fertility so that they can sell their produce on the urban market.
- >>> **Financial risks**. Potential speculative bubbles and uncertainties about the resale value of some mortgaged land leave investors exposed not only those with unstable economic resources, but also commercial banks and other financial institutions.
- Potentially unsustainable residential areas. Land markets are developing more quickly than local government capacities to plan, monitor and service new housing. Failure to provide new residential areas with the necessary infrastructures and services leads to vacant and degraded housing, impoverished neighbourhoods, a broader deterioration in residents' quality of life (conditions of mobility, access to services), and health inequalities.
 Sectoral housing and infrastructure policies need to do more to tackle service provision and local public finances. Local governments may have little room to manoeuvre or incentive to act when the revenues generated by land transactions give them a direct financial interest in land markets (income from taxes, registration charges, fees for changes in zoning, new housing on recovered land, etc.). They are often responsible for monitoring and regulating land transactions and conversions, but lack the financial and institutional capacities to do so. Another problem is their lack of accountability to their constituents.
- >>> Increased risk of land conflicts in sought-after spaces. Land transfers and conversions of agricultural, natural or grazing land into building lots usually involve negotiations at some level. Customary landholders, large landowners and farmers may willingly initiate these transactions themselves, or succumb to pressure from investors, the land administration or land brokers. These processes provide unprecedented opportunities for some actors, but also accentuate inequalities in local communities. New arrivals often have problems accessing basic services that appear on planning documents (road layouts, spaces reserved for public infrastructures, etc.) but do not always materialise in practice, and are rarely monitored or maintained when they do exist. Local governments then have to manage the possibly contradictory expectations of different groups of actors (former farmers and new arrivals) and deal with all the problems associated with resolving tensions and conflicts over land. These disputes may involve individuals acting on their own behalf, mobilise group networks or play out in collective arenas.

>>> Planning and zoning tools are inadequate, unable to deal with urban exceptionalism, infrastructure needs and mega-projects, or the intense demand for housing. Authorised zones rarely provide enough housing to meet people's needs, and speculative behaviours make it even more inaccessible. Authorisations are often retrospective, and plans are frequently passed because of the revenues the development will generate. Public policies that include mechanisms to control land transactions (plot sizes, types of investor) filter out certain types of investor and favour actors with private capital to invest in peri-urban development. Powerful actors can adjust their market strategies to these mechanisms, by moving to different territories and negotiating with different actors, for example.

The numerous issues raised by these land conversions indicate that a broad, crosscutting perspective is needed to analyse and consider how best to regulate them. Sectoral policies and legislation (especially on rural versus urban affairs, irrigated versus dry lands, or acquired rights for particular disadvantaged groups) often create legal gaps and grey areas that are open to exploitation at various stages in the land conversion process.

Updated analytical frameworks for thinking on public policies

One of the key lessons learned from this research project is that we need **to adopt a systematic, crosscutting approach to territorial development**. Land is not the only sector in play. It is equally important to consider three other crucial issues that affect conversion dynamics: adapting agricultural practices to climate change, meeting housing needs, and seeking solutions to financial exclusion and lack of social insurance.

- >>> Environment, natural resources and climate change: more specifically, a systematic approach entails moving from an urbanistic view that rationalises urban expansion, to an approach that takes account of the specific environments in which these changes to land use and living conditions take place (Vanuxem, 2018). The concept of urban bioregions (Magnaghi and Bonneau, 2014) is based on a territorial approach that considers an environment's specific characteristics and human and non-human relationships: actors' practices, specific political organisations, cultural, industrial and other types of heritage, and flora and fauna ecosystems. Introducing a sustainability perspective into a political ecology approach enables us to consider how to manage environmental capital and undeveloped land, and how to incentivise sustainable management of vegetative cover, water resources, etc. when local authorities are allocated land. Cities will have to face the accelerating environmental pressures associated with climate change (increasingly uncertain and scarce rainfall, flooding, torrential rains and landslides, more frequent heat waves, rising water levels and coastal erosion), which will entail looking after vegetative cover and maintaining or restoring permeable soils, wetlands and watercourses.
- >>> **Agricultural production**: the key issue here is agricultural activities and yields, and their predictability in the face of environmental stress. A comprehensive approach to this issue requires concerted action to address the growing uncertainty of agricultural activities, support in understanding the changes agriculture will face due to climate change, pressure on natural resources and the price of inputs and labour, and rural people's aspirations

(particularly rural youth – see the CTFD study on young people's access to land and the dynamics of changing agrarian structures). The food system also needs to be rethought in a more global way, in order to promote more localised food systems capable of producing nutritious, healthy and sustainable food. Special attention should be paid to peri-urban market gardens, which are under particular threat even though they are essential in producing healthy food that is accessible to very large numbers of people.

- >>> **Financial, social and educational inclusion**: land acquisitions provide the basis for social insurance and popular savings schemes to cover social, educational and health expenses. It is imperative to act on this driver of land use conversions, and promote the universal expansion of financial inclusion and social insurance schemes (in the broad sense) in precarious urban and rural contexts.
- >> Access and rights to housing: supporting grassroots housing production rather than retrospectively regularising it is a crucial step in rationalising land resources and providing access to networked infrastructures for basic services and travel needs. Securing the right to adequate housing in well-serviced territories (Rolnik, 2013) is an objective that can only be achieved by using local building knowledge to produce dense neighbourhoods with the resources they need for basic infrastructures.

Regulation: the need for an enlightened, shared vision and reflection on the conditions for effective public action

As the dynamics at work in these land use conversions are unlikely to lose momentum, something needs to be done to mitigate their adverse environmental, socio-economic and territorial impacts. However, it is not easy to implement regulations in this sector due to the complex interests at play and the contradictory effects of poorly coordinated sectoral public action at various levels.

Regulatory efforts will need to acknowledge and engage with the power relations between the diverse actors and interests involved. With this in mind, it seems more realistic to think about **regulating** territorial dynamics rather than introducing strict controls to confine the spatial extent of urban sprawl. Regulation in this sense involves mechanisms that help balance the different needs and interests at play in particular spaces and times, which can never be totally stabilised (Dubresson and Jaglin, 2002). It is a process of finding compromises between different issues (environmental and social justice issues, for example), resolving conflicts between different actors, and also supporting wealth creation.

Formulating public strategies to regulate land conversions requires certain upstream actions to: (1) clarify the current situation, which is often opaque but tolerated or negotiated with public actors (civil society activists and newly elected officials sometimes ask for a diagnosis of the situation, or even a land audit); and (2) define a desirable future where shared land capital is managed in ways that do more than simply protect ownership systems. All parties need to have a shared social, environmental and territorial ambition, supported by a clear political will. Only then will it be possible to arbitrate between actors with divergent interests and unequal capacities for action and anticipation, and to adjust the treatment of various issues according to different legal, political and economic mechanisms that may be specific to each territory. The objectives of the public strategy need to be defined: is it supposed to guide sales? Support development? Resolve conflicts? Strengthen public actors' capacities to intervene? Or protect peri-urban agriculture?

Finally, this strategy should combine territorial ambitions with clear policies. This will require pragmatic reflection on **the conditions for effectiveness**. A wide range of policies and regulatory instruments can be envisaged, and the most promising ones selected according to the particular political and social context, and the very concrete institutional conditions, opportunities, competences, etc. that will help or hinder implementation of the strategy.

Different regulatory approaches and levels

Peri-urban areas have become a public issue in several countries, which have implemented policies and regulatory and control mechanisms that involve residents, farmers and landowners to varying degrees. The approaches taken vary from country to country.

Regulations may relate to changes in land ownership, changes in land use, or construction certificates, and consist of monitoring land transactions or the processes whereby land uses change. The desire for regulation is often expressed through national policies to tackle agricultural issues or financial risks, or to protect natural resources; and through local management tools such as legal categories of land use, taxation, registering transactions, programmes to digitise transactions and register titles and cadastral information, or local development plans and building permits.

The economic and institutional context, which may or may not facilitate or incentivise land conversions, can also be regulated. This means that many sectoral public policies can indirectly influence the regulation of land use conversions:

- >> National land policies naturally have a bearing on matters such as the classification of land uses, expropriations, the development or privatisation of public land reserves, and major land and land tax reforms.
- >> Macroeconomic, financial and fiscal policies also come into play, mainly through major development projects and bank credit reforms (mortgages) that broaden the range of households that can access credit and are a major stimulus for urban sprawl.
- >> Agricultural and trade policies play an important role in stabilising farmer incomes and means of production or, conversely, in exacerbating the agrarian distress observed in certain regions.
- >> Social and housing policies and the support they provide for working class citizens are crucial in regulating the logic of urban and peri-urban land markets.
- >>> Environmental policies relating to biodiversity conservation, nature reserves, and natural resource extraction norms should also be linked to urban issues.
- >>> Decentralisation and devolution reforms affect local governments' financial capacity (taxation, fees on subdivisions, transactions and zoning changes), monitoring capacity (communal subdivisions, boundary and zoning changes) and ultimately their ability to monitor changes in land use.

Finally, **citizens may mobilise** to demand or initiate regulations to protect land that is slated for major projects, or to protect and defend common goods such as classified areas, wetlands, forests, pastures, coastlines, etc.

Recognising and resolving contradictory public actions

The final factor to consider in land conversion dynamics is possible contradictions between different levels of public action. On the one hand, national emergence policies stimulate urban sprawl through major projects, financialisation, and different kinds of support for housing production and the property sector. Economic actors' initiatives and expectations are taking precedence over the State's desire for supervision and planning, and the huge financial interests at play are accelerating territorial change in increasingly remote areas far from urban centres where land is less expensive. At the other end of the scale, lower-income actors who acquire microplots for housing, as a form of insurance against health risks, or to enable them to access resources and build up capital for an economic project or secure their children's future are also participating in the financialisation of land that has been taken out of agricultural use.

Conversely, pressure from voters and civil society to heed public debate on the artificialisation and monopolisation of land in peri-urban areas is strengthening the political will to find strategies to regulate, limit and guide urban expansion. Concerns about working-class access to housing and the need to support or even redevelop peri-urban and urban agriculture in order to shorten food supply chains are creating some pushback against liberal approaches that favour market-based development of peri-urban land in order to increase local income streams. Policies that promote market dispersion and artificialisation are under increasing pressure from environmental issues. As the need to model sustainable cities grows ever more acute, it is also important to acknowledge that environmental efforts to enhance local landscapes may also contribute to land scarcity and thus social exclusion as land prices rise. Land conversions must be considered in the context of increasing and increasingly contested metropolitan fragility.

This raises several dilemmas, as better support, structuring and rationalisation can increase costs in ways that conflict with efforts to improve social inclusion. More effective regulation requires institutional willingness and capacity in contexts where State and local government officials are often involved in land speculation. Many local administrations are already weak, and they are further limited when political actors use them to protect or even enhance their own land interests and electoral prospects. **The common interest is undermined by local elected officials and public actors who use the land registry, urban planning procedures, the agricultural sector or the justice system to enlarge their personal land portfolios and boost their incomes and assets.** Even where corruption is not involved, it is important to understand that many land conversions flow from negotiated norms or legal practices that serve not only political interests and local elites, but also enable ordinary people to access land and housing.

Government mechanisms are also used by diverse (and sometimes unexpected) actors with unequal economic resources and needs. This can disrupt other types of regulation and expose contradictions between different modes of public action. For example, instruments to facilitate the construction of affordable apartment blocks in the outer suburbs often include no measures to ensure that local developers consider their environmental impacts (soil pollution, heavy groundwater pumping, sand extraction), which then have to be dealt with by the local authorities.

There are also questions about the role that compartmented sectoral interventions by international institutions play in land conversions. Despite their increasing focus on these issues, their preference for particular urban, rural or sectoral approaches can lead to inconsistent strategies, as seen in two recently commissioned WAEMU studies on urban and rural land markets (see Box 15).

Box 16

CONTRADICTORY RECOMMENDATIONS FROM STUDIES ON URBAN AND RURAL LAND MARKETS COMMISSIONED BY THE WEST AFRICAN ECONOMIC AND MONETARY UNION (WAEMU)

WAEMU published two studies on urban and rural land markets in 2017.

Proposals in the **WAEMU study on urban land markets** (African Agency for Urban Planning and Development, 2017) aim to "promote and develop the urban land market in the WAEMU region" by consolidating the legal, fiscal and institutional environment (SO1), the economic and financial environment (SO2), urban planning and management tools (SO3), and actions to strengthen governance (SO4).

The study recommends a legal and institutional approach to regulating transactions: identify measures to regulate the market (Project 5) and generalise delivery of final property titles (Project 13), with precedence given to identifying business opportunities rather than regulating existing land transactions. Project 5 (control over land markets) aims to identify the actors in each country's urban land market, establish their activities and roles, and "measure the business niches in each centre of activity in order to control their exploitation and reduce negative externalities in the urban environment and surrounding rural land reserves."

The recommended approach to peri-urban areas, which are characterised as having "a dynamic relationship", is based on "exchange relations between rural and urban economies", with

- >> Harmonised planning through the establishment of urban areas (Project 9);
- >> The introduction of green belts (Project 11);
- >> Awareness raising and information about planning documents and land acquisition procedures (Project 12).

The main thrust of the recommendations is to harmonise legal and institutional arrangements at the WAEMU level (standardise planning, similar set-ups for professional bodies, etc.) and generalise land titles (land registration and conservation, Project 13) to support a mortgage housing market that is accessible to people on low incomes. Even though this seems unrealistic, the model of constructing and financing housing by developing mortgage credit seems to have been accepted without reservation.

WAEMU study on rural land markets (Lavigne Delville *et al.*, 2017a and 2017b; Merlet *et al.*, 2017). This study takes a socio-anthropological and pluralist approach. Its main recommendation for regulating transactions centre around four aspects of rural land markets:

- >> Securing transactions;
- >> Differentiated rules according to the spaces and actors concerned;
- >> Rebalancing actors' relationships to make land markets more equitable and economically efficient;
- >> Discouraging unproductive and speculative purchases.

.../...

In operational terms, the study recommends regulatory mechanisms that are "pragmatic, simple, rooted in reality and consistent with institutional capacities". The priority in regulating land markets is to ensure that contracts for both legal and non-legalised plots are secure. They can be secured with minutes of family council meetings or by formalising long-term leases in writing. In terms of land management, the local, communal and inter-communal rules that define spaces, uses and possible changes need to be clarified in a way that is consistent with development policies at different scales. Measures to rebalance the market, such as encouraging rentals, could make the economic environment more secure for producers. The final suggestion is to introduce an annual tax on unproductive land in order to discourage speculative land acquisitions.

Recommendations

The diverse dynamics at play make territorial planning and management at different scales extremely challenging. It is important to establish a strict framework for changes in land rights and land uses that recognises the complex strategies involved and facilitates sustainable territorial development while leaving working-class actors sufficient room to manœuvre and access the land they need for housing, to fund their life projects or secure their children's future. Some suggested guidelines for action based on our findings are presented below.

Strengthen dialogue between research and public action on land management in rural/urban interfaces

Measures to limit land conversions will not work if they take no account of stakeholders' needs. Regulatory and zoning measures are ineffective in tackling situations where people act out of necessity, distress, or the basic need to survive (deteriorating agricultural conditions, housing shortages): it is important to **understand the upstream logics and economic expectations** that drive land transactions, and their potential outcomes. This requires:

- >>> Better understanding of land's value as a form of insurance, the survival/heritage mechanisms that stimulate popular land markets, and how they relate to policies on financial inclusion (access to credit) and proposed universal insurance policies (health, education, etc.);
- >> Support for popular alternatives to insurance-based land capitalisation.

These socio-economic issues should be considered in terms of multi-actor governance rather than vertical and sectoral governance. Thinking around governance should regard resident communities as the main land actors in the locality, consider how their means and needs affect their capacities, and take account of what is happening outside the political and administrative boundaries of urban areas.

Participatory processes should be prioritised, and legal mechanisms that authorise enforceable citizen territorial planning are to be encouraged. As there are still very few studies on the empowerment of local governments in rural/urban interfaces where land is increasingly commodified, it would be useful to analyse how local authorities use their new

institutional mandates and decentralisation funds to prevent certain transactions or leverage urban investment.

Environmental and climatic changes in these urbanisation fronts should also be studied, with more interdisciplinary approaches, participatory science and better dissemination of survey data to the authorities and civil society. Environmental scientists have started investigating this issue by analysing pollution and pressures on agricultural soils and groundwater in periurban contexts (Tankari Dan-Badjo et al., 2013; Sorensen et al., 2015), but have so far focused on water stress and irrigation initiatives that concern producers (Simon et al., 2004). Clear links are sometimes made between the increasing commodification of land and privatised access to water (Bartels et al., 2018), but there is little focus on how the ecological context influences land transactions and resistance or adaptation to urban demands (Bertrand and Bon, 2022). Upstream data are needed on groundwater volumes and properties, and the agronomic and ecological conditions of artificialised land (Chéry et al., 2009). It would also be useful to revisit the concept of artificialisation in light of the prolonged fallow periods, extraction activities and temporary cultivation associated with peripheral urbanisation. Some authors argue that we should move away from an exclusionary definition of artificialisation (non-natural and non-forest land), and instead consider a gradient of soil disturbances – abandoned land uses, sealing, contamination, presence of vegetation. This would involve a shift from statistical categories of artificialised soils based solely on soil cover or the extension of built-up areas (for a summary, see Desrousseaux et al., 2019). Pollution in remote areas that are undergoing urbanisation also needs to be examined, as well as the possible health risks from dust raised by the increasing number of vehicles using unpaved roads, potential new zoonoses, and brownfield sites that are major breeding grounds for mosquitoes carrying diseases such as dengue and chikungunya.

In order to measure changes in land use and future urbanisation, we need to be able to count the number of plots that are left fallow (subdivided or otherwise). In the vast majority of cases, fallow land is not returned to productive use. Plots often go unwatered and may even have their topsoil sold, but are still counted as agricultural land while they are not built upon, even if it is years since they were last cultivated. The extent to which land uses have changed remains largely invisible as it is not captured by the statistics; and the measurements that are taken are usually gathered by rural and/or agricultural administrations, which look at them in terms of agricultural production and very rarely share them with urban administrations or land registries. This raises the issue of intersectoral information production and sharing between rural, agricultural, urban, environmental and water resource administrations. Land that is categorised as 'wasteland' should become a shared marker for detecting and anticipating change on urban fronts, or indeed any land. Participatory approaches could be developed to encourage local people to report wastelands (sharing geolocated photographs, etc.) so that the health risks associated with stagnant water, or fire or flood risks can be managed.

- >> Attempts have been made to tax undeveloped land (see Box 18, or the Kenyan case study in this report), but it is very hard to tax wasteland that is not recognised as building land. It would have to be taxed because of the lack of cultivation, which would not be popular.
- >> This raises the question of how the observation of noticeable changes in land use can link into changes in regulatory tools (new territories to be taken into account, new regulations, etc.).

Box 17

MECHANISMS AND TOOLS FOR LOCAL AUTHORITIES

Knowledge of the situation and dynamics at play, relevant expertise, and territorial coordination are vital factors in defining and steering policies to address planning, structural and regulatory issues. Increasingly powerful technical tools are becoming available (such as satellite imagery with raw or processed data, see Box 1: Redefinitions and new sources of urban data), along with participatory territorial engineering techniques for prospective urban planning and thinking that involve all the different actors who make up cities. If local authorities are to use these tools effectively, they need to prioritise their urban policy objectives, organise themselves accordingly, and have the human resources and expertise needed to pursue these objectives. These are all organisational and financial challenges.

One way of tackling these challenges is to set up urban planning agencies, which are mandated to deal with these territorial and land development issues, bring together diverse resources and technical expertise, and are designed to serve their members, whose nature and number vary according to the country and agglomeration concerned. There are various models of urban agency around the world: from the Institute of Urban Research and Planning in Curitiba, Brazil (IPUCC, https://ippuc.org.br/) to agencies in Morocco whose tasks include conducting studies for urban development master plans, monitoring their implementation, and providing technical assistance to local authorities and public establishments responsible for urban planning. A number of these urban agencies are listed in the Metropolitan and Territorial Planning Agencies (MTPA) network.

The French Development Agency (AFD) has contributed to the emergence of these tools, working in partnership with the Fédération Nationale des Agences d'Urbanisme (FNAU) and its members at the international level. It has published a guide to creating an urban planning agency (https://www.fnau.org/wp-content/uploads/2016/10/guide-afd-fnau-a4-v19-1.pdf) and supported specific initiatives such as the Greater Antananarivo urban planning agency (IPAM) in Madagascar, which opened in 2020. IPAM's mission is to disseminate knowledge, advice and urban expertise to help develop the agglomeration that includes the urban commune of Antananarivo and 37 peripheral communes. It is structured around two objectives: to act as a shared resource centre for knowledge of the Greater Antananarivo area, and to play a key role in construction of the city by providing advice and expertise. It is expected to contribute to better managed urban development through knowledge, technical expertise, advice and territorial coordination.

Some agencies have set up specific land observatories. The Urban Planning and Development Agency for French Guiana in the French Overseas Territories set up an observatory to improve monitoring of the territories' land and property markets (whose opacity and complexity were distorting prices), learn more about their land reserves and potential for urban projects, and make the data public via an open portal (https://www.geoguyane.fr). Other bodies and mechanisms to help clarify various aspects of urban dynamics include regional organisations such as the Centre for Affordable Housing Finance in Africa (CAHF). Rather than a single model, there is a series of tools and mechanisms that can be adapted to the needs of local authorities in the South and help them meet the challenges of managing their territory and preserving their agricultural land.

Alix Françoise, French Development Agency

Engage with conflicting interests: negotiation is preferable to power struggles and conflicts, even if it is asymmetrical

Participatory mechanisms are needed to rebalance the power relations between actors whose divergent interests and capacities for action leave some parties in an extremely vulnerable position. These mechanisms could include:

- >> Holding genuine public enquiries ahead of large-scale private projects and initiatives that wish to be included in public utility recognition procedures;
- >>> Reviewing the fines and penalties payable by members of the administration or local elected officials who are found guilty of corruption, issuing illegal certificates or taking decisions that conflict with legal provisions and thereby causing local people to lose their legitimate land rights;
- >> Organising consultations in territories with high rates of land conversion, with multistakeholder territorial planning mechanisms, where they exist.¹³

The potential revenues generated by land conversions can result in the public authorities having conflicting interests in these processes, making them both part of the problem and part of the solution.

Another consideration is the levels at which regulations should be set. As land conversions usually extend beyond communal boundaries, inter-communal bodies (where they exist) can be agents of reflection and action. Including other institutions (families, the State, user groups, etc.) in discussions about food security, environmental justice and other issues can help communities build a collective vision of what they are losing and what they are gaining through land conversion and urbanisation processes.

This recommendation draws on the lessons learned from decades of participatory processes, especially those relating to large-scale rural land grabs. One key lesson learned is the importance of the conditions in which these processes are implemented, and the need to:

- >>> Ensure that participation is transparent and open to economic actors and investors who are often regarded as disruptive;
- >>> Encourage the use of objective mechanisms to enable affected actors to express their opinions, and give realistic presentations of the projects' negative effects as well as their positive impacts (Durand, 2019; Leblond, 2019);
- >>> Remember that civil servants, representatives of public administrations (taxes, land registry, agriculture, etc.) and local elected officials are often landowners or investors themselves, and may therefore have a personal interest in urban development. More independent and frequent local consultation procedures are needed to improve on the current system, which gives elected local politicians powers to plan and modify land uses (legislative frameworks and urban planning codes cannot always guarantee that the common interest will be served).

^{13.} Such as the major consultation process for the Niayes 2040 project.

Developing legal regulations that support social and environmental justice

The speed at which land conversions are occurring is partly due to the legal uncertainties surrounding the process. Changes to certain legal statutes could improve the way that responsibilities are shared, particularly environmental responsibilities:

- >> Strengthen co-ownership by new residents in developed areas by giving them joint responsibilities for environmental issues and including them in reflections on the legal framework for soil and subsoil ownership. There could be more specific checks on groundwater exploitation (hydrogeological studies and sanitation inspections), natural resource extraction, overexploitation of groundwater for agricultural activities and irrigation, and the construction of wells and boreholes; along with legislation setting out provisions for groundwater protection or recharge.
- >>> Civil society could support citizen land trusts as an alternative way for residents to take practical action on land issues, protect land and support local agriculture (see *Terres de liens* in France, cooperative statutes in various countries, Community Land Trust). These citizen land trusts could link up with actions to preserve existing rural commons and secure pastoral commons by including transhumants.
 - Existing land and exploitation rights should be respected and secured:
- >> Avoid forced sales and dispossessions, even of 'informal' rights;
- >>> When land is expropriated, ensure that proper compensation is paid and solid mechanisms for reparation and managing complaints are in place. Land should only be expropriated if it is in the public interest, or if the landholder does not agree with a locally approved collective project (plots in the middle of the project site). Compensation should take account of the farmers' loss of livelihood and enable them to rebuild sustainable livelihoods;
- >>> Enable rural farmers to postpone projected sales by helping improve farm incomes, facilitating access to credit and agricultural insurance, and supporting collective initiatives that enable farmers to continue their agricultural activities (agricultural land groups, etc.);
- >> Formalise and secure purchases of unregistered land;
- >>> Help secure and facilitate access to land for the most vulnerable members of society through social agreements that make land available to women's and youth groups, land reserves for future generations, etc.

Use planning and forecasting instruments to harmonise different sectoral approaches and timeframes

Compartmentalised public actions can lead to contradictory efforts and unanticipated territorial effects in the short or medium term. Various steps could be taken to counteract these perverse effects:

>> Link infrastructure planning (particularly for roads) with land management policies to improve the management of emerging zones and areas where speculative land purchases are increasing;

- >> Understand and anticipate the spatial dynamics that sectoral policies generate, especially economic emergence policies regarding SEZs, new towns, affordable housing and tourism development;
- >> Develop and encourage the implementation of clear, simple standards that provide, if possible, a minimum framework for development and parcelling processes, ¹⁴ such as minimum criteria for the following aspects of communal development plans: wetlands, water circulation, minimum town planning standards (roads, public spaces, connections to essential services), maintaining agricultural spaces, and environmental standards.

Support local management capacities

All of our case studies highlight the importance of local management, particularly for decentralised and devolved services previously undertaken by central authorities such as national environmental agencies. But local management bodies often lack the necessary capacity for action and are poorly coordinated with other institutional levels. A better balance between responsibilities and capacities at different institutional levels is needed. This could be achieved by:

- >> Continuing to strengthen local authorities' financial, technical and human capacities, particularly in processing and archiving land and environmental data;
- >>> Where necessary, setting up specific land management training courses to help local authorities and land administrations recruit qualified staff;
- >> Promoting cross-sectoral coordination tools and platforms;
- >>> Putting in place public information systems (public displays at town halls and deconcentrated service offices) for more transparent governance of development and subdivision operations;
- >> Setting conditions for the negotiation and approval of private developments;
- >> Developing recurrent and conditional financing arrangements for parcelling groundworks so that they don't become money-spinners for public and private actors (such as conditional investment funds held by ministries or communities).



LOCAL FINANCE IN RAPIDLY URBANISING REGIONS

The international aid and economic research community has long debated local finance in the global South. This debate was particularly lively when decentralisation reforms were at their height in the 1980s and 1990s, and came back into focus in the late 2000s, fed by reports and initiatives by local actors, organisations such as the Lincoln Institute for Land Policy (LILP) and the International Centre for Tax and Development (ICTD), and the joint OECD-UCLG initiative to set up a World Observatory on Subnational

.../..

^{14.} This recommendation picks up on some of Tribillon's work on African cities, particularly Tribillon (1993).

Government Finance and Investment (SNG-WOFI) in 2017.¹⁵ The Global Land Tool Network is also a centre for resources on local finance.

Analysis of major trends in local government **revenues** in the global South show that overall revenues are low, and mainly based on State transfers (which account for 58% of local government revenues in Africa). This reduces local governments' autonomy and their capacity to fulfil their mandate to deliver urban services and amenities. Levels of **investment and expenditure** are also low: local governments in Africa account for just 19% of public investment, compared with 36% and 41% globally (OECD/UCLG, 2019).

There has been a particular focus on sources of local revenue that enable local governments to become financially autonomous and to **finance urbanisation** – to provide the services and facilities they are responsible for in both existing cities and surrounding areas undergoing rapid urbanisation (Paulais, 2012; OECD et al., 2022; Bahl et al., 2013; Goodfellow, 2015). Land-based taxation also returned to prominence in recent years against a backdrop of urban development and sustained urban growth, with key publications by authors such as Berrisford et al., 2018, Cirolia and Mizes, 2019, and Walters et al., 2016.

Property taxation mechanisms are a feature of their work, following the economic theory that land and property are immobile assets and therefore suitable targets for local taxes. These taxes are usually raised on built-up land, although unbuilt land and sales of building rights are sometimes taxed too, as are leases on public land (land leasing) in countries with British-style land laws. Money can also be raised through land readjustment, where land patterns are restructured and some land may be transferred into the public domain for infrastructures. This facilitates major development operations that can be partly funded with money from landowners. ¹⁶

Land value capture or ground rent also feature prominently in this line of thought. Land value capture is a set of tools that enables public authorities to take advantage of rising urban land values, particularly when building new infrastructures. This can be done by making landowners or developers whose land increases in value pay capital gains tax (betterment levies), or getting developers to make financial or in-kind contributions (developers exactions). These tools are mainly used in emerging economies where land prices are soaring (Brazil, India, Colombia). They require significant public capacity for implementation, and are less widely used on the African continent, where land tenure systems are complex and land information is lacking.

Academics have paid less attention to vacant or fallow land, which is rarely taxed (Franzsen and McCluskey, 2017). This type of land is often exempt from taxation, either because it is located outside urban areas (in contexts where only urban areas or built-up land are taxed) or because it is technically difficult and socially unacceptable to tax (because it is hard to identify the owner, or because it is customary rural land, not connected to urban services, or is in a rural area where incomes are very low).

^{15.} With support from the Asian Development Bank, AFD, the Council of Europe Development Bank, the French Ministry of Foreign Affairs, the United Nations Capital Development Fund, and the Development Partners Network on Decentralisation and Local Governance (DeLoG).

^{16.} Land consolidation in peri-urban areas of Benin is an example of this. Berrisford *et al.* (2018) refer to Global Land Tool Network country reports and exchange visits to discuss the potential of land consolidation in Africa, citing publications such as Fourie, C. (2004), Land Readjustment for Peri-Urban Customary Tenure: The Example of Botswana, Earthscan press, London, and Adam, A. G. (2015), Land readjustment as an alternative land development tool for peri-urban areas of Ethiopia, *Property Management*, No. 33(1), pp. 36-58.

Rural land taxes generally depend on the legal status of the land. Taxes often only apply to registered or titled land, and countries such as Kenya, Botswana, Lesotho, Uganda and Zimbabwe only charge property taxes in urban or developed areas. In some countries (such as Mozambique and Tanzania), all land is owned by the State and is not taxable. It can be leased, but rent collection is generally low.

Tools for taxing **vacant urban land** are more commonly available. Franzsen and McCluskey (2017) note that vacant or undeveloped land in urban areas of Africa is taxed in countries with Anglo-Saxon systems, such as Botswana, Kenya, Namibia, South Africa, Swaziland and Zimbabwe. Francophone countries such as Benin, Burundi, Central African Republic, Chad, Congo, Côte d'Ivoire, Gabon, Madagascar and Togo have a specific tax for this type of land, although it is rarely enforced. A few countries, such as Botswana, Liberia, Namibia and South Africa offer tax incentives to develop urban land in order to reduce land vacancy in densely populated areas. For example, vacant plots in Pretoria, South Africa, are taxed at over six times the rate of residential land. In Namibia, tax penalties apply to unused land in planned urban development areas, with rates doubling if the land remains vacant for two years, and quadrupling after five years.

Latin America has some fairly longstanding examples of this kind of tax (Haas and Kopanyi, 2017; de Araujo Larangeira, 2003). Porto Alegre in Brazil introduced a vacant land tax in 1988, along with the new state constitution, and applied it relatively effectively to the small number of owners (65) holding vacant land in the city. In Colombia, Bogotá charges tax on vacant land at a rate that triples over a ten-year period if the land is not developed. The city can also reclaim land that is left undeveloped for more than two years and put it up for public auction. The city of Mexcali in northern Mexico introduced a staggered tax that increases by 25% each year the land is left vacant. This was considered particularly successful as it not only generated a twelvefold increase in municipal revenues, but also prompted many owners to register their properties in order to avoid paying the tax. The tax was not staggered in Mexico City and other urban areas across the country. Metropolitan areas in the Philippines have the option of applying a 5% surcharge on vacant land, which is now enforced in most cities, and Quezon City in Metro Manila charges 3% tax on vacant land near national highways (McCluskey and Franzsen, 2013).

The studies also examine **the performance of existing tax systems**, looking at tax management and administration, governance, and the political issues associated with land taxes. Updating land information in fast-growing regions is a huge challenge, especially in sub-Saharan Africa, whose specific characteristics, complex land tenure systems and legal pluralism make it hard to maintain land databases (Franzsen and MacCluskey, 2017). The social contract between citizens and local public authorities is sometimes tenuous, especially when these authorities are newly installed; and the volume of international aid in some countries can also dampen the political will to implement local taxes.

Finally, there has been no focused reflection or concrete experience with brownfields on the outer edges of urban areas. A first step would be to conduct dedicated empirical research to document them and determine why taxing them seems to be such a challenge.

BIBLIOGRAPHIC REFERENCES

- ABABSA, M. (2020). Diagnostic du secteur du logement abordable en Jordanie. Agence française de développement, Ifpo.
- ACEY, C. (2018). Rise of the synthetic city: Eko Atlantic and practices of dispossession and repossession in Nigeria. In Sweet, E. L., (Ed.), Disassembled Cities. Routledge.
- ADEGBINNI, A. (2015). Production foncière et patrimoine socio-cultuel au Bénin : cas des communes d'Adjarra et d'Avrankou. Université de Bretagne occidentale, Brest.
- ADEGBINNI, A. (2018). Les terres sacrées, nouveaux fronts d'urbanisation au Bénin.
 Les Cahiers d'Outre-Mer, No. 278.
- ADJAHOUHOUE, L. (2013). Dynamiques sociales autour du foncier péri-urbain de Cotonou au Bénin : logiques des acteurs et vulnérabilité sociale. Thèse de doctorat en socioanthropologie, Université d'Abomey-Calavi.
- AFRICAN URBAN PLANNING AND DEVELOPMENT AGENCY (2017). Étude sur la promotion du marché foncier urbain au sein de l'espace UEMOA. Rapport final, UEMOA.
- AGIER, M. (2014). Un monde de camps. La Découverte.
- ANDREASEN, M., AGERGAARD, J., MOLLER-JENSEN, L. (2016). Suburbanisation, homeownership aspirations and urban housing: Exploring urban expansion in Dar es Salaam. *Urban Studies*, No. 54(10), pp. 2342-2359.
- ARAUJO LARANGEIRA (de), A. (2003). Vacant land in Latin Americas: Challenges and opportunities. Working paper WP06AA1, Lincoln Institute of Land Policy.
- AUBRY, C. (2013). Les fonctions alimentaires de l'agriculture urbaine au Nord et au Sud-Diversité et convergences. Bulletin de l'Association de géographes français, No. 90(3), pp. 303-317.
- AVELINE-DUBACH, N. (2016). Les dynamiques différenciées de la « bulle immobilière » chinoise. Cybergeo : revue européenne de géographie.
- AVELINE-DUBACH, N. (2017). Un nouveau défi pour la recherche. L'articulation des marchés fonciers et immobiliers à l'heure de la financiarisation, Revue Foncière, No. 19, pp. 6-9.
- AVELINE-DUBACH, N., LE CORRE, T., DENIS, E., & CLAUDE, N. (2020). Les futurs du foncier : modes d'accumulation du capital, droit de propriété et production de la ville. Pour la recherche urbaine, CNRS Éditions, pp. 312-335.
- BA, A., & AUBRY, C. (2011). Diversité et durabilité de l'agriculture urbaine : une nécessaire adaptation des concepts ? *Norois*, No. 221 (décembre), pp. 11-24.
- BAHL, R. W., LINN, J. F., & WETZEL, D. L. (Eds.) (2013). Financing metropolitan governments in developing countries. Lincoln Institute of Land Policy.

- BALAKRISHNAN, S. (2019). Recombinant urbanization: Agrarian—urban landed property and uneven development in India. *International Journal of Urban and Regional Research*, vol. 43(4), pp. 617-632.
- BANON, F., & JEHLING, M. (2020). Looking for innovation Trajectories of land transaction and readjustment in West Africa. Cities, No. 106.
- BARTELS, L. E. (2019). Peri-urbanization as quiet encroachment by the middle class.
 The case of P&T in Greater Accra. Urban Geography, No. 41(4), pp. 524-549.
- BAWA, A. (2017). Mutation des périphéries urbaines au sud du Togo. Des espaces ruraux à l'épreuve du peuplement et de la marchandisation des terres. Université de Montpellier.
- BERCEGOL (de), R., BON, B., & LÉVY, K. (2021). In the shadow of the tower planters. Affordable housing in the outskirts of Indian cities. NAQD, No. 38-39(1), pp. 267-284.
- BERRISFORD, S., CIROLIA, L. R., & PALMER, I. (2018). Land-based financing in sub-Saharan African cities. Environment & Urbanization, No. 30(1), pp. 32-52.
- BERTRAND, M. (2019). A cadastre for Mali? The production of land titles and the challenge of data on the periphery of Bamako. Land Use Policy, No. 81, pp. 371-381.
- BERTRAND, M. (2021). Bamako. De la ville à l'agglomération. IRD Éditions.
- BERTRAND, M. (2021). Une Afrique des convoitises foncières : regards croisés depuis le Mali. Presses universitaires du Midi, Toulouse.
- BERTRAND, M., BON B. (2022). Négocier la terre en attendant la ville : marchés fonciers et gouvernance périurbaine en Afrique subsaharienne. Canadian Journal of African Studies.
- BOUTRY, M., PYAE SONE, K., CHIN PAR, S., & MYO WIN, T. (2016). Land dynamics and livelihoods in peri urban Yangon, The case of Htantabin township. Rapport de recherche du Gret.
- BREDENOORD, J., LINDERT (van), P., & SMETS, P. (Eds.) (2014). Affordable housing in the urban global south: Seeking sustainable solutions. Routledge.
- CAMARA, F. (2017). Les titres fonciers autour de Bamako : mode d'accès et impacts sur les usages. VertigO – la revue électronique en sciences de l'environnement, No. 17(1).
- CHEN, G., LI, X., LIU, X., CHEN, Y., LIANG, X., LENG, J., XU, X., LIAO, W., QIU, Y., WU, Q., & HUANG, K. (2020). Global projections of future urban land expansion under shared socioeconomic pathways. *Nature Communications*, No. 11(537).
- CHÉRY, P., LEE, A., SLAK, M.-F. (2009). Impact de l'urbanisation en espace rural sur l'empreinte écologique Prise en compte du patrimoine sol. In Actes des journées d'études « Urbanisme raisonné en milieu rural De nouveaux modes d'habiter à inventer », 1-2 octobre 2008, Agen, pp. 17-20.
- CHOPLIN, A. (2020). Matière grise de l'urbain : la vie du ciment en Afrique. MétisPresses.
- CIROLIA, L. R., & MIZES, J. C. (2019). Property tax in african secondary cities: Insights from the cases of Kisumu (Kenya) and M'Bour (Senegal). African Property Tax Initiative (APTI).
- CIROLIA, L. R., BERRISFORD, S. (2017). Negotiated planning': Diverse trajectories of implementation in Nairobi, Addis Abeba, and Harare. Habitat International, No. 59, pp. 71-79.
- COLIN, J.-P. (2004). Droits fonciers, pratiques foncières et relations intra-familiales : les bases conceptuelles et méthodologiques d'une approche compréhensive, *Land Reform*, *Land Settlement and Cooperatives*, No. 2004(2), pp. 55-67.

- COLIN, J.-P. (2017). Émergence et dynamique des marchés fonciers ruraux en Afrique subsaharienne. Un état des lieux sélectif. Cahiers du Pôle Foncier, No.18/2017, Dakar/ Montpellier, IPAR/IRD.
- COLIN, J.-P., & BOUQUET, E. (2022). Les marchés fonciers. Dynamiques, efficience, équité.
 In COLIN, J.-P., LAVIGNE DELVILLE, P., & LÉONARD, E. (Éd.), Le foncier rural dans les pays du Sud. Enjeux et clés d'analyse. Marseille/Versailles, IRD/Quae, pp. 453-522.
- COLIN, J.-P., LAVIGNE DELVILLE, P., & JACOB, J.-P. (2022). Le foncier rural. Droits, accès, acteurs et institutions. In COLIN, J.-P., LAVIGNE DELVILLE, P., & LÉONARD, E. (Éd.), Le foncier rural dans les pays du Sud. Enjeux et clés d'analyse. Marseille/Versailles, IRD/Quae, pp. 25-74.
- COMBY, J. (2000). La réforme du droit foncier au Bénin. Éléments de constat. SERHAU/ SEM.
- OWAN, T. (2018). The Urban village, agrarian transformation, and rentier capitalism in Gurgaon, India. *Antipode, A Radical Journal of Geography*, No. 50 (5), pp. 1 244-1 266.
- CROESE, S. (2018). Global urban policymaking in Africa: A view from Angola through the redevelopment of the bay of Luanda. *International Journal of Urban and Regional Research*, No. 42(2), pp. 198-209.
- CROUSSE, B., LE BRIS, E., & LE ROY, E. (1986). Espaces disputés en Afrique noire. Pratiques foncières locales. Karthala, Paris.
- DATO AGBEGNIDO, H. (2021). La ville par décret : foncier et logements sociaux en périphérie de Cotonou au Bénin. Mémoire de master universitaire en développement territorial, Université de Genève.
- DEFRISE, L., BURNOD, P., TONNEAU, J.-P., & ANDRIAMANGA, V. (2019). Disparition et permanence de l'agriculture urbaine à Antananarivo. L'Espace géographique, No. 3 (48), pp. 263-281.
- DENIS, É. (2011). La financiarisation du foncier observée à partir des métropoles égyptiennes et indiennes. Revue Tiers Monde, No. 206 (2), pp. 139-158.
- DENIS, É. (2016). Désirs de ville et convoitises foncières. Marchandisation du sol dans les Suds. Métropolitiques.
- DENIS, É. (2017). Désirs de ville et convoitises foncières. Métropolitiques.
- DENIS, É. (2020). More urban constructions for whom? Drivers of urban built-up expansion across the world from 1990 to 2015. In Pumain, D. (Ed.), Theories and Models of Urbanization. Springer, pp. 235-258.
- DENIS, E., & ZÉRAH, M.-H. (2017). Subaltern urbanisation in India: An introduction to the dynamics of ordinary towns. Springer, Berlin.
- DESROUSSEAUX M. et al. (2019). Sols artificialisés. Déterminants, impacts et leviers d'action. Éditions Quae.
- DINH, S. (2016). Des rizières aux plots : conversion foncière et stratégies des acteurs locaux en Inde du Sud. Mémoire de master, Université Paris Panthéon-Sorbonne.

- DIONGUE, M. (2020). Gestion des propriétés lignagères et stratégies d'appropriation à la périphérie de Dakar : le cas de Kounoune dans la commune de Bambilor (Sénégal). In Bertrand, M. (Éd.), Une Afrique des convoitises foncières. Regards croisés depuis le Mali. Presses Universitaires du Midi, Toulouse, pp. 231-248.
- DIOP, D. (2012). Urbanisation et gestion du foncier urbain à Dakar : défis et perspectives.
 L'Harmattan.
- DIOP, D., & TIMERA, A. S. (2018). Diamniadio, naissance d'une ville nouvelle : enjeux et défis d'une gouvernance durable. L'Harmattan.
- DOEVENSPECK, M. (2004). Migrations rurales, accès au foncier et rapports interethniques au sud du Borgou (Bénin): une approche méthodologique plurielle. Afrika Spectrum, No. 39(3), pp. 359-380.
- DORIER-APPRILL, E. (2005). Information géographique: un outil pour la décision municipale ou un produit de rente? SIG et registre foncier urbain à Porto Novo et dans sa zone péri-urbaine (Bénin). In Miras (de), C. (Éd.), L'information de la décision municipale: Outil pour une gestion décentralisée de la cité et marqueur des dynamiques sociales et spatiales. Contextes urbains maliens et béninois. Rapport final Action de recherche MAE/IRD-CODESRIA.
- DUBRESSON, A., & JAGLIN, S. (2002). La gouvernance urbaine en Afrique subsaharienne : pour une géographie de la régulation. Historiens et Géographes, No. 379, pp. 67-75.
- DURAND-LASSERVE, A., DURAND-LASSERVE, M., & SELOD, H. (2015). Le système d'approvisionnement en terres dans les villes d'Afrique de l'Ouest. L'exemple de Bamako (p. 131). The World Bank.
- DURAND, J.-M. (2019). Respecter le consentement préalable, donné librement et en connaissance de cause au Sénégal. FAO/IPAR.
- ESPOSITO, A. (2020). Figures d'un urbanisme aspirationnel. Les villes secondaires d'Asie du Sud-Est à l'heure de la Belt and Road Initiative. Urbanités.
- FANCHETTE S. (2015). Gestion foncière métropolitaine et confrontations entre société villageoise et État/province (delta du fleuve Rouge). Hérodote, No. 157, numéro spécial Vietnam, pp. 184-199.
- FAO (2010). Climate Smart Agriculture. Food and Agriculture Organization (online).
- FAO (2012). Growing greener cities in Africa. First status report on urban and peri-urban horticulture in Africa. Food and Agriculture Organization of the United Nations, Rome, Italy (online).
- FAO (1999). Issues in urban agriculture. Food and Agriculture Organization of the United Nations, Agriculture and Consumer Protection Department (online).
- FAUVEAUD, G. (2020). The new frontiers of housing financialization in Phnom Penh, Cambodia: the condominium boom and the foreignization of housing markets in the global South. *Housing Policy Debate*, No.30(4), pp. 661-679.
- FRANZSEN, R., & MCCLUSKEY, W. (2017). Property tax in Africa. Status, challenge and prospects. Lincoln Institute of Land Policy.

- GAO, J., & O'NEILL, B.C. (2020). Mapping global urban land for the 21st century with data-driven simulations and shared socioeconomic Pathways. *Nature Communications*, No. 11 (2 302).
- GENESTE, P., HARBONN, C., JESTIN, J., LE TROTER SERRA, D. SALENSON, I., & VALETTE, J.-F. (2022). Le sol social mexicain porte-t-il encore des communs? *Ejidos* et lotissements d'intérêt social dans la périphérie de Mexico. Papiers de recherche AFD, No. 228 (janvier).
- GLELE, G. A. (2014). La périurbanisation et les dynamiques foncières sur le plateau d'Allada (Sud-Bénin): l'espace témoin de la commune d'Abomey-Calavi. Université d'Abomey-Calavi.
- GONÇALVES, R. S. (2016). Quelle régularisation foncière pour les villes brésiliennes ? Défis et obstacles. Métropolitiques.
- GOODFELLOW, T. (2015). Taxing the urban boom: Property taxation and land leasing in Kigali and Addis Ababa. ICTD Working Paper 38.
- GROSSMAN, J. (2018). Toward definition of diaspora. Ethnic and Racial Studies, No. 42 (2019), Issue 8, pp. 1263-1282.
- GUIGMA, L. (2019). Le « Marteau », un coup dur sur l'homogénéisation des quartiers de Ouagadougou. Ouagadougou urban project management workshop.
- GURURANI, S., DASGUPTA, R. (2018). Urbanisation beyond cities in South Asia. Frontier urbanism. Economic & Political Weekly, No. 53(12), pp. 41-45.
- HAAS, A. R. N., & KOPANYI, M. (2017). Taxation of vacant urban land: From theory to practice. International Growth Centre.
- HAMILTON, A. J., BURRY, K., MOK, H.F., et al. (2014). Give peas a chance? Urban agriculture in developing countries. A review. Agronomy for Sustainable Development, No. 34, pp. 45-73.
- HANLON, T., KRAKOWKA A., SHELZI, J., & MYERS, G. (2019). Cultural identity in the peri-urban African landscape: A case study from Pikine, Senegal. African Geographical Review, No. 38 (2), pp. 157-171.
- KAKAI, S. H. F. (2012). Government and land corruption in Benin. LDPI Working Paper, Land Deal Politics Initiative.
- KAMDEM, P. (2015). Éléments d'une géopolitique des migrations au Cameroun. L'Harmattan, Paris.
- KAMDEM, P. (2017). Le Programme de la route des chefferies à Dschang : patrimonialisation, migrations et développement local dans les hautes terres de l'Ouest-Cameroun. Espace Populations Sociétés (en ligne), No. 2017/3.
- KAMDEM, P. (2017). Scolarisation et vulnérabilité: les enfants réfugiés centrafricains dans la région de l'Est-Cameroun. Espace Populations Sociétés (en ligne), No. 2016/3.
- KAMUSOKO, C., & CHIKATI, E. (2017). Harare metropolitan area. In MURAYAMA, Y., KAMUSOKO, C., YAMASHITA, A., & ESTOQUE, R., Urban Development in Asia and Africa. Geospatial Analysis of Metropolises. Springer, Singapore, pp. 347-370.
- KARAMAN, O., SAWYER, L., SCHMID, C., & WONG, K. P. (2020). Plot by plot: Plotting urbanism as an ordinary process of urbanisation. Antipode, No.52 (4), pp. 1 122-1 151.

- KIHATO, C., & ROYSTON, L. (2013). Rethinking emerging land markets in rapidly growing Southern African cities. *Urban Forum*, No. 24(1), pp. 1-9.
- KINUTHIA, H., MAJALE, C., & LETEMA, S. (2021). Influence of public policy planning on peri-urban land speculation in (Greater) Eastern bypass in Nairobi metropolitan. *Land Use Policy*, No. 107.
- KPIENBAAREH, D., & LUGINAAH, I. (2019). Modeling the internal structure, dynamics and trends of urban sprawl in Ghanaian cities using remote sensing, spatial metrics and spatial analysis. African Geographical Review, No. 39(3), pp. 189-207.
- KUUSAANA, E. D., & ELEDI, J. A.(2015). As the city grows, where do the farmers go?
 Understanding peri-urbanization and food systems in Ghana. Evidence from the Tamale metropolis. *Urban Forum*, No. 26(4), pp. 443-465.
- LABBÉ, D., MUSIL, C. (2017). Les « nouvelles zones urbaines » de Hanoi (Vietnam) : dynamiques spatiales et enjeux territoriaux. Mappemonde, varia, No. 122.
- Land Tenure and Development Technical Committee (2015). Formalising land rights in developing countries: moving from past controversies to future strategies. Paris, MAEDI/ AFD.
- LAVIGNE DELVILLE, P., COLIN, J.-P., KA, I., & MERLET, M. (2017). Étude régionale sur les marchés fonciers ruraux en Afrique de l'Ouest et les outils de leur régulation. UEMOA – Union Économique et Monétaire Ouest Africaine, vol. 1.
- LAVIGNE DELVILLE, P., COLIN, J.-P., KA, I., & MERLET, M. (2017). Étude régionale sur les marchés fonciers ruraux en Afrique de l'Ouest et les outils de leur régulation. UEMOA/IPAR.
- LAVIGNE DELVILLE, P., COLIN, J.-P., KA, I., et al. (2017a). Étude régionale sur les marchés fonciers ruraux en Afrique de l'Ouest et les outils de leur régulation. Volume I. Ouagadougou, UEMOA/IPAR.
- LAVIGNE DELVILLE, P., COLIN, J.-P., KA, I., et al., (2017b). Étude régionale sur les marchés fonciers ruraux en Afrique de l'Ouest et les outils de leur régulation. Volume II. Annexes. Ouagadougou, UEMOA/IPAR.
- LEBLOIS, A. (2021). Mitigating the impact of bad rainy seasons in poor agricultural regions to tackle deforestation. *Environmental Research Letters*, No. 16 (5).
- LEBLOND, N. (2019). Consultations communautaires et dépossessions foncières. Une géographie du pouvoir au Nord du Mozambique. Revue internationale des études du développement, No. 238, pp. 165-192.
- LEITNER, H., & SHEPPARD, E. (2018). From Kampungs to Condos? Contested accumulations through displacement in Jakarta. *Environment and Planning A: Economy and Space*, No.50(2), pp. 437 56.
- LORRAIN, D. (2017). Métropoles en Méditerranée. Gouverner par les rentes. Presses de Sciences Po, Paris.
- MA MUNG, E. (1999). La dispersion comme ressource. Cultures & Conflits (online), No. 33-34.
- MAGNAGHI, A., & BONNEAU, E. (2014). La biorégion urbaine : petit traité sur le territoire bien commun. Eterotopia France, Paris.

- MAGNON, Y. Z. (2013). En attendant l'aéroport : pression marchande et vulnérabilités sociofoncières et agricoles à Glo-Djigbé (arrondissement rural du sud-Bénin). Autrepart, No.1 (64), pp. 107-120.
- MAZOYER, M. (2001). Protecting poor farmers and the rural poor in the context of globalisation. Rome, FAO.
- MCCLUSKEY, W., & FRANZSEN, R. (2013). Property Taxes in Metropolitan Cities. *In* Bahl, R. W., LINN, J. F., & WETZEL, D. L. (Eds.), Financing Metropolitan Governments in Developing Countries. Lincoln Institute of Land Policy, pp. 159-182.
- MÉDARD, C., & DUVAIL, S. (2020). Accaparement foncier et officialisation de la propriété privée au Kenya. Hérodote - Revue de géographie et de géopolitique, No. 179 (4), pp. 165-181.
- MENDELSOHN, B. (2018). Making the urban coast. Comparative Studies of South Asia, Africa and the Middle East, No. 38(3), pp. 455-472.
- MERING, C., BARO, J., & UPEGUI, E. (2010). Retrieving urban areas on Google Earth images: Application to towns of West Africa. *International Journal of Remote Sensing*, No. 31 (22), pp. 5 867-5 877.
- MERLET, M., SAUZION, C., & EL OUAAMARI, S., (2017). Étude régionale sur les marchés fonciers ruraux en Afrique de l'Ouest et les outils de leur régulation. Volume III. Fiches d'expériences de régulation des marchés fonciers dans différents pays. Ouagadougou/ Dakar, UEMOA/IPAR.
- MORICONI-EBRARD, F. (1993). L'urbanisation du monde depuis 1950. Éditions Anthropos, Paris.
- MORICONI-EBRARD, F., HARRE, D., & HEINRIGS, P. (2016). Urbanisation dynamics in West Africa 1950-2010: Africapolis I. Update. West African Studies, OECD Publishing, Paris.
- MORSHED, N., YORKE, C., & ZHANG, Q. (2017). Urban expansion pattern and land use dynamics in Dhaka, 1989-2014. *The Professional Geographer*, No. 69 (3), pp. 396-411.
- MUKHOPADHYAY, P., ZÉRAH M.-H., & DENIS, E. (2020). Subaltern urbanization: Indian insights for urban theory, International Journal of Urban and Regional Research, No. 44(4), pp. 582-298.
- MUSIL, C., LABBÉ, D., & KHANH, V. N. (2020). L'immobilier residentiel: principal moteur de la fabrique urbaine de Ho Chi Minh Ville. Discussion à partir du cas de l'aménagement du district 2 et de la Nouvelle Zone Urbaine de Thú Thiêm. EchoGéo, No. 52. Ndour, M. (2021). Migration et dynamiques urbaines: rôle des migrants dans la production de nouvelles centralités urbaines. Le cas des Parcelles-Assainies de Cambérène (Dakar-Sénégal). Thèse de doctorat de Géographie, Université Cheikh Anta Diop, UCAD.
- NKENNÉ, J. M. (2020). Migrations internationales et mutations spatiales par l'habitat : le cas de la diaspora camerounaise dans la ville de Yaoundé. 2L2S, Université de Lorraine.
- OECD, United Nations Economic Commission for Africa, & African Development Bank (2022). Africa's urbanisation dynamics 2022: The economic power of Africa's cities. OECD.
- OECD/SWAC (2020). Africa's urbanisation dynamics 2020, Africapolis, Mapping a New Urban Geography. OECD Publishing, Paris.

- OECD/UCLG (2019). 2019 Report of the world observatory on subnational government finance and investment – Key Findings. OECD.
- PAULAIS, T. (2012). Financing Africa's cities: The imperative of local investment. Pearson education, Agence française de développement, World Bank.
- PEYROUX, O. (2020). Guinée: la vente des terres finance la migration. https://www.rfi.fr/fr/afrique/20200704-guin%C3%A9e-vente-terres-finance-migration (last accessed 4 March 2023).
- POTTER, C., & LABBÉ, D. (2021). Gentrification or ...? Injustice in large-scale residential projects in Hanoi. *Urban Studies*, No. 58(12), pp. 2456-2472.
- POULOT, M. (2015). Agriculture et ville : des relations spatiales et fonctionnelles en réaménagement. Une approche diachronique. *Pour*, No. 224(4), pp. 51-66.
- PROMSOPHA, G. (2019). Migration, Risk Management and Land Assets: from Isan to Bangkok. Moussons (Online), No. 34.
- PULLIAT, G. (2017). Métropoles émergentes et alimentation : une lecture croisée. L'Information géographique, No. 81 (3), p. 54.
- PUMAIN, I. (2020) (Ed.). Theories and Models of Urbanization, Springer.
- QUESNEL, A., & WIMARD, P. (1996). Family Recompositions and Agrarian Transformations, a Reading of African and Mexican Cases. Research Team Fertility Transition and Reproductive Health, Research Papers No. 1, Orstom.
- RANGÉ, C. (2019). Compétition foncière et autonomisation des jeunes ruraux. Le cas d'une économie de plantation en Guinée Forestière (pays kpelle). 'Land Tenure and Development' Technical Committee, AFD-MEAE, Research collection.
- RAYNAUT, C., & LAVIGNE DELVILLE, P. (1997). The transformation of social relations and the management of natural resources (2): The Emancipation of the Workforce. *In Raynaut*, C. (Ed.), *Sahels. Diversité et dynamiques des relations sociétés-nature*. Karthala, Paris, pp. 315-346.
- RIBARDIÈRE, A., & VALETTE, J-F. (2017). Accéder au foncier et à l'immobilier à Mexico. La diversité des marchés vue depuis l'espace public. EchoGéo, Pôle de Recherche pour l'Organisation et la diffusion de l'Information Géographique.
- RIBARDIÈRE, A., & VALETTE, J.-F. (2019). Access to housing and integration into the city. The major real estate developments on the outskirts of Mexico City. Inhabiting Latin American cities. New approaches and interdisciplinarity in urban research, LAVUE, CRH, ENSA-PVS, Paris, France, conference paper.
- ROBINEAU, O., TICHIT, J., & MAILLARD, T. (2014). S'intégrer pour se pérenniser: pratiques d'agriculteurs urbains dans trois villes du Sud. Espaces et sociétés, No. 158(3), pp. 83-100.
- ROLNIK, R. 2013. Report of the Special Rapporteur on adequate housing as a component of the right to an adequate standard of living, and on the right to non-discrimination in this context. United Nations General Assembly, Human Rights Council.
- SALAZAR CRUZ, C. (2011). La privatisation des terres collectives agraires dans l'agglomération de Mexico: l'impact des réformes de 1992 sur l'expansion urbaine et la régularisation des lots urbains. Revue Tiers Monde, No. 206, pp. 95-114.

- SASSEN, S. (2014). Expulsions: Brutality and complexity in the global economy. Harvard University Press, Cambridge.
- SEARLE, L. G. (2016). Landscapes of accumulation, real estate and the neoliberal imagination in contemporary India. The University of Chicago Press, Chicago.
- SHATKIN, G. (2017). Cities for profit: The real estate turn in Asia's urban politics. Cornell University Press.
- STEEL, G., VAN NOORLOOS, F., & OTSUKI, K. (2019). Urban land grabs in Africa? Introduction to the special issue. Built environment, No. 44(4), pp. 460-467.
- SUD, N. (2014). The men in the middle: A missing dimension in global land deals. *The Journal of Peasant Studies*, No. 41 (4), pp. 593-612.
- TALL, S. M. (2000). Les investissements immobiliers à Dakar des émigrés sénégalais.
 Émergence d'un nouvel acteur et mutations de l'espace urbain. Thèse de doctorat de Géographie, Université Louis Pasteur de Strasbourg.
- THONTTEH, E., BABARIN, J.-A. (2018). Analysis of land speculation in the urban fringe of Lagos, Nigeria. *Pacific Rim Property Research Journal*, No. 24(2), pp. 161-184.
- THORNTON, A. (2008). Beyond the Metropolis: Small town case studies of urban and peri-urban agriculture in South Africa. *Urban Forum*, No. 19(3), pp. 243-262.
- TRIBILLON, J.-F. (1993). Villes africaines. Nouveau manuel d'aménagement foncier. ADEF, Paris.
- TWARABAMENYE, E., & NYANDWI, E. (2012) Understanding informal urban land market functioning in peri-urban areas of secondary towns of Rwanda: Case study of Tumba sector, Butare town. Rwanda Journal, No. 25, Series D.
- UPADHYA, C. (2020). Assembling Amaravati: speculative accumulation in a new Indian city. Economy and Society, No. 49(1), pp. 141-169.
- UPADHYA, C., & RATHOD, S. (2021). Caste at the city's edge: Land struggles in peri-urban Bengaluru. South Asia Multidisciplinary Academic Journal, No. 26.
- VALETTE, J.-F. (2020). Commoning and trajectories of historical "Land Commons" In Mexico. The example of ejidos and comunidades in Mexico-city. Working seminar - Urban land-based commons for housing, Campus Condorcet, Aubervilliers.
- VAN NOORLOOS, F., & KLOOSTERBOER, M. (2018). Africa's new cities: The contested future of urbanisation. *Urban Studies*, No. 55 (6), pp. 1223-1241.
- VAN NOORLOOS, F., AVIANTO, D., & OPIYO, R. O. (2019). New master-planned cities and local land rights: The case of Konza techno city, Kenya. *Built Environment*, No. 44(4), pp. 420-437.
- VANUXEM, S. (2018). Ownership of the land. Wildproject.
- VIJAYABASKAR, M. (2020). Land questions in the 21st century postcolony. *Journal of Agrarian Change*, No. 20(4), pp. 682-689.
- VIJAYABASKAR, M., & MENON, A. (2016). Peripheral agriculture? Macro and micro dynamics of land sales and land use changes in the 'rural' economy of Kancheepuram. In NAGARAJ, R., & MOTIRAM, S. (Eds.), Political Economy of Contemporary India (1st ed., p. 205-229). Cambridge University Press. https://doi.org/10.1017/9781316691373.010

- VIJAYABASKAR, M., & MENON, A. (2018). Dispossession by neglect: Agricultural land sales in Southern India. *Journal of Agrarian Change*, No. 18(3), pp. 571-587.
- VISHWANATH, T., LALL, S. V., DOWALL, D., LOZANO-GRACIA, N., SHARMA, S., & WANG,
 H. G. (2013). Urbanization beyond municipal boundaries: Nurturing metropolitan economies and connecting peri-urban areas in India. N°75734.
- WALTERS, L. C., QUINLAN, V., United Nations Human Settlements Programme, Global Land Tool Network (2016). Leveraging land: Land-based finance for local governments. A reader.
- WANG, J., & MADUAKO, I. N. (2017). Spatio-temporal urban growth dynamics of Lagos metropolitan region of Nigeria based on hybrid methods for LULC89odelling and prediction. *European Journal of Remote Sensing*, No. 51(1), pp. 251-265.
- WATSON, V. (2013). African urban fantasies: Dreams or nightmares? *Environment and Urbanization*, No. 26(1), pp. 215-231.
- WILLKOMM, M., FOLLMAN, A., & DANNENBERG, P. (2020). Between replacement and intensification: Spatiotemporal dynamics of different land use types of urban and peri-urban agriculture under rapid urban growth in Nakuru, Kenya. *The Professional Geographer*, No. 73(2), pp. 186-199.
- YUNG, J.-M., & BOSC, P.-M., (1999). Schumpeter au Sahel. In CHAUVEAU, J.-P., CORMIER SALEM, M.-C., & MOLLARD, E. (Eds.), L'innovation en agriculture. Éditions de l'IRD, Paris, pp. 143-168.

LIST OF BOXES

Box 1.	Redefinitions of urban areas, and new sources of urban data	16
Box 2.	Africapolis Report on changes in land use (OECD, 2020)	20
Box 3.	Processed satellite images of micro-lot divisions between 2010 and 2020 for case studies in Kenya, India and Côte d'Ivoire	22
Box 4.	Examples from India of counting fallow land other than current fallow	23
Box 5.	Land reforms and sales pastoral land in Jordan	28
Box 6.	Emergent and resilient urban and peri-urban agriculture in Togo, Vietnam, Burkina Faso, Madagascar	32
Box 7.	Forms of urbanisation and agricultural land in Africa identified by the Africapolis 2020 report	33
Box 8.	Consent, resistance and a sense of injustice - a review of the academic literature	34
Box 9.	New housing production tools are driving changes in land use	37
Box 10.	Contested State takeover of land in Diamniadio, Senegal	39
Box 11.	Land allocations by town halls in Senegal	44
Box 12.	Changing patterns of land conversion and the arrival of transnational capital in Sihanoukville, Cambodia	45
Box 13.	Migration, diasporas and land transaction dynamics in an increasingly mobile africa	50
Box 14.	An economy built around micro-lots	59
Box 15.	Farmers turning to property development in the Delhi region of India	60
Box 16.	Contradictory recommendations from studies on urban and rural land markets commissioned by the West African Economic and Monetary Union (WAEMU)	77
Box 17.	Mechanisms and tools for local authorities	80
Box 18.	Local finance in rapidly urbanising regions	83

LIST OF FIGURES

Figure 1.	Distribution of urban built-up areas in km ² in 1990, 2015 and 2020	18
Figure 2.	Diversity of rural lands and landholders	27
Figure 3.	Life cycle of a parcel: changes in its monetary value, use and surface area	67
Figure 4.	Pathways to land conversion	68
Figure 5.	Major factors in agricultural land conversion	68
Figure 6.	Typology of land conversion processes according to levels of access to capital and changes of use	69

LIST OF PHOTOS

Owner of agricultural land near the new city of Diamniadio, Dakar, Senegal, 2019	34
Construction on former agricultural land on the outskirts of Delhi, India, 2020	37
Examples of housing developments on the outskirts of Mexico City, 2019	38
Land acquired by a local developer in Tami Nadu, India, 2017	47
Subdivided farmland, acquisitions by low-income households and fallow land in Hlegu, Burma, 2019	48
Fenced subdivided plot on the edge of the lagoon in Togbin, Benin, 2021	49
Land 70 km from Nairobi purchased in 2018 by a cooperative set up by members of the Kenyan diaspora who live in England and Ireland, 2022	50
Building works on land purchased by a civil servants' cooperative in Amman, Jordan, 2021	53
Land in Kenya bought and subdivided by a civil servants' cooperative. To date, only one member has started building a house, 2021	54
Examples of markers and fences in Kenya: bits of wood, posts, barbed wire, walls, line of trees and gate, 2022	56
Wall round an uncultivated plot on a subdivided landholding in Togbin, Benin, 2021	57
Construction on newly parcelled land in Djimini-Koffikro, Côte d'Ivoire, 2023	58
Walls around two unused plots of subdivided land in Konza, Kenya, owned by entrepreneurs from Nairobi, 2021	58
Housing under construction in Mapinga, a suburb of greater Dar es Salaam, Tanzania, 2019	60
Buildings constructed by the three Gupta brothers in Faridabad, India, next to their original village home in the centre of the photograph, 2020	61
Wells and boundary markers on vacant plots in Kitengela, Kenya, owned by a cooperative, 2021	62
Plots markers in Bagamoyo, on the outskirts of greater Dar es Salaam, Tanzania, 2018	63
Micro-lots in Bahour, India, 2018	64



Ordinary changes in land use linked to urbanisation in the global Souths

Housing, capitalisation, agricultural changes

This study considers the ways in which land use is changing in the global South, and how these changes are linked to urbanisation. The different stages of the conversion process are analysed: changes in ownership, acquisition of land rights, land transactions, plot divisions, productive use through construction and property development (housing estates, building projects of various sizes, etc.), and fallow land (demarcated parcels that remain undeveloped). Large-scale land conversions generated by major development and infrastructure projects, industrial and extractive activities, and large-scale land grabs in rural areas have been widely examined over the past decade. But little has been written about how ordinary actors residents, land rights holders, entrepreneurs and local elected officials – acquire plots of land and change the way they are used in order to build houses, develop economic activities or accumulate capital. Given that these activities are occurring on a huge scale, it is important to determine what drives them and how local administrators and political players navigate the systems that are supposed to regulate land conversions.

The pace of these conversions is accelerating due to a range of factors: urban growth at different levels, changes in local legal arrangements for accessing rural land, the

rise of rural and urban land markets, and the increasing power of private and financial actors in land and property production and urban development. They are also generating far-reaching effects – causing environmental degradation, increasing socio-economic inequalities, pressure on family farms and sterilisation of fertile soils, exacerbating financial risks at many levels, and adding to the burden borne by the authorities responsible for delivering infrastructure and services.

Land conversions need to be regulated. But the tools traditionally used for planning, zoning and protecting agricultural areas need to be adapted and expanded to facilitate coordinated action on diverse public policies and across urban and rural sectors. The "Land Tenure and Development" Technical Committee draws on the study findings to suggest a number of avenues and principles to guide public action, support local actors and develop standards that recognise and frame their practices. Inclusive financial mechanisms are also essential for land to regain its primary function as a usable resource, along with tax systems that enable the revenues generated by land conversions to help fund local development, and support for participatory territorial planning approaches that take account of environmental issues and the need to maintain agricultural production.

The "Land Tenure and Development" Technical Committee is a working group composed of experts, researchers and land policy actors. Since its creation in 1996 it has worked with numerous French and international actors to support the French Cooperation's strategic thinking and analysis of action on land issues.

In addition to the White Paper by French Cooperation actors, other publications by the Committee include analysis of large-scale land appropriations (2010), a guide to due diligence of agribusiness projects that affect land and property rights (2014), a study on the formalisation of land rights in developing countries (2015), a document promoting a land-based commons approach (2017), a guide to the issues surrounding young people's access to land (2020), and many other works and tools intended to improve our understanding and efforts to address land-related challenges in the global South. Full versions of all these outputs can be found on the "Land Tenure and Development"

portal (www.foncier-developpement.fr), which the Committee set up to provide access to quality information in this field.

The **UMR CESSMA** Centre for Social Science Studies on African, American and Asian Worlds is a joint research unit that brings together researchers and teacherresearchers from l'Université de Paris, l'Institut national des langues et civilisations orientales (Inalco) and l'Institut de recherche pour le développement (IRD). Its mission is to analyse the historical and spatial configurations of development and globalisation dynamics. The historians, geographers, sociologists, anthropologists, economists, demographers and urban planners who work in this unit share common social science practices as they conduct interdisciplinary and comparative studies and exchanges with scientific partners in their fields of study. Their research extends from Central and South America to Africa and the Arab world, South Asia, South-East Asia and East Asia.

UMR Géographie-cités is an interdisciplinary research centre with an open science perspective that generates and disseminates new knowledge, bodies of knowledge, expertise and methodological tools, and provides research-based training in territorial sciences. Taking space as its entry point, the centre uses analytical and visualisation tools to investigate and help improve the theoretical and methodological approaches to work on the social, political and economic changes that are occurring in our societies.

UMR LATTS is a multidisciplinary humanities and social sciences laboratory that specialises in cities and territories, public action and work. The researchers and teacher-researchers from CNRS, l'Ecole des Ponts ParisTech and l'Université Gustave Eiffel who work in this joint research unit analyse major societal transformations such as urban change, environmental crises, energy transitions and digital turning points through the prism of technical worlds, devices and infrastructures.





