URBAN TRANSFORMATIONS AND LAND GOVERNANCE IN PERI-URBAN KHARTOUM: THE CASE OF SOBA

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ABSTRACT
The New Urban Agenda and SDG 11 promote inclusive urban development, but limited empirical knowledge exists on how such global rhetoric plays out on the ground. This paper contributes to the inclusive city debate by focusing on the case of Soba, a peri-urban area at the fringes of the capital of Sudan. Based on an explorative study of secondary material, semi-structured interviews and structured observations it aims to systematically analyse the dynamics of peri-urban development. Findings show how the rising pressure on land results in commoditisation, (informal) land-use changes and a multitude of other land transformations. The paper concludes that the mismatch of urban land policies has resulted in increasing fragmentation of urban space and socio-spatial discrepancies between those who can afford to buy land or transform it into urban uses and those who cannot. It sheds fresh light on the challenges of the inclusive urban transition agenda.

Key words: urban transformations; land governance; spatial segregation; inclusive cities; Khartoum; Sudan

INTRODUCTION
The world is urbanising at a rapid rate. In 2050, more than 66 per cent of the world’s population is expected to live in cities (UN DESA 2018). This urban transition is especially expected to take place in Africa, one of the continents which has experienced massive urban growth in the last couple of years (although much variation exists; see Potts 2012). At 3.6 per cent, Africa has shown the highest annual urban growth rates worldwide for the past few decades (Zuberi & Thomas 2012; ESA UN 2013). In some African cities urbanisation rates have reached almost 10 per cent between 2005 and 2010 (e.g. Ivory Coast, UN Habitat 2013) and it has been projected that the African urban population will almost double by 2035 (African Economic Outlook 2015). Many authors have argued that this urban transition is taking place in medium-sized and small-scale cities (Christiaensen et al. 2013; McGranahan & Satterthwaite 2014; Steel & van Lindert 2017). But urban expansion in the capital city of Sudan, the greater agglomeration of Khartoum, is still very significant. Khartoum is one of the largest
metropolises on the African continent, with an estimated population in the range of seven to eight million inhabitants (Central Bureau of Statistics 2018). Shifting from a marginalised urban area in the Arab world, it has become a crucial frontier for urban city development and the new ‘Eldorado’ for foreign investors (Choplin & Franck 2014). But how to drive Khartoum’s urbanisation processes in such a way that ‘no one is left behind’ (UN 2015) or that all urban citizens can benefit from these urban developments?

From an international perspective, there has been a huge push to build sustainable and inclusive cities, reflected in Sustainable Development Goal 11, which aims to create ‘inclusive, resilient and sustainable’ cities (UN 2015) and in the New Urban Agenda, as proposed at Habitat III, the latest United Nations Conference on Housing and Sustainable Urban Development in Quito, Ecuador in 2016 (UN Habitat 2016). To meet these goals, enormous investments in housing, infrastructure, energy and economic development are expected to be mobilised over the coming years (Zoomers et al. 2017). At the moment, a number of initiatives and concrete actions that promote inclusive growth, poverty reduction and access to sustainable livelihoods have been already initiated in different cities across the globe. There is, however, limited empirical knowledge on how these initiatives and commitments to inclusive urban transitions will play out on the ground. There is little information about how these global mantras are incorporated into urban governance practices and urban development plans of cities in the global South. There is also very little knowledge about local responses or the impacts of these global efforts in concrete localities, such as peri-urban hinterlands.

Aiming to contribute to the inclusive city debate (McGranahan et al. 2016), this paper focuses on the specific case of Soba, a peri-urban area at the fringes of the capital of Sudan where competing claims over land have resulted in very diverse urban dynamics. New urban dwellers have to compete for land with long-term residents. The Khartoum state government has made several efforts to halt these processes of informal urban sprawl and to further integrate peri-urban areas into the urban fabric. However, the complex political nature of Khartoum’s urban land dynamics and the specific urbanisation patterns of the city pose many challenges to the global call for more inclusive urban transitions which leave no one behind. This paper throws light on these challenges and systematically analyses how the mismatch of urban policies might further enforce unequal urban geographies.

This paper has been co-produced by researchers and practitioners working on land-related issues, land governance and urban planning processes in the city of Khartoum. It is part of a broader research project studying the urban land nexus and its political economy in Khartoum, Dar es Salaam and Mwanza. This particular case study on the urban land nexus in peri-urban Soba builds on a triangulation of different research methods. It combines a review of secondary data, maps and satellite images with empirical data collected on land governance and the current living situation in peri-urban Soba.

First, we assessed a wide range of policy documents and other available literature on urban land policies in Sudan to gain an in-depth understanding of the key institutional structures for land management and the current policies in place. Second, we analysed the direct consequences of these policies on the ground by combining participant observation and 10 semi-structured interviews and informal conversations with inhabitants of Soba who were selected through snowball sampling. We asked questions about the actual living situation in Soba and the way in which the inhabitants have experienced and perceived land transformations over the last 20 years. We also conducted eight semi-structured interviews and informal conversations with a variety of urban land experts ranging from civil servants, government officials and policy advisors to academics, urban planners, architects and engineers. Alongside the information gleaned from these interviews, we further explored the current situation in Soba and its challenges in terms of land governance, using two focus group discussions with civil servants of the Ministry of Physical Planning and the Ministry of Strategic Affairs. We processed the empirical insights through joint reflection and discussion between the researchers and the practitioners and using a systematic analysis of
the transcribed data. The interview and focus group data were manually analysed by coding the transcripts according to core themes such as land governance, urban transformations, service delivery, living conditions and experiences of socio-spatial segregation.

Following this introduction, we continue this paper with a general overview of the academic debates on inclusive city development and land governance practices in peri-urban Africa. The empirical part of the paper starts with a brief overview of land governance and urbanisation processes in Khartoum. After that, we analyse and compare the land transformation policies and land-use changes, drawing on Soba as a case study. We conclude with some general reflections on how to develop a well-integrated and inclusive peri-urban area.

THE INCLUSIVE URBAN CITY DEBATE AND THE ROLE OF PERI-URBAN LAND DYNAMICS

Urbanisation is currently at the core of the development agenda. It is one of the most significant trends of the past and present century. Global to local governments are increasingly faced with the challenges of curbing poverty, inequality, unemployment, environmental degradation and climate change. They must also guide urbanisation processes so that they can contribute to sustainable and inclusive development.

Cities are culturally diverse, encompassing the many traditions, beliefs, knowledge, technical skills, professional activities and aspirations of their inhabitants. It is on the basis of this heterogeneity that cities are born, grow and frequently prosper as centres of interaction and interchange, innovation and development. The World Bank, in its work to understand poverty, examined the concept of inclusive cities. It has indicated that inclusive cities involve a complex web of multiple spatial, social and economic factors striving for spatial inclusion (by providing affordable basic services such as housing, water and sanitation), social inclusion (guaranteeing equal rights and participation of all, including the most marginalised) and economic inclusion (by job creation and by giving urban residents the opportunity to enjoy the benefits of economic growth) (World Bank 2015).

This focus on urban inclusivity dates back to the ‘right to the city’ discussions of the French sociologist and philosopher Henri Lefebvre. He saw urban inhabitants as the key to political inclusion by granting them various forms of urban rights (Lefebvre 1996 [1968]). Although his work can be read in different ways (Marcuse 2010), his study still forms the basis on which to discuss the basic human rights of urban residents, including freedom of movement, basic economic opportunities and greater inclusion of the urban poor in general (Marcuse 2010; Parnell & Pieterse 2010; O’Loghlen 2016). His ideas have been reflected in a global call for an inclusive urban transition seeking to eliminate discriminatory exclusion, giving the disadvantaged a bigger voice in existing institutions, and guaranteeing human rights (McGranahan et al. 2016). As land acquisitions, capital-driven evictions and displacements and unintended processes of gentrification are at the basis of many urban inequalities (Steel et al. 2017), a concrete pathway to realise an inclusive urban transition is to promote security of tenure of excluded urban dwellers, sustainable land use, and responsible land governance (Zoomers et al. 2017).

In studying the possibilities and challenges towards this inclusive urban transition, one of the core frontiers is at the urban fringes where contestation over space (at the root of many urban inequalities) and the struggle for gaining access to adequate housing and sustainable human settlement is very visible. Peri-urban areas are commonly defined as transitional zones between rural and urban areas, characterised by a high heterogeneity of land uses, mixed livelihoods, population densities and pressures on land resources (Simon et al. 2004; Simon 2008; Trefon 2009; Rauws & de Roo 2011; Ros-Tonen et al. 2015). For a long time, these peri-urban fringes have been considered as zones of survival where people of the rural hinterlands come to settle in the hope of finding better livelihoods in the city while maintaining strong linkages with their rural livelihoods (Briggs & Mwamfupe 1999).

As such, these peri-urban areas have been known for their strong rural-urban interface, huge expansion of informal settlements and uncontrolled urban sprawl. However, a more
nuanced picture of these transition zones has since developed. Several authors have argued that apart from absorbing the rural-urban exodus into informal settlements, these fringes have shifted towards ‘zones of innovation’ (Rauws & de Roo 2011, p. 270) and ‘opportunity spaces’ (Scott et al. 2013, p. 2) with huge economic potential. Due to a rise in the commercialisation of peri-urban land (Briggs & Mwamfupe 1999), a variety of different people is attracted to invest in peri-urban areas ranging from foreign investors, local entrepreneurs and commuting middle classes, to slum dwellers and farmers. They all compete for land which is generally held under customary tenure without title deeds, but with a de facto tenure security through social recognition and effective occupation (Rakodi 2006).

This mixed and multi-functional character of peri-urban areas poses significant challenges in terms of inclusive urban land governance. Researchers from the Food and Agriculture Organisation of the United Nations (FAO) have defined land governance as ‘the rules, processes and structures through which decisions are made about access to land and its use, the manner in which the decisions are implemented and enforced, the way that competing interests in land are managed’ (Palmer et al. 2009). In a peri-urban context, we can see that different governance structures overlap and that urban expansion is often very chaotic, because powerful plans to restructure these transition zones are often lacking (Balestri 2019). Due to institutional fragmentation, legal pluralism and overlapping jurisdictions (Evers & de Vries 2013; Ros-Tonen et al. 2015), hybrid approaches arise to deal with the different socio-economic developments and the heterogeneity of land dynamics in these territories. As argued by Ros-Tonen et al. (2015, p. 87), this complex and hybrid institutional structure calls for governance approaches that stretch ‘across scales and beyond urban boundaries’, which have a flexible and adaptive character, and which emphasise the need for not working with exclusively rural or exclusively urban policies. Instead, they argue that an integrated urban-rural governance structure is needed – one that works across governmental institutions (e.g. across ministries and municipalities) – to achieve the concrete delivery of spatial planning and housing, as well as service and infrastructure provision (Ros-Tonen et al. 2015).

Inspired by the Western cadastres, concrete solutions for these land-related issues include formal registration and land titling to unlock the economic potential of land as an asset (Feder & Feeny 1991; Feder & Nishio 1999). This strategy of formalising the informal and thus enabling the informal settlers in the periphery of the city to capitalise on ‘dead capital’ was boosted by the widely referred work of the Peruvian economist Hernando de Soto (2000). Many land policies in Africa still implement formal land registration as the foundation for enabling the urban poor to partake in the market economy. However, from an academic perspective, this neoliberal belief in land titling has been strongly contested (Payne 2001; Varley 2002; Shaw 2013; Williamson 2011). Especially in a peri-urban context, it seems that titling and land registration strongly push commoditisation and privatisation of land and as such make the already precarious position of informal settlers even worse. They generally lack the economic means to compete with private developers and formal land holdings, they have to make way for upgrading programmes and are expelled to other parts of the city (McGranahan et al. 2016). In this sense, by only favouring and even strengthening the well-educated and wealthy echelons of society, formal titling schemes may reinforce inequalities in cities and exiting power balances (Beal & Fox 2007; Watson 2009).

In general, urban sprawl and the expansion of the city towards the rural hinterlands indicate that the ‘inclusivity’ of these urban developments is questionable. In the empirical remainder of this paper, we will systematically scrutinise the increasing pressure on peri-urban land in Khartoum to see how these areas can contribute to an inclusive urban transition.

LAND GOVERNANCE AND URBAN PLANNING IN KARTOUM

Khartoum is a low-rise, sprawling city located where the Blue and the White Nile confluence. This Sudanese capital consists of three

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Cities in one – Khartoum, Omdurman and Khartoum North or Bahri – all belonging to Khartoum State. The central business district has expanded into the surrounding residential areas due to large migration inflows (internally displaced people as well as refugees from neighbouring countries), high rates of population growth, and the real-estate investments and land-grabbing activities of local as well as foreign investors (Egemi & Ganawa 2014). Some dwellings have been directly transformed into commercial offices, while some old and obsolete units have been demolished and replaced with high-rise buildings for commercial and financial use.

The government institutions responsible for mapping, titling and administering land in Sudan in general and in Khartoum in particular are spread across different levels. They range from federal and state levels to village and administrative levels. Since the introduction of the federal system in Sudan in 1994, many of the responsibilities for land and other issues have been delegated to the state level. However, not all ministries have relinquished control – in keeping with the centralist tendencies of Khartoum – and roles and responsibilities regarding land location and usage continue to overlap between the federal government and Khartoum state government.

Land survey activities are accommodated by a number of different government bodies ranging from the ministry of defence of the federal government to the ministries of physical planning at state level. These different bodies compete for more control over land allocation in order to establish a source of revenue for their specific institution.

The absence of a national instrument for land-tenure mapping or land-use planning as well as the lack of an efficient monitoring structure has made land mapping and allocation efforts primarily sector-based and highly fragmented. For instance, one of our informants working as a town planner for Khartoum state indicated that there are some clear and detailed city plans to guide urban development in Khartoum. But their implementation and monitoring is recognised as expensive and difficult (Interview with town planner, October 2018). Land allocation is dispersed over different ministries at the federal and the state levels, and these ministries can only devise their land-use planning with the support of the urban planning and survey departments. These plans of the urban planning and survey departments may again differ from the spatial planning documents made by the state planning committee. As a consequence, changes in land use and plans, many of them initiated by private commercial interests, are made frequently and without proper public notice. In some cases, changes are made ex post by district and state-level authorities to bring plans into accordance with actual land use on the ground – rather than the opposite.

This multiplicity of structures and institutions and the lack of unified policies regarding land can be seen explicitly at the urban fringes of Khartoum. Officially, many of the peri-urban areas are still registered as villages. But in practice, these villages have become part of the urban fabric. However, there is no unified urban policy that determines land use, service provision or other socio-economic issues in these areas.

GOVERNMENT RESPONSE TO INFORMAL URBAN SPRAWL IN PERI-URBAN KHARTOUM

As in other African cities (see Balestri 2019), peri-urban areas have been the cradle for slum development and informal settlements. In Arabic, these informal settlements are called ashwaeyat, which literally means ‘randomly built housing’, or the occupation of land without permission to live there or to build. In Sudan, ashwaeyat date back from British colonisation in 1927, during which rural people from poor and marginalised families migrated to the capital city in search of better livelihoods. Major expansion of the ashwaeyat in Khartoum occurred during the drought and desertification period of 1984–1986, the civil wars (1955–1972 and 1983–2005) and the Darfur conflicts (since 2003) when many south Sudanese migrated to Khartoum (Assal 2004). In the late 1980s, the ashwaeyat already covered two-thirds of Khartoum, dispersed throughout the city, but with a high concentration in the urban periphery (Sumaia Omer 2015). Since then, the state authorities have
taken strong measures to tackle informal urban expansion.

In 1990, the Minister of Housing and Engineering Affairs of Khartoum State (where surveying, physical planning and the land authority are located) decided to identify and control the *ashwaeyat* in Khartoum. Especially under the direction of Sharaf Eldin Banaga, who was state minister for housing and engineering in Khartoum from 1989 until 2001, the city has been restructured according to land allocation schemes. These relocated internally displaced people into appropriate residential housing schemes (the so-called ‘Dar es Salaam’), demolished *ashwaeyat* that were built on state-owned lands or in hazardous locations (e.g. on water drains or waste dumps) and assigned land to specific governmental officials in newly planned areas (Mohamed Aziz 2011; Elwaleed & Seif Eldin 2012).

In addition, according to the Regularisation and Planning of Villages decree (Ali Yahya 2014), villages in Khartoum had to be re-planned and integrated into the urban fabric. These villages are historical settlements of tribal groups and were established before the British colonisation of Sudan (1890–1953) in agricultural zones where land was owned in a freehold tenure system. These villages used to supply the urban markets of Khartoum with vegetables, dairy produce, fish, meat and raw building materials. Inhabitants of these villages were middle-class rural families who made a livelihood from farm production, cattle raising and brick making. Some inhabitants sold soil for making bricks for construction. In general, for people living in the villages, their lifestyle did not differ that much from their former rural lifestyle. They were involved in the same activities as their rural counterparts. They had similar social connections and made use of the same building construction types. Only a few village residents worked in the city for governmental or private institutions. But as urban areas expanded, so too did the need to improve access for these villages with urban services and to upgrade the land tenure system in these transformed areas. These were the main goals of the village re-planning policy (2014) (Interview with civil servant, land department, November 2018). The policy further aimed to support national plans to improve productivity and provide land for public service provision in the future (Ali Yahya 2014).

**PERI-URBAN DYNAMICS: THE CASE OF SOBA**

In this section, we analyse the impact on the ground of these various policies by focusing on the specific case of Soba, a peri-urban area 18 km southeast of Khartoum on the west bank of the Blue Nile. Soba is physically transforming at a very rapid pace. The expansion of the city combined with a wide range of planning and restructuring strategies have turned this peri-urban area into a highly heterogeneous and multi-functional space in which different types of land use are combined, including old villages, newly planned areas, agricultural land and informal settlements. Due to these urban transformations, land prices in this area have become ever more expensive. But how can these urban transformations contribute to the inclusive urban development agenda?

**LAND AND LIVELIHOOD TRANSFORMATIONS IN RURAL VILLAGES**

Originally, most of the population of Soba lived in the rural village Soba al-Hilla. They worked their farms on the fertile banks of the River Nile, supplying the city with milk, dairy produce and vegetables on a daily basis. Families in Soba al-Hilla used to live in the *hoash*, an extended family house where up to five different families belonging to the same grandfather lived together in one compound with one boundary or fence. Every family had its own sleeping area, but the kitchen and the guest rooms were shared between families of the same *hoash*. The land on which these houses were constructed was inherited from grandfather to grandson or granddaughter and secured by customary tenure. However, since 2014, this tenure system has begun to change. The government decided to re-plan the village by only registering the land rights of nuclear families owning a minimum-sized plot of 200m². To formally register their land, extended families were forced to divide their
hoash into plots of 200m$^2$. Many families, however, did not want to register their land because they had de facto access to land and did not see the added value of going through costly and the time-consuming bureaucratic procedures required for the revision of the land by the state (Mohamed Osman 2014).

As a consequence, the re-planning policies have resulted in a very diverse patchwork of (un)finalised land transformations. Several families decided not to register their land and remain in tenure insecurity. Other families that used to host up to five families on one plot, suddenly had to divide their plot into five houses. Plot sizes were generally not big enough for these types of subdivisions and as a consequence a number of nuclear families were relocated to other residential areas in the city. Other families had to hand over some of their land to the government for infrastructure development and public services provision. For instance, one of the families we interviewed used to live in Soba al-Hilla, but had to relocate when their plot of land became less than 200m$^2$ when they had to make way for an electricity line in the re-planning process. The Ministry of Physical Planning compensated this family with a piece of land 18km away from where they were living (Interview, March 2017). In these cases, as has also happened elsewhere in the world (see for instance Pritchett 2003), the power of eminent domain (or expropriation power of the state) allows the government to take private land for public purposes such as widening roads or electricity provision, provided that the landowners are compensated for their loss. While these families were compensated in financial terms, the relocation had social and economic consequences. Many of these families had been living in the same village for at least 20 or 30 years and suddenly had to build a new life somewhere else in the city.

At the same time, the livelihoods of the people in Soba al-Hilla have changed over the years. Increasingly, many hold urban jobs in the service sector. Years ago, several families used to work in the brick industry, making bricks from mud left on the banks of the Blue Nile River after the flood season. With this mud, they could make bricks until the next flood season. However, due to the expansion of the city and the adverse environmental impact of brick making, the government decided to prohibit the brick industry around the River Nile and closed the brick factories, locally named kamina.$^4$ In addition to curbing the environmental consequences of the carbon emissions from brick kilns, the government also wanted to use the river banks for recreational and residential purposes: the informal kamina stood in the way of achieving that. As a result, many people lost their jobs in the brick-making industry and had to look for another source of income elsewhere, although we did observe that some informal brick makers are quietly encroaching upon the area again.

The livelihoods of farmers and their day labourers who used to produce milk, flowers and other farm products have also changed over the years. Most lost their livelihoods due to urban expansion and the related increased pressure on farm land. According to our interviews, many farmers decided to sell their land and shift from farming to other activities such as taxi driving or working in construction. Many farms had already been abandoned before actual land-use changes took place. For example, Belail Farm, with 40 hectares, was one of the largest farms in Soba, producing and selling milk, chickens and agricultural produce to the city. It used to offer employment opportunities to many day labourers from the village and its surrounding areas. But then the farm was transformed to residential land use. And while the land has already been allocated, construction has not yet taken place. To date, the former farm land remains empty and people living in the surrounding areas complain that no alternative livelihood opportunities have emerged since the destruction of the farm.

Despite these transformations, and the fact that not everybody has benefited equally by finding alternative land and or livelihoods, Soba al-Hilla is a popular residential neighbourhood with relatively good access to services and social facilities. Through participatory efforts and donations, the village has managed to establish schools and electricity and health services. According to an interview with a town planner working for the Ministry of Physical Planning, Soba al-Hilla currently has nine schools, four kindergartens, 14 mosques, three water-pumping
stations (offering some of the cleanest water in Khartoum), three health centres and one police station (Interview with civil servant, November 2018). In addition, the government is working on an improved road and public transport network which started with the opening of the Soba Bridge on 28 July 2017. This bridge now connects Khartoum with the East Nile locality and forms an important gateway to the city for traders and agricultural industries from the east of the country. It is exactly these infrastructure developments that, according to our respondents, make Soba al-Hilla an attractive place to live. And due to its close connection to the city it attracts ever more newcomers seeking a cheap place to live and to connect to the city for employment opportunities (Interview with resident, November 2018). Consequently, the population of Soba al-Hilla has become ever more diverse, ranging from high-income families with huge plots of land to many low-income families and day labourers who rent rooms in the area and aiming to build in a life in the city.

**LAND TRANSFORMATIONS IN ‘NEWLY PLANNED’ AREAS**

In addition to the village regularisation and planning policies, other policy approaches have also taken place in Soba and have significantly changed the geography of the area. The Ministry of Physical Planning, for instance, has demarcated certain pieces of land for urban development projects. Some of these plots were sold to development companies and private investors, in order to develop the land and to build condominiums or villas according to the gated community concept (Klaufus et al. 2017). The local government also sold pieces of land by auction to private owners with the intention to develop high-income urban areas with the corresponding services and land-registration procedures.

One of these lands is Sabaa, located directly west beside Soba al-Hilla (see Figure 1). In 2005, the government surveyed the area and sold the ‘individual’ pieces of land by auction. The government provided the new owners with serviced land and promised to offer electricity and water supplies next to their plots of land. The land was sold quickly, but similar to the case of the Belail Farm, actual construction is taking place at a much slower rate. This slow materialisation of the development of the new area suggests that those who bought the land were not in need of shelter at the time of buying the land. Perhaps many of the new owners bought the land speculatively or could not start construction because they had spent all their money on buying the land. As a consequence, it was difficult to find an original owner who had bought land directly from the state in 2005 when we visited the site in November 2017. Most of the current landowners bought their land at a later stage. Ibrahim, for example, is a retiree. He bought a piece of land in Sabaa two years ago, to build a family house and had just started the construction of his four-storey house. He told us that Sabaa is an attractive area to live in because it is well connected to the roads which connect the neighbourhood to the centre of the city – and because land prices are still relatively affordable compared to prices in more central areas in the city (Interview, November 2017).

It is true that the area has good road and transport connections to the centre of the city. These have only improved with the opening of the Soba Bridge. However, one might still question the attractiveness of Sabaa as a residential area. During a field visit in February 2019, it became clear that Sabaa is an area still under construction, with only a few people effectively living there. Combining the satellite image of 2017 with the physical map of the Ministry of Physical Planning, we observed that out of 650 houses in Sabaa, only 190 have been fully or partially constructed.

As a result of the fact that real construction has not yet fully materialised, service provision in Sabaa is still very basic. Only the road connecting Soba Al-Hilla with the main road to the city of Wad Madani is asphalted. The other asphalted roads have already been eroded or damaged in places where people have tried to connect their homes to the electricity and water grids. Electricity facilities such as transformers are in poor condition as no one is maintaining them. In general, the further development of basic services has stagnated as most will not
be economically feasible unless the population size in the area passes a certain threshold. The Khartoum State Water Authority is for instance not allowed to supply water to a neighbourhood until a certain number of households are actually living there. In addition, there seems to be a problem with the groundwater level in Sabaa. As such, residents cannot install sewage systems. Sewage waste can only be removed by tankers for which residents have to pay a certain fee. Also, in contrast to Soba Al-Hilla, facilities such as mosques, schools and health services have yet to be developed. The few families who live in their houses in Sabaa prefer to take their children to schools in the city rather than attending the neighbourhood school, which is only attended by the children of the construction workers or guards.

In short, people living in Sabaa live on their own and pay high prices for access to water, electricity and security services. They still very much rely on private service delivery and facilities in the surrounding areas. In contrast to the residents in Soba Al-Hilla, people in Sabaa are socially poorly connected. As one of the current inhabitants stated, ‘Here we do not know our neighbours, as we all come from different areas’ (Interview, November 2017).

RURAL VILLAGES AND ‘NEWLY PLANNED’ AREAS COMPARED

Overall, the re-planned village has developed more rapidly than the newer areas surrounding it. The differences in built-up areas can be seen in Figures 1 and 2, which show development over the last 12 years. Although the government sold the land at commercial prices before 2005 and provided the new owners with serviced land (with an asphalt road, electricity and water supply next to their plots of land), only a few owners have actually built their houses (see Figure 2).

However, land prices in Sabaa are much higher than in Soba Al-Hilla (see Table 1). According to our interviews with land valuers in March 2017, land in Sabaa costs 3,000 Sudanese pounds per square metre (US$160) compared to 1,000 Sudanese pounds per square metre (US$53) in Soba Al-Hilla (Interview with land valuator, March 2017). However, as people in Soba Al-Hilla already

Source: Adapted from Google maps from 2015.

Figure 1. Building density in peri-urban Soba: Sabaa (left) versus Soba Al-Hilla (right), in 2005. [Colour figure can be viewed at wileyonlinelibrary.com]
own their land, they are able to add extra rooms to their homes or expand vertically. The fees for this expansion are significantly less than the transactions costs that new owners have to pay to acquire a piece of land in a planned area adjacent to the same village. In addition, any new owners must generate extra revenues and collect enough cash to meet construction expenses. As well as paying up to 3,000 Sudanese pounds for an official permit to start construction (which easily takes more than two months to obtain), construction costs run up to US$800/m² (Interview with engineer, July 2017). In practice, this means that landowners in Sabaa sometimes must invest up to 800,000 Sudanese pounds (US$44,000) to acquire land and subsequently must secure another 2,160,000 Sudanese pounds (US$119,000) to build a one-story concrete house.

As a consequence of these high costs associated with lengthy bureaucratic procedures (see Table 2; see also Franck 2018), the newly built areas are urbanising at a much slower rate than the villages. People in the former villages continue to build, whereas the planned areas are still very sparsely built. It is to be expected that this will further increase socio-spatial segregation and land speculation in the area. Indeed, several of the original Sabaa landowners have already sold up, either because they did not have the means to immediately start construction after they had acquired the land or they simply saw it as an investment strategy in an unstable investment climate with a lack of access to cash and foreign currency.

CONCLUSION: TOWARDS AN INCLUSIVE CITY

One of the main concerns surrounding urban transitions in the global South is the complex patchwork of land transformations taking place in and around cities and the implications this has for inclusive urban development (Steel et al. 2017). In this paper, we have seen that the state government of Khartoum uses land as a source of revenue, be it through auctioning off land (as in the case of Sabaa)
or though the changes in land-use fees that people must pay to convert agricultural land to urban or residential land (as in the case of Soba al-Hilla). These commodification processes have resulted in diverse and contrasting urban developments that will not necessarily result in inclusive cities, as advocated for in Habitat III and SDG 11.

In spatial terms, the rather ad hoc planning policies in Sabaa and Soba al-Hilla pose many challenges to meeting the global call for more inclusive urban transitions. At the very least, the complex and diverse urban land dynamics in this part of the city have contributed to a heterogeneous urban space, where very dense urban areas coexist alongside envisioned urban areas where actual construction has yet to materialise. Tenure security in this urban space in the making is more straightforward than in Soba al-Hilla where (despite re-planning strategies) informal land use is still predominant. People are resistant to paying registration fees to transform their agricultural land into residential land or to officially register their land because they do not own the minimum of 200m² for registration or have *de facto* use. As a result, the socio-spatial discrepancies between those who can afford to buy land or transform it for urban uses and those who cannot are increasing.

In socio-economic terms, the newly planned area in Sabaa is not contributing to counteracting the housing crisis put forward in the literature on urbanisation in the global South (King *et al.* 2017). Instead of using ‘empty lands’ in Sabaa as an opportunity to offer a space for affordable, adequate and secure housing (and thus more inclusive cities), most of the lands in Sabaa have been used for the sake of speculation and commercialisation. Also, in the case of the re-planning strategies in the former villages, has the government succeeded in transforming them into well-integrated and inclusive urban spaces (or ‘opportunity spaces’ as described by Scott *et al.* 2013)? In terms of service delivery, the new road built by the government has improved connections between Soba Al-Hilla and Khartoum North. There are also health centres, electricity and water services, and schools. In comparison with Sabaa, where all

| Area          | Selling price per m² in Sudanese pounds (SDG) | Registration costs and building permits |
|---------------|-----------------------------------------------|----------------------------------------|
| Soba Al-Hilla | 1,000 SDG                                     | 10 SDG/m² land transformation costs    |
|               |                                               | (from agricultural to residential land)|
| Sabaa         | 2,000–3,000 SDG                               | 3,000 SDG (for building permit)        |

*Note*: 1 SDG = US$0.053.

*Source*: Interview with land valuator, March 2017.

Table 1. *Land prices and land transformation costs.*

| Who? | Land authority | Survey department | Planning department | Survey department | Land authority | Land Registrar |
|------|----------------|-------------------|---------------------|-------------------|----------------|----------------|
| What?| Household survey | Village survey    | Re-planning proposal | Demarcating the re-planned area | Drawing up contracts | Issuing certificates |
| Average cost per house (US$) | 5 | 8 | 4 | 8 | 300 | 10 |

*Source*: developed on the basis of our empirical data.
these services have to be privately accessed, Soba Al-Hilla has relatively good access to services and social facilities. But the quality of these services might, however, be questioned. Those who can afford them seem to rely on school and health services elsewhere in the centre of the city. Also, in terms of livelihoods, we saw that for the farmers and brick makers especially, it has been hard to find alternative livelihood strategies. Combined with the ever-increasing price of land and rents, these informal workers in Soba must live with a high level of uncertainty and have become ever more vulnerable.

The increasing pressure on land in Soba and the mismatch of urban policies might further enforce these patterns of spatial segregation and processes of social exclusion. Although there have been some significant efforts to improve the quality of urban services and to upgrade the land tenure system in this area, to really move towards a well-integrated and inclusive peri-urban area there is a strong need for a better land governance system that tackles institutional overlap in land administration and stretches ‘across scales and beyond urban boundaries’ (Ros-Tonen et al. 2015, p. 87).

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Notes

1. For more information about the project see https://www.ids.ac.uk/projects/the-urban-land-nexus-and-inclusive-urbanization-in-dar-es-salaam-mwanza-and-khartoum/.

2. Sudan’s country administration system followed the colonial structure by moving from a provincial to a regional and state governance system. The federal system granted significant power to the states, localities and administrative units. Sudan is administered by the federal system which grants significant power to states, localities and administrative units. Khartoum State is administratively divided into seven localities, each of these localities having urban administrative units as well as rural ones. In this paper we refer to the Greater Agglomeration of Khartoum when talking about Khartoum.

3. The 2005 Comprehensive Peace Agreement (CPA) required the establishment of a National Land Commission (NLC). This commission should mediate on land claims between contending parties, assess appropriate land compensation and advise the government on land reform policies and recognition of customary land rights or laws. But due to political differences between the ruling National Congress Party and the South Sudanese Sudan People’s Liberation Movement (SPLM), the state offices of the National Land Commission have so far only been established in Darfur Region and Kordofan State. Other states have not yet managed to establish a land commission.

4. The brick industry in Khartoum used to produce more than 3 billion bricks annually and employed more than 250,000 people, whose livelihoods depended on employment in this sector. These included 40,000 direct labourers, drivers, car owners and land owners (Saibawaih Usuf, Etihad Newspaper, 8 February 2010).

5. All names in this paper have been changed to pseudonyms to preserve confidentiality.

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