Theme Issue Article

Economy and Space

EPA: Economy and Space
2023, Vol. 55(2) 407–427

DOI: 10.1177/0308518X221107016
journals.sagepub.com/home/epn
SAGE

Articulation work: Value chains of land assembly and real estate development on a peri-urban frontier

Vinay Gidwani
Department of Geography, Environment & Society, and Institute for Global Studies, University of Minnesota, USA

Carol Upadhya
Urban & Mobility Studies Programme, School of Social Sciences, National Institute of Advanced Studies, Bengaluru, India

Abstract

If the entanglements of real estate and finance capital are pivotal in ongoing urban transformations in cities of the global south, then a less visible but equally vital dimension is the process of land assembly on which residential and commercial real estate speculation and development are premised. This paper pries open the value chain of land assembly that underlies these transformations in a rapidly expanding peri-urban frontier of Bengaluru, India. Drawing on detailed interviews with land market intermediaries, operating across different scales, who were instrumental in assembling agricultural land for a large apartment complex, the paper shows how existing forms of social power and local knowledge are harnessed to create inter-scalar linkages that enable the creation and extraction of value in Indian real estate. It makes the case for understanding the economic and cultural work of intermediaries in animating land's value chain as 'articulation work'. Finally, the paper assesses the varying forms and quantum of value that are generated and captured by different actors in the value chain, which stretches from the landowning farmer up to a major real estate company, to reflect on the micro-dynamics of speculative urbanism and agrarian urbanization.

Keywords

Articulation, value, land market intermediaries, real estate development, peri-urban land, Bengaluru, India

Corresponding author:
Vinay Gidwani, Department of Geography, Environment and Society, The Institute for Global Studies, University of Minnesota, Minneapolis, Minnesota, USA.
Email: gidwa002@umn.edu

In July 2018, the promoters of 'Lakeview Haven'[1] – a large residential complex on the south-eastern fringe of Bengaluru (earlier Bangalore) – organized a grand opening ceremony. Lakeview Haven consists of 3500 apartments in 25 towers and over 250 'villas' (independent bungalows), built on 100 acres of land in the peri-urban village of 'G-halli'. The clients who purchased flats in Lakeview Haven include software engineers and other middle-class professionals who work in nearby office parks and IT campuses, while the independent villas were bought by more affluent businesspeople and corporate executives (who often view such properties as investments). The builders arranged the event for the new owners of the apartments and villas and those who had contributed to the project, upon completion of the first two towers. On the gaily decorated stage, music was played and children performed dances to entertain the guests. The Chairman of 'Prominent Ventures' – the Bangalore-based real estate company that built Lakeview Haven – addressed the audience. Describing the evolution of the project, he said:

> Friends, let me begin with our thought process. Five years back two gentlemen approached us saying, we have this piece of land, would you like to develop it? One fine weekend they drove me to this place and showed me this one hundred acres of land. When you look at this much space you should not think of just building verticals of one, two or three blocks, but should imagine the people living here … With the support of the entire team, we could deliver these 3500 apartments and 250 villas, four club houses, and all these amenities… Today is the time to acknowledge their hard work. It starts with the land-owner, to all of you who purchased apartments here, the bank who had faith in us, and then the entire team…

The Chairman then invited several key individuals onto the stage to thank them for their contributions to the project. Conspicuously missing from this list was 'Somnath', a local landowner who was largely responsible for convincing the farmers to sell their land. Although he had been invited to sit in the front row, Somnath was overlooked until 'Nitin' – the aggregator who acquired the land for the project – whispered in the Chairman's ear, reminding him of his important role. Later, while showing us around the development, Somnath's mood was glum and subdued. He was clearly stung by the Chairman's slight, but explained that he is 'only close to Nitin' and had met the Chairman only a couple of times.

Our vignette introduces three actors who were key to the production of urban real estate from agricultural land for the Lakeview Haven project: Nitin, the land aggregator; Somnath, the local agent who worked with Nitin to convince the farmers of G-Halli to sell; and Prominent Developers. While these three actors were central to the production of Lakeview Haven, many other actors, institutions and processes had to be 'linked'[2] together to form the multi-scalar chain that enabled this transformation.

In this paper, we elaborate on the 'link work' (Cook, 2015) that produces farmland as a commodity, or asset, that can circulate in property markets and wider circuits of financial capital. We do so by repurposing the concept of 'articulation' proposed by Stuart Hall (1985; Grossberg, 1996). Although Hall employs the term in his analysis of social formations as well as discourse, ideology, and culture, we suggest that its double meaning, 'in which the ideas of "to give voice to" and "to connect" are always implied and always co-present' (Clarke, 2015; 277), makes 'articulation' a powerful analytic for grasping the practices of diverse actors, the division of labour, the frictions and contingencies, the imaginative prospects, and the realizations of value that are inherent to the process of land assembly. By prying open the often opaque 'articulation work' that underlies global value chains and networks of real estate production, our paper contributes to the recent literature on land dispossessions and transformations in the global South (D'Costa and Chakraborty, 2017; Levien, 2018; Nielsen, 2018; Vijayabaskar and Menon, 2018), foregrounding the dynamics of peripheral urbanization (Denis et al., 2012; Friedmann, 2016; Ren, 2021) and the financialization of land (Christophers, 2016; Fairbairn, 2014; Gotham, 2009).

Mediating the production of value from land

Over the past decade, a copious political economy and urban studies literature has emerged on dispossession, value-grabbing, assetization, rent capture, fictitious capital and financialization – much of it centred on land and peri-urban transformations. An influential strand of scholarship has shown how the 'new enclosures' (White et al., 2013) have led to new and reworked forms of dispossession (Peluso and Lund, 2011; Tilley et al., 2017). In India, this shift has been driven not only by large-scale land acquisitions but also by multiple processes of 'agrarian urbanization' (Gururani, 2020). As Ghertner (2014: 1560) observes, 'India's urban revolution is proceeding on its peri urban fringes through millions of small land transactions'.

An important subset of scholarship highlights the role of intermediaries in transforming agrarian land into real estate (Deng, O'Brien and Zhang, 2020). In India, local brokers, often belonging to landed 'dominant caste' groups, are central to the making and structuring of land markets (Cowan, 2018; Nelson, 2018; Roy, 2020). Although intermediaries have long been crucial to economic activity and political relations in India (Björkman, 2021), Sud (2014) suggests that the space for brokerage and land aggregation services in India expanded with the introduction of economic reforms in the 1990s and the consequent rapid expansion of the real estate industry. These studies also demonstrate that locally powerful groups are usually best placed to profit from mediating land transactions in booming land markets (Levien, 2015).

At the other end of the value chain as well, intermediation is crucial as real estate developers forge connections with foreign private equity firms to channel international capital into land and property markets in India (Searle, 2016, 2021). Searle argues that

> … to understand the rapid expansion of capitalist markets since the early 1990s and the continued production of new financial assets, we should examine the mediators – the fixers, brokers and consultants – who help transform objects and social relations into financial assets and thus 'move' them through the global economy. (2018: 539)

The work of intermediaries helps to 'remove local particularity – social knowledge, political connections, bureaucratic idiosyncrasies – from land and present it as an abstracted, internationally legible asset that could be traded as shares' (Searle, 2018: 538–9). Similarly, according to Halbert and Rouanet (2014: 474), in Indian property markets 'finance capital is channelled via a series of interlinked actors that make use of the multiple scales involved in business property investment and development'. Such interscalar value chains bring together actors drawn from different and unequal social and locational positions to form (temporary and usually asymmetrical) relationships – often drawing on pre-existing templates of kinship, caste, patronage or power (Piliavsky, 2014).

While studies of land and property markets in India have focused on the two extreme ends of the value chain – the role of local brokers in separating cultivators from their land, and the networks that draw transnational capital into the Indian real estate market – agents that operate at intermediate scales, providing the crucial links between these two nodes, have received less attention.[3] In this paper, we highlight the central role of a large land aggregator in constructing the chain of land assembly and in the generation and sequestration of value from land.

Another aspect of intermediation largely missing in this literature is the imaginative dimension of what we call 'articulation work' – the fact that linkages create an inter-scalar real estate market by bringing together sellers and buyers around 'fictional expectations': 'the images actors form as they consider future states of the world, the way they visualize causal relations, and the ways they perceive their actions influencing outcomes' (Beckert, 2016: 9). The production of new imaginaries, or an 'economy of appearances' (Tsing, 2005), in the creation of speculative markets has been highlighted by anthropological scholarship that theorizes speculation as 'future oriented social action' that harnesses both imagination as well as 'affective, discursive, and physical labour' (Bear, 2020b: 47, 48) for the accumulation of value. Whereas scholarship on finance capital and urbanization has debated the nature and socio-economic ramifications of land as 'fictitious capital' or 'fictitious commodity' (Christophers, 2016; Ghertner & Lake, 2021) and the rise of 'speculative urbanism' (Goldman, 2011), this current work advocates an expanded understanding of speculation that exceeds a purely economistic conception of value, encompassing the discursive realm of potential and yet unrealized futures that mobilize capital flows (Bear, 2020a).

Reconfiguring the values of land

As land moves up the chain of land assembly, its value form, and value, vary across different phases of its transformation. Broadly, it is transformed from a factor of production in agriculture to a factor of production, a commodity, and a financial asset for real estate. This transformation is not smooth: although land across most regions of India has long been commoditized, rural land markets are notoriously 'sticky' (Chakravorty 2013: 143). Cultivators are usually reluctant to sell land unless a crisis requires a large sum of cash, and land usually changes hands within the village because of its significance not just as a means of production, or use value, but also a key source of social power and repository of cultural meanings. Agrarian land in India is imbued with diverse non-commodity affordances and values, particularly in relation to caste identity, village affiliation, family status and kinship relations (Frykenberg, 1969; Majumder & Gururani, 2021; also, Li, 2014). Further, the monetary value generated from a given plot of land can assume many forms: from wages and surplus value production (when the farmer is cultivating with hired hands), to capital gains (when the farmer sells his plot), to commercial profit (when the aggregator sells the land to a developer), to a combination of rent, interest, wages, surplus value and speculative gains (when the developer builds an apartment complex financed by bank loans and private equity, selling units to both aspiring homeowners and 'investors' anticipating a future boom in property markets).

In short, the movement of land through different forms of value, mediated by intermediaries, not only involves its passage across geographic scale (Leitner and Sheppard, 2020) but also sets in motion a process where value is captured from processes of both production and circulation. In cities such as Bengaluru, where domestic capital as well as foreign private equity are driving forces in real estate development, this multi-scalar process allows for profit to be increasingly generated 'out of the processes of circulation', which is the 'distinguishing feature of financialized capitalism' (Lapavitsas, 2013: 163).

In the following sections, we explore the role of intermediaries, 'land fictions' (Ghertner and Lake, 2021) and speculative futures in generating value from land through our case study from Bengaluru. We elaborate on the 'articulation work' of the chain of intermediaries that was constructed to acquire land for a large real estate project and convert it into a consolidated and 'clean' (without encumbrances and with the requisite clearances) land parcel ready for 'development'.

'Articulation work' and the land boom on Bengaluru's periphery

Bengaluru's real estate revolution can be traced to the 1990s when it became India's preeminent technology hub. Mega-real estate projects began to appear in the late 1990s and early 2000s, catering to the rising demand from corporates and their newly affluent employees for high-end commercial and residential properties, abetted by the increased availability of formal housing finance for middle-class consumers. Initially, the sector coalesced around a nexus of political power and land-grabbing; low entry barriers, combined with an aspirational population with higher incomes, prompted an increase in the number of builders and the professionalization of the real estate industry. The scenario shifted again after 2005, when the Indian real estate sector was opened to 100 percent direct foreign investment (Goldman, 2011, 2020; Goldman and Narayan, 2021; Halbert and Rouanet, 2014) and capital from private equity partners flowed in – allowing companies to undertake larger and more ambitious projects. But as Searle (2016) has shown, foreign investments fructify only through partnerships with local real estate companies that have the knowledge, experience and social and political capital needed to acquire land and manage the complexities of property development in India.

A major challenge is to assemble land parcels sufficiently large to be attractive to developers, in a context where typical plots of agricultural land are not more than one to two acres in size and land records are complex and often incomplete. In cities such as Bengaluru, large parcels are rarely available in core city areas, hence most new development takes place on the periphery of the city (Figure 1). However, until recently Karnataka (the state where Bengaluru is located) had strict restrictions on the conversion of agricultural land to non-agricultural uses and on its sale to non-agriculturalists – inhibiting land markets. Consequently, land acquisition and development were often undertaken by government agencies such as the Bengaluru Development Authority (BDA, the municipal body responsible for city planning), using the power of eminent domain (Nair, 2005: Chap. 3).

Responding to the growing demand for land from developers, a class of professional land aggregators emerged, specializing in buying up land from farmers and rural landholders and assembling numerous plots into larger parcels. Aggregators also manage the complex legal and bureaucratic processes of obtaining permission for land use change and other clearances, property transactions and title registration – all the steps needed to produce land as a fungible commodity (mostly) divested of its complex historical adhesions and layered claims (Keenan, 2017). Severe restrictions

Figure 1. Agricultural land at the cusp of conversion to real estate. Pierre Hauser, with permission.

on converting agricultural land to non-agricultural uses make land aggregation an uncertain and intricate process requiring sharp business acumen, good negotiating skills, local social networks and political influence. Nonetheless, over the last several decades land aggregators have bought up land in villages as far as 50 km away from the city, creating extensive 'land banks' in anticipation of future demand.

Land aggregators constitute just one link in the (unstable and friction-ridden) multi-scalar chains of intermediaries that are formed to convey agrarian land into urban real estate. Other actors include land brokers who are embedded in the local community and deal directly with landowners, middlemen at other scales who have access to government officers or politicians, and (at the top of the chain) real estate developers and investors. While other scholars have explored the top and bottom ends of these chains, here our objective is to chart its entire length up to the developer, focusing on the links that are forged between different actors, the mechanisms that move land up the value chain, and the versatile work of making the farmland ready for 'development' as real estate. Further, we uncover the changing ways in which land becomes the source of value generation – that is, both 'value creation' and 'value extraction' (Mazzucato, 2018: 5)[4] – through the activation of land markets, housing, and commercial property development, the assetization of real estate, and speculative investment. The 'articulation work' of intermediaries, as conceived below, is pivotal to the process of accumulation in this context.

In *Friction*, Anna Tsing discusses how 'spectacular accumulation' on Indonesia's resource frontiers involves an 'articulation of finance capital, franchise cronyism, and frontier culture' (Tsing, 2005: 77). Notably, she depicts articulation as a 'scale-making project' (2005: 60) that must overcome frictions as it constitutes and connects processes at different scales: global, national, and regional.[5] She borrows the term 'articulation' from Stuart Hall, as do we to describe the multivarious work of land intermediaries. In an oft-cited interview, Hall explained 'articulation' in this way:

> In England, the term has a nice double meaning because 'articulate' means to utter, to speak forth, to be articulate. It carries that sense of languageing, of expressing, etc. But we also speak of an 'articulated' lorry (truck): a lorry, where the front (cab) and back (trailer) can, but need not necessarily, be connected to one another. The two parts are connected to each other, but through a specific linkage, that can be broken. An articulation is thus the form of the connection that can make a unity of two different elements, under certain conditions. It is a linkage which is not necessary, determined, absolute and essential for all time. (Grossberg, 1996: 142)

Contingency and indeterminacy are implicit in 'articulation'; equally vital, specific articulations – often inter-scalar – must be *made* and *sustained*. Overcoming frictions involves work. This is evident in the way Nitin, the land aggregator for Lakeview Haven, described the process of land assembly:

> We started this project in 2014 and it has been completed within four years – about 1 crore [10 million] square feet has been built. But to acquire the land it took us from 2007 to 2013 – seven years! All the farmers from these villages cooperated and gave me 100 acres of land. In 2013 I approached the Chairman of Prominent Ventures saying, 'Sir, I have 100 acres on this important road, are you interested? He said, 'Yes, I am interested' ... Today I am very proud that we have done this wonderful project together very successfully within four years ... This iconic project is not only the talk of Bengaluru, it should be the talk of all India!

Whereas Lakeview Haven is a successful project, the annals of real estate ventures in Bengaluru are littered with tales of failure. Tensions and contradictions, ever-present between participating and prospective intermediaries, can inhibit the formation of new linkages or the unravelling of existing ones – destabilizing the value chain of land assembly.

Hall's writings on 'articulation' underscore the political-cultural work that produces discursive alignments and intra-/inter-group links within a social formation. Here, we repurpose Hall to foreground the economic-cultural work required to forge the social linkages that animate the value chain of land. In practice, this entails inventorying land parcels and their claimants, persuading landholders to sell, resolving disputes between multiple claimants, securing the support of local politicians and powerbrokers, navigating the bureaucracy, obtaining the requisite paperwork, and other such steps required for land to become a factor of production in real estate development as well as a liquid, 'investible' asset (Li, 2014). When scholars contend that practices of financialization which enable the circulation of land and other entities as tradable financial risk in markets should be regarded as 'value-generative work' (Christophers, 2018: 337; also, Bryan et al., 2015; Gotham, 2009), there is oddly mention only of 'workers in the financial sector' or 'insurees' implicated in the creation of securitized assets. The 'articulation work' of intermediaries to disembed land from its place-bound social integuments, enabling its circulation as property and financial commodity, goes unmentioned. We push back against this omission, arguing that the work of intermediaries that 'moves' land up the value chain by transforming its fungibility, is value-creating: both in the domain of commercial services rendered by intermediaries, and when that parcel of land enters construction as a factor of production. But, to the extent that intermediaries also garner a portion of their profits out of the processes of circulation or straightforward arbitrage, and to the extent that land can be enrolled into interest- or rent-bearing instruments or forms of financial speculation, the work of intermediaries is also value-extractive.

Also typically effaced in writings on intermediation is the imaginative dimension of 'articulation work' – the fact that linkages create an inter-scalar real estate market by bringing together sellers and buyers around 'fictional expectations' (Beckert, 2016) of a projected future state. This involves the telling of 'social stories through which land is narrated as a commodity to produce particular political-economic effects' (Ghertner & Lake 2021: 14). As Clarke (2015) points out, articulation implies both 'to connect' and 'to give voice to'. Thus, Nitin's pitch to the Chairman of Prominent Ventures, asking him to contemplate the development possibilities of 'one hundred acres' in G-halli. Or the Chairman's remark at the grand opening of Lakeview Haven:

> I thought I should create this space for people's convenience and pleasure, with *[a mix of]* semi-high rise and low-rise *[buildings]*. Because there was so much space, I thought I should divide it in half – in half you will get the tangible value and in the other the intangible value … Intangible value is where people have space to enjoy a good life.[6]

Field site

We draw on extended research in the peri-urban village of G-halli where Lakeview Haven was built on land acquired from local farmers and landowners.[7] G-halli was a rural settlement of about 600 households with a geographical area of 800 hectares (including its agricultural land), located in a fast-urbanizing area on the periphery of Bengaluru (Figure 2). The village is socially and politically dominated by Reddys – a major landowning and cultivating caste of southern India – who owned most of the village land. Most landholdings were small to marginal in size (less than 4 hectares), and only a few Reddy families had substantial holdings.

The land on which Lakeview Haven now stands once produced subsistence crops such as *ragi* (finger millet – a staple coarse food grain), pulses and rice, as well as vegetables, fruits and milk for sale in city markets. The area's ecological and livelihood patterns began to change in the 1990s, as the over-extraction of groundwater for urban consumption (Ranganathan, 2014) led to a sharp fall in the water table and the drying up of irrigation tanks. As a result, many households began to turn to non-farming economic activities to supplement their agricultural incomes. In addition, the

Figure 2. 'Lakeview Haven' seen from the marshy banks of the lake. Pierre Hauser, with permission.

younger generation of Reddy landowning families are mostly educated and have taken up urban employment.

As cultivation became more difficult and less remunerative and the younger generation 'lost interest' in agriculture, farmers began to sell their holdings. Sales were further stimulated by rising land prices as the area became a prime site of land speculation and real estate development in the early 2000s. The land market took off particularly after 2007 when G-halli was incorporated into the municipality.[8] As in other fast-urbanizing rural areas of India, several cultivators became brokers or small-scale rentier landlords, garnering profits from the booming land market (Cowan, 2018; Gururani 2020; Upadhya and Rathod, 2021). By the time we began fieldwork in early 2017, an estimated 80 percent of the agricultural land had already changed hands. Interviews revealed that most Reddy households had disposed of some or all of their holdings, often investing the proceeds in urban properties or agricultural land farther from the city (where prices are lower).

In the following section, we discuss the process of land assembly for Lakeview Haven.

Mapping the chain of land assembly

The 'articulation work' that actualizes land's potential for value generation pivots on a combination of elements: personal charisma, place-specific knowledge, practices of intermediation, localized instruments of power (consent and coercion), regional political networks, portable and standardized techno-managerial and operational skill sets (that can migrate from location to location), as well as inter-scalar circuits of capital. As discussed above, value is generated from land through chains that operationalize and 'link' these various elements together. These chains include a range of actors, from the farmer selling the land, to the local broker(s) providing the connection to the owner, and finally the land aggregator or real estate development company – the ultimate recipient and user of the land on which commercial and residential properties are built for sale. Other actors that get linked into the chain at various junctures in the land assembly process include the ubiquitous 'touts' or agents who specialize in helping files move through the government bureaucracy or creating land sale documents (Sud, 2014), as well as various financiers and investors. In addition, in India land deals rarely get accomplished without the involvement or sanction of politically powerful actors such as the local MLA (Member of the Legislative Assembly), who oil the bureaucratic wheels in return for a cut of the profits or launder their 'black' (unaccounted) money by investing in land. Each of these actors deploys their specific sets of knowledge, skill, or social capital to carry out their required task – whether raising finance, employing the right leverage to persuade an obstinate landowner to sell, or obtaining official clearances.

To illustrate the operations of the value chain of real estate production in Bengaluru, in this section we describe how land was assembled for the Lakeview Haven project, focusing on the three key actors mentioned above. At the top of the chain is Prominent Ventures, a Bengaluru-based company that rode the real estate boom to become one of the largest developers in India and a profitable listed company. The master land aggregator, Nitin, occupies a lower rung in the social hierarchy, but has built up his successful land business to become an affluent and politically influential businessman in Bengaluru. Somnath, who hails from a landowning Reddy family of G-halli, was the key village intermediary who leveraged his local knowledge and networks to help Nitin acquire the land, substantially enhancing his own wealth in the process. The following account shows how these socially diverse and unequal actors engage in 'articulation work', coming together (temporarily) to form a value chain that produces land as a fungible and unencumbered asset. This case illustrates how the business of real estate in an expanding metropolitan city of the global South, in swallowing up agrarian land on its perimeter, depends on the construction of complicated and often fraught relations across social boundaries of class and caste, rural and urban.

Nitin, the land aggregator: imagining the future city, anticipating returns

The story of Lakeview Haven begins in an imaginative geography. Nitin, the land aggregator, had identified the south-eastern fringe of Bengaluru as a future real estate 'hot spot' and began trying to acquire land there in 2005.[9] Nitin's actions were speculative in the double sense of being financially risky and anchored in a vision of the city's future growth – one that could well have proved wrong. Thus, a key skill of aggregators is the ability to anticipate in which directions the city will grow and to invest in buying agricultural land in anticipation of that growth. As Charney (2001: 744) puts it, 'optimization of capital gains in the real estate business involves "spatial literacy"'. It is this imagined future that creates land markets in places such as G-halli. But aggregators do not engage in this visioning exercise in a vacuum – they cultivate relationships with powerful politicians and bureaucrats from whom they glean important information, such as the location of a planned highway or new infrastructure project. In this case, Nitin may have had inside information that G-halli would soon be incorporated into the Greater Bengaluru Municipal Corporation (BBMP) – a development that would make it an attractive site for development and push up land values.

During an interview Nitin explained to us how the process of land aggregation works. First, they identify a prime spot for real estate development. Next, they spread the word amongst local agents that they are interested in buying land. These agents contact prospective sellers to make offers and broker deals. After cementing a land sale, aggregators manage the complicated processes of 'converting' agricultural land to non-agricultural use, drawing up the sale deeds, registering the transactions, and other paperwork needed to create a 'clean' parcel of land. Nitin explained: 'My strong area is land banking – acquisition of the land, completing all the formalities for converting from agricultural to non-agricultural, and so on'. Thus, successful aggregators such as Nitin forge their own chains or networks of contacts, at multiple scales (Sud, 2017; 2020). At the local level they work with brokers and functionaries in local government offices, and at wider scales they utilize their connections with politicians to ensure that land transactions take place smoothly. Land aggregators often employ individuals recently retired from the Revenue Department (which administers agricultural land) as 'fixers', whose role is to overcome processing hurdles.

In the case of G-halli, Nitin commissioned local brokers to approach farmers with offers of 15 lakh rupees per acre – higher than the ruling market value for land in 2006–7 of 10 lakh.[10] He also promised fast closures: his brokers were in touch with the relevant government officials – the Revenue Officer, the Tahsildar and the Village Accountant – to ensure that all the required documents were processed 'in record time' of just a few days. The promise of quick cash tempted several farmers to sell, encouraged or coerced by the brokers. According to 'Samir', a local key informant, brokers acting for Nitin initially posed as the actual buyers and registered the purchased land in '*benami*' (fake names). They did this to conceal the fact that the land was being purchased for a large real estate project, which would have led owners to demand higher prices. However, Nitin succeeded in acquiring only a few acres through brokers, while his vision pivoted on assembling a large, contiguous tract of land for property development. It was at this point, in 2009, that Somnath Reddy entered the scene.

Local intermediaries: mediating or making the land market?

As a member of a local landowning Reddy family, Somnath was well-placed to help Nitin with his land acquisition project. Although his father was a cultivator, Somnath had received a college education and worked as a college teacher and salesperson before starting his own small industries. This background – straddling the rural landowning class and the urban middle class – made him comfortable dealing with a wealthy businessman such as Nitin as well as the local farming community. Somnath explained that as a son of the village, he had the 'trust' of most landowners. He also possessed the local knowledge and social networks needed to persuade them to sell. Explaining why a local 'big man' such as Somnath is needed to acquire land, Nitin said:

> It takes a lot of time. You have to convince the farmers one by one, they all have a different mentality and you have to adjust to their mentality … Somnath knows everyone in the village, he knows the family tree and the situation of the family, so there should not be any problems with the land deal. So, wherever we are acquiring land, we must have two or three people in the local area to help. It must be someone in whom people have faith, and he should be confidential for us also.

Over the course of several long interviews conducted in his office situated on the congested main road running through G-halli, Somnath recounted the various strategies he used to persuade owners to sell. His account illustrates the distinctive attributes of land that requires very particular skills and know-how to enter circulation. Drawing a rough diagram to illustrate, Somnath explained that he first marked the rough acquisition target area on a copy of the village land revenue map (which records individual plots of land and their survey numbers). Next, he identified the owners of each parcel from land records procured from the Revenue Department. With the help of his father and other village elders, he carried out a quick 'background check' on each landholding household to ascertain their financial situation and 'needs', based on which he compiled a list of likely sellers. He then redrew the boundaries of the target area, leaving out plots held by 'difficult' landowners. Explaining the need for all this painstaking background work, he said:

> If you give me six hours to cut down 10 trees, I will spend four to five hours just sharpening my axe. I will not just go to the field and start cutting the tree right away. I will do the preoperative work very, very intelligently.

After Nitin approved the acquisition plan, he set a target price of 1 to 1.5 crore rupees per acre. Working with this 'budget', Somnath first approached the 'easy' farmers to offer deals, directly or through brokers. Only after negotiating with likely sellers did he move on to the others. But the process of land assembly was far from smooth: Somnath deployed various tactics to convince several recalcitrant landowners to sell. For example, he claimed that the BDA was planning to compulsorily acquire some of G-halli's agricultural land for a housing scheme, which would force farmers to surrender their land at low compensation. He asserted that he was trying to get the landowners a better deal by convincing them to sell to Nitin, but other interlocutors suggested that the story about a BDA project was created by Somnath himself as a pressure tactic.

Through this very slow, incremental and difficult process, Somnath finally succeeded in purchasing 100 acres of land from around 100 families, over a three-year period (2009 to 2011). Because each deal was individually negotiated, the price paid varied considerably, depending on the seller's specific financial or social circumstances, how hard they bargained, and other factors such as location. Although the parcel he created was largely contiguous, there remained a few plots 'locked' in the centre whose owners had refused to sell. Somnath claimed that these owners were actually '*benamis*' holding land that had been purchased previously by another developer intent on making speculative gains and obstructing a competitor's land aggregation project in the area. With great difficulty, he acquired these plots by offering alternate (and valuable) land parcels outside the project boundary in exchange. From Somnath and other interlocutors we heard many similar examples of the difficulties of land aggregation, from negotiations with landowners to dealing with the byzantine bureaucratic procedures governing land transactions.

Samir described Somnath as the 'siphoning system' that distributed cash to the people below him in the chain, who in turn cement the deals. Somnath, linked to Nitin on one side and the landowner on the other, was the key actor who ultimately determined the sale price. Nitin's interest was to pay as low a price as possible, while the landowner's interest was to get a higher price; thus, Somnath had to negotiate to arrive at a price acceptable to both parties. Somnath told us that it is easier to deal with farmers compared to aggregators, who are 'greedy' and keep 'pestering him' to cut corners to 'save ten rupees'. The aggregator in turn is under pressure from the developers to 'control the price' of land.

Nitin's land aggregation activities drove up land prices in G-halli significantly, from 35–40 lakh per acre in 2006 to 2.5 crore by the time the aggregation was complete. Smaller farmers often sold early, at lower prices, because they needed quick money to clear debts or cover urgent expenses, while more substantial landowners could hold out for higher prices. Despite paying higher rates as time went on, the difference between the price paid by Somnath (1.25 to 2.5 crore per acre), and the value of the land once it moved up the land assembly chain, was even greater – as we show below.

In acquiring this land, Somnath's caste identity was clearly crucial: almost all the farmers who were approached with offers and eventually sold were also Reddys. Land belonging to Dalit households was explicitly excluded from the target area.[11] Somnath's concern for his own 'community' is clear in his narratives, wherein he represented himself not as an ordinary land market intermediary who stood to gain from brokering land deals, but as a local leader who wanted to get landowners the best price. He claimed that he was motivated to help Nitin not by greed but a desire to 'help' his fellow villagers, who would inevitably lose their land, one way or another, given the rapid pace of urbanization. Somnath's ideological self-fashioning gestures to yet another aspect of Hall's theory of articulation: namely, that during the work of listening, engaging, addressing, and connecting, subjects 'discover' – articulate – themselves in new ways.

After a successful negotiation, Somnath would give the seller an advance of 25% of the sale price. He then managed all the legal and official processes needed to make the land ready for real estate development, which include (amongst other steps): applying to the District

Commissioner's office for 'conversion' of the plot from agricultural to non-agricultural use; transferring the plot from the registers of the Revenue Department to the municipal land records office; drawing up the sale deed and other papers; and registering the property in the name of the buyer. Although these procedures are the responsibility of the aggregator, Nitin needed a local man such as Somnath to handle the work because he had the local knowledge and networks required to navigate the land administration and district bureaucracy (Roy, 2020). Such intermediaries are also well-placed to negotiate the 'fees' paid to fixers and local officials to complete these procedures (which add a substantial amount to the cost of aggregating land).

Another key task Somnath had to perform was to trace all the relatives who might have a potential claim on the land and convince them to agree to the sale, because without their signatures a sale deed cannot be registered. While around 100 families sold land for the project, there were some 500–750 individuals who had claims over these lands and so signed the transfer papers. Illustrating the difficulties he faced in tracing all these claimants, Somnath told us that *one sale deed included the names of 278 individuals*! In addition, he often had to mediate family disputes that arose around proposed sales – a role that he was well placed to play given his embedding in the Reddy community.

After ensuring that all the acquired plots had 'clear title' and were registered in the name of Nitin's company, Somnath's role in the land assembly chain largely ended. His work for Nitin, and Nitin's dependence on him, allowed Somnath to extract substantial profit from the process. Although already a property owner and a small-scale industrialist, this role propelled him into another class entirely: he now owns a petrol station and a fancy 'farmhouse' near G-halli, plus three villas in Lakeview Haven (received as part of his payment), drives a BMW, and established an 'international school' on land that he owns near G-halli.

Somnath's story illustrates not only the importance of intermediaries in procuring land for real estate projects – highlighted in several studies discussed above – but also their role in connecting actors across different nodes in the value chain. Somnath's social position in the village gave him the connections and knowledge to close land deals which small-time brokers, acting for Nitin, could not achieve. His 'articulation work', as he narrated it to us, included cultivating expectations through tailored narratives that addressed the specific life circumstances and speculative aspirations of potential land sellers.

We now turn to the third key actor in the chain – the real estate developer.

Prominent Ventures: land into real estate

As the foregoing account shows, the aggregator's work is to transform raw agricultural land into a tradable commodity by acquiring, cleansing, and consolidating a land parcel that is ready for development. The aggregator then approaches developers to offer the land for sale or a joint development agreement (JDA), where the aggregator contributes the land as his equity share in the project. In some cases, developers may have an advance agreement with the aggregator to acquire land and so may partially fund the process. An aggregator's role in the value chain terminates when the land is sold to a developer, but it continues if he enters into a JDA. In this case, Nitin formed a JDA with Prominent Ventures in 2011.

Like several other Bengaluru-based real estate companies, Prominent Ventures capitalized on the post-2005 real estate boom by launching an Initial Public Offering (IPO) in 2010 to raise capital – an issue that was quickly oversubscribed. With this infusion of capital, as well as investments from foreign private equity firms in specific ventures, the scale and ambition of their real estate projects grew manifold. A manager at a major fund noted that, during this period, the supply of investment kept rising 'as more and more … foreign institutional investors bought into the Bengaluru growth story', expecting returns of 25–30 percent per annum (cf. Rouanet and Halbert, 2016: 1408) – an expectation that was not met in most cases. In short, 'fictional expectations' (Beckert, 2016) of above-normal returns lured institutional, individual and private equity investors into the real estate sector.

Thus, Prominent Ventures was well positioned to undertake a residential project on the scale of Lakeview Haven – one of the largest in Bengaluru at the time. The company set up a Special Purpose Vehicle to execute the project,[12] which negotiated a joint development agreement with a subsidiary of Nitin's company, 'LAG', which held the land. Construction of Lakeview Haven began in 2013, and by mid-2018 two towers were ready for occupation. Sales were brisk, with nearly 80 percent of the units sold by late 2019.

Generating and extracting value from land

To sum up, the value chain of land assembly is a loose assemblage of interlocked, shifting and often friction-laden relationships that are activated, created, and sutured at different points in the process of land assembly. As Searle reminds us:

> Financialization is human work, shaped by social relations and power asymmetries. It is thus precarious, reliant on assembling chains that can profit from mediation without splintering under the weight of its contradictions. (2018: 540)

The 'articulation work' that reassembles land from its place-bound social integuments and enables its *dis*placement to the next phase and scale of circulation inserts is marked by a clear technical and social division of labour. Each actor contributes a unique set of social and cultural capital, financial power, knowledge and skills, and access to information in forming these sequential linkages. For the sub-aggregator (Somnath), these include his intimate knowledge of people and place, his powers of persuasion and coercion, his own 'links' with Reddy farmers, local leaders, and government officials, as well as tactics of intermediation. The aggregator (Nitin) leverages his financial resources and political contacts to facilitate Somnath's work and overcome bureaucratic hurdles. In turn, the aggregator conveys the consolidated land parcel to the developer through a joint development agreement, who designs and manages the construction of a real estate project and sells the units.

Thus, Nitin provided the crucial 'link' between Somnath (and his connections to local landowners) and a large developer like Prominent Ventures, whose work inserts land into national and global circuits of capital. This articulation work mobilizes his personal charisma, regional social and political networks, his capacity to raise private finance, and location-specific land banking skills of the aggregator. Nitin's ability to assemble land combined with the more portable and standardized techno-managerial, operational skill sets of the real estate developer, including the latter's capacity to tap into national and international circuits of capital (and other sources) to fund the project.

This articulation work, or 'relational work' (Ballard & Butcher, 2020), creates relations of reciprocity or symbiosis as each actor in the chain carries out tasks that cannot be performed by others. For example, land aggregators allow professional real estate developers to distance themselves from the 'dirty' business of land acquisition, such as pressurizing farmers to sell, channelling bribes to government officers, and converting 'black money' into 'white'. As a key informant put it, 'There is a different level of thuggery required to pull out land, and big developers don't engage with this. So, these people do it, package it and pass it on'. The structure of the chain also facilitates value capture through information asymmetry: the financial details of transactions at each link are generally known only to those immediately concerned, the basis of valuations of land and other elements are often opaque, and most actors are unaware of the identities of other actors in the chain except those to whom they are immediately connected.

As the process unfolds, land is gradually converted from a productive form of real property (agricultural land, which is usually inherited property and hence a legacy asset for cultivators with no value as sunk capital), into a commodity purchased by the aggregator, who converts and consolidates individual plots into a larger parcel that can be wielded as a financial – and speculative – asset for future gain. The land aggregator realizes this value (in the form of value creation, trading profits, and capitalized rent) when he sells the land to a developer or, as in our case, forms a JDA. Below we examine more closely how value is generated and extracted from land through this process by delving into the financial details of the Lakeview Haven project.

Capturing value from the real estate chain

The financing of real estate development in India is a complicated affair, which itself requires other kinds of 'linking' work to raise money and service debt as the project unfolds. While the financial details of the Lakeview Haven project are publicly available, information on how LAG financed the land acquisition is harder to gather.[13] In addition to using his own funds, it is likely that Nitin tapped various sources, including 'black money' invested by politicians and other wealthy individuals, who share in the profits – sometimes in the form of finished apartments or villas. As an interlocutor commented sarcastically, 'If this fellow [Somnath] made this much money, imagine what all the MLA must have gotten? Somnath is the MLA's *shishya* [disciple]'.

Although both Somnath and Nitin claimed that they conduct transactions only 'in white' (traceable in the banking system and subject to taxation), land deals almost always involve a large amount of black money – in part because sellers of agricultural land usually demand at least part of the payment in cash. Because a key role of the value chain is to transform land and unaccounted money into accountable real estate, it is difficult to trace or measure the flow of finance as the project unfolded. This is how Nitin described the financing of real estate projects and how it reverberates down the chain:

> There is a financial link amongst people in this business. Imagine you are a builder and you need 10 crore rupees. Initially you will only have 1 or 2 crore … You may give me [the aggregator] 2 crore up front when the project begins. You will give me more money after some period of time – which you get from a bank loan or a loan from a Marwari [moneylender].[14] Only when you start selling his flats will you begin to get back the money he's put in. These days, if after three months you have not repaid [the loan], it becomes an NPA [non-performing asset]. This is when the builder is most needy … When the builder is under such pressure, we [aggregators] get some cushioning as they are willing to spend more money per acre. So I will say to Somnath, 'Offer him [a recalcitrant landowner] 10 or 20 more lakhs and just get the deal closed'. It is during those times that we approach the tough farmers, offer them more money and close the deal.

Thus, capital provided by the master aggregator (or the developer, in some cases) works its way down the chain, compensating the various intermediaries for their work and financing the transaction costs, with a portion finally reaching the original landowner. The actors in the chain extract value from their 'linking' role in different ways. Brokers and other intermediaries glean a percentage from each land transaction, while the aggregator pockets the difference between what he has spent on acquisition and the price at which he sells the land to the developer (or the price at which the land is valued in the JD agreement). In this case, the 'sub-agents' who brokered deals with farmers received 2% of the transaction value as their cut, while the 'main agents' (Somnath and his associates) received a lump sum of Rs. 10 lakh per acre acquired, according to Samir.

'This is how they became so rich', he said, referring to Somnath and his brother (who helped him in the land business). While Somnath likely earned around 10 crore from his work for Nitin, this amount pales in comparison to what actors higher up in the value chain were able to gain.

Based on publicly available data, we have tried to calculate the value extracted or produced from the land transformation by the aggregator and the developer. The joint development agreement between Nitin's company and Prominent Ventures to build Lakeview Haven was based on a 30:70 equity and revenue share: LAG contributed the consolidated and 'cleaned' land parcel, valued at 30 percent of the total project capital, while the developer contributed their 70 percent of the equity as liquid capital. The revenues are split in the same proportion: the aggregator gets 30 percent of revenues from the sale of units (minus 2% marketing costs incurred by the developer), while the balance is retained by the developer. The liability of unsold inventory is split on the same basis.

According to our calculations, the project yielded a project IRR (internal rate of return), for both the aggregator and the developer, of over 30 percent.[15] This figure represents, directly or indirectly, *value extracted* as well as *value created* (via linking services provided, accounted for in brokerage fees and imputed land value, and surplus value realized through sale of produced housing units). We found that LAG's investment in the project – raw land converted to developable land agglomeration – multiplied 4.65 times over the 10 years of revenues from the project, whereas Prominent Venture's investment grew four times over the same period (with a total net cash flow of 600 crore after sale of units). These figures suggest that the land aggregator captured the biggest share of value generated in the chain (as industry insiders also suggested), pointing to his irreplaceable role in the value chain.

However, this remains an inexact representation of value generation since it does fully capture claims to value from all lenders or investors. Were these to be considered, the project equity multiple and IRR for the developer would likely be less than what we have estimated. Additional claimants on the value generated through transactions include institutional and individual investors holding shares in listed real estate companies, and banks, NBFCs, and PE funds entering structured debt arrangements with the developer. Further, those who invested black money in the project would extract high returns on completion.

In addition, our calculations indicate how the value of the land increased as it moved up the value chain. We found that the valuation of the land as equity was many times the cost of the land for the aggregator. An important point to note about calculating value produced and extracted: in joint development agreements the valuation of the land contributed by the owner or aggregator forms is a crucial part of the negotiations, because it does not have an inherent or discoverable market value but is based on the projected sale price of the real estate produced. In this case, LAG, with Somnath's intermediation, incurred a cost of 135 crores to acquire 100 acres from G-Halli's farmers. This figure grows to around 300 crore, or 3 crore per acre (including expenses), as calculated from publicly available data. Further, official project reports show that the value of the 100 acres in the joint development agreement was pegged at around 1100 crore, or 11 crore per acre. Thus, the imputed value of the land in the JD agreement was *3.5 times* the publicly disclosed cost incurred by LAG and up to *ten times the price* paid to the original owners (1.25 to 2.5 crore).

The wide disparity in the value of land at different points of the land assembly process, as well as across its different forms (as agricultural land – as a 'cleaned' parcel converted to urban uses, as equity in a real estate deal, and finally as profits accrued from the sale of finished units) – illustrates the diverse 'land fictions' (Ghertner and Lake, 2021) through which value is produced and extracted in real estate development. *The effect of land's movement up the value chain is even more dramatic when pictured in price per square foot*: 80 rupees (farmers in G-Halli who sold in 2006–07), 310 rupees (farmers who sold to LAG via Somnath between 2009 and 2011), 2500 rupees (the imputed land value in the 2011 JDA), 3100 rupees (LAG's net cash flow over project life), and 7500 rupees (the average sale price of units in Lakeview Haven).

Conclusion

Bengaluru has witnessed a frenzied pace of real estate investment and construction since the 1990s, transforming land into a coveted commodity. Till the 1990s, land markets in India were largely local and dull due to lack of demand, social norms proscribing alienation, and government restrictions. Creating a market for land and staging urban land as 'exchange value' for sale and speculation, aside from the economic-cultural 'articulation work' discussed in this paper, required an array of interventions: the loosening of regulations on the sale and ownership of agricultural land; making home loans more accessible to the middle classes; easing restrictions on foreign capital investment in real estate; and most intangibly, creating an 'imagination' to accompany structural transformations in economy and society – with the net result of transforming land into an investment 'asset' for a range of actors. In short, land in growing cities such as Bengaluru became (in media narratives) the new 'gold' (Fairbairn, 2014).

In all of this, land is revealed as an object that is far from unitary. As it is abstracted from its social and spatiotemporal moorings, its value form switches from an asset that provides economic security for millions of rural households and is culturally valued as family property passed down through generations, to a commodity that yields commercial profit for the middleman, to a financial asset that the land aggregator can hold or trade for speculative gain, to a financial asset and factor of production for the developer. In the case of a JDA, profits accrue to the aggregator and developer from residential or commercial construction when units are sold (although here too, buyers may be speculative investors rather than end-users). Although difficult to track empirically, our calculations from one case study (confirmed by other sources) suggest that the largest chunk of value from this process accrues to the land aggregator, or in some cases to the real estate company and its investors – depending on the current state of the real estate market.

In short, as land travels up the real estate chain, its steadily increasing and changing forms of value – a consequence of its entry into ever-wider scales of capital circulation – are siphoned off by the various intermediaries directing and lubricating its journey, including interest payments to an array of lenders. These transactions exemplify what Mazzucato (2018) terms 'value extraction'. But between the range of commercial services provided by intermediaries and real estate property construction employing raw materials and labour, we enter the realm of surplus value production – although claims to profit from the latter type of 'value creation' remain unrealized for the aggregator, developer and equity holders until the new apartment or villa is sold. The obvious caveat here is that the articulations mobilizing land as a more promiscuous source of value are never risk-free: slippages or unpredictable events can derail land's phase shifts at any number of points. Lenders may balk, a land bank may become a liability, and housing stock may suffer devaluation as unsold inventory piles up.

Speculation is arguably a vital motive force in contemporary real estate transactions, creating a degree of 'incalculable uncertainty' (Humphrey, 2020: 2) at each step of the value chain. It would be incorrect, however, to characterize financial dealings around land merely as gambles: they also, often, are productive of new surplus value in the form of commercial property or new housing stock. Moreover, expressions of interest generated by developers and land aggregators – speculating on the future development of a locality – drive up land prices and thereby create markets as farmers become more interested in selling out. Thus, the business of land assembly may be less risky than real estate development, which is subject to vagaries of property markets, the need to manage capital flows and investor demands, and other elements of risk (Searle, 2018).

The value chain of land detailed in our paper also points to the inter-scalar circuits of finance that connect local land markets with large-scale developers, which in turn have connections with banks, NBFCs, and often foreign private equity firms. Money flows into the rural economy from land aggregation and real estate companies (themselves often financed by a murky combination of business and political interests) through numerous small transactions in land, driving up land values and setting in motion a region-wide ripple effect: not only in land markets but also by generating new wealth through credit, rent and land transactions. The agents facilitating these transactions gain through commissions and trade margins; owners of land generally reap substantial benefits by selling; and aggregators and developers make handsome profits by marketing residential and commercial properties to end users and investors. Of course, the agrarian land transition also tends to displace landless workers, tenant farmers and other marginalized groups from their sources of livelihood and sociality.

Repurposing Stuart Hall's concept of 'articulation' and foregrounding its double valence – to 'give voice to' and 'to connect' – as vital in forming the linkages that compose value chains of land, we have proposed 'articulation work' as a powerful analytic for grasping the practices of diverse intermediaries, their division of labour, the frictions and contingencies that introduce risk, the imaginative prospects, and, ultimately, the realizations of value through the process of land assembly. What local actors call 'linking' creates an inter-scalar real estate market by bringing together sellers and buyers around a speculative economy of anticipation. In so doing, we have sought to ethnographically nuance the political economy scholarship on the financialization of land, which has foregrounded the 'high' and 'low' ends of intermediation but neglected the critical work of mid-level intermediaries. We have also tried to theoretically deepen the anthropological and sociological scholarship on peri-urban transformations by showing how agrarian landscapes are being profoundly altered through the 'articulation work' of local and regional intermediaries, who dis-embed and 'launder' land, thereby allowing it to be inserted into large real estate projects, as well as widening circuits of capital accumulation and financial speculation.

Acknowledgments

This paper draws on fieldwork carried out between 2017 and 2020 as part of the Speculative Urbanism project. We thank our colleagues Sachinkumar Rathod, Kaveri Medappa, Hemangini Gupta and other members of the research team for their exemplary fieldwork and other contributions; our interlocutors for sharing their stories; and the participants in the AAG 2021 panel and the anonymous referees for their constructive critical comments on the paper.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship and/or publication of this article: This work was supported by the National Science Foundation's Directorate for Social, Behavioral and Economic Sciences (grant number BCS-1636437).

Notes

1. Names of all individuals and institutions are anonymized.
2. The English verb 'linking' is often used in vernacular speech to refer to the work of land brokerage or market intermediaries.
3. Several scholars note the importance of land aggregators, but these studies are thin on specifics, with the exception of Sud (2014, 2020). While her interviews with land aggregators illuminate the web of transactions that lubricate land acquisition, our paper elaborates on the operational details that enable land's assembly and its movement into new orbits of capital accumulation through a thick case study.

4. Mazzucato (2018: 5) writes: ‘By “value creation” I mean the ways in which different types of resources (human, physical and intangible) are established and interact to produce new goods and services. By “value extraction” I mean activities focused on moving around existing resources and outputs, and gaining disproportionately from the ensuing trade’.
5. We are grateful to the anonymous reviewer who noted parallels between our argument and Tsing’s. The concept of ‘articulation work’ that we develop in this paper overlaps with Cook’s (2015) discussion of the ‘link work’ of brokers in Mangaluru, India, and Ballard and Butcher’s (2020) notion of the ‘relational work’ of developers in Johannesburg, South Africa. But it is also substantially different.
6. Here he is referring to the proportion of open space to built-up area within the complex – a key determinant of property values for residential projects in Bengaluru.
7. The paper is based on fieldwork carried out between February 2017 and February 2020 by a team of researchers, one of whom lived in G-halli for eight months. The researchers conducted numerous semi-structured, informal and in-depth interviews with village residents and key individuals connected with the Lakeview Haven project, as well as participant and non-participant observation and collection and analysis of a range of documents.
8. In 2007, the boundary of the city was expanded to encompass 110 surrounding villages and the Greater Bengaluru Municipal Corporation (BBMP) was created. Villages such as G-halli that fell within the boundary were then rezoned from ‘green belt’ to urban land in the city’s Comprehensive Development Plan (CDP), making it easier to convert land to non-agricultural purposes and leading to skyrocketing land values.
9. In addition to Prominent Ventures, other real estate companies have acquired land in the area and were planning or constructing projects at the time of our research.
10. 1 lakh = 100,000, 1 crore = 100 lakh or 10,000,000, in the Indian numbering system. In this paper we use ‘lakh’ and ‘crore’ to reflect how monetary values are usually discussed in India. During the period under discussion, the exchange rate hovered around INR 70 to 1 USD, so INR 15 lakh is equivalent to USD 22,000 approximately, and 1 crore to USD 143,000.
11. Dalits, or Scheduled Castes (’SC’, an official category designating groups at the bottom of the caste hierarchy), are the second most populous group in the village. They were mainly employed as agricultural labourers on Reddy farms, but some also held or leased in land for cultivation. Land aggregators and developers generally avoid ‘SC lands’ because (they say) such plots tend to be encumbered by disputes or restrictions on sale (in the case of ‘grant lands’ which have been distributed to poor households through government welfare schemes).
12. A special purpose vehicle (SPV) is usually formed by developers for such large projects, to limit investments and liabilities to the particular project.
13. Real estate developers raise finance from various sources – loans from banks or non-banking finance companies (NBFCs), investments from private equity firms, and others. The collateral for loans is usually land held by the promoters. Aggregators may also take bank or private loans to finance their acquisitions, using land and other assets as collateral.
14. In Bengaluru and other Indian cities, private financiers from ‘traditional’ mercantile communities such as the Marwaris and Sindhis, or city merchants such as jewellers, are important sources of capital for land aggregation and real estate projects. Such credit transactions take place are outside the formal banking system, which makes it very difficult to document the movement of finance (often ‘informal’) through land and real estate investments.
15. We computed LAG’s profit margin based on the difference between the costs of aggregation and revenues earned. But LAG’s returns were relatively high because Lakeview Haven’s sales were very good – not all projects are so successful. According to a real estate consultant, in the best-case scenario land aggregators may earn an annualized rate of return of 25 to 30 percent, and developers 15 to 20 percent.

References

Ballard R and Butcher S (2020) Comparing the relational work of developers. *Environment and Planning A: Economy and Space* 52(2): 266–276.

Bear L (2020a) Speculation: A political economy of technologies of imagination. *Economy and Society* 49(1): 1–15.
Bear L (2020b) Speculations on infrastructure: From colonial public works to a post-colonial global asset class on the Indian railways 1840–2017. *Economy and Society* 49(1): 45–70.
Beckert J (2016) *Imagined Futures: Fictional Expectations and Capitalist Dynamics*. Cambridge, MA: Harvard University Press.
Björkman L, ed. (2021) *Bombay Brokers*. Durham: Duke University Press.
Bryan D, Rafferty M and Jefferis C (2015) Risk and value: Finance, labor, and production. *The South Atlantic Quarterly* 114(2): 307–329.
Chakravorty S (2013) *The Price of Land: Acquisition, Conflict, Consequence*. Delhi: Oxford University Press.
Charney I (2001) Three dimensions of capital switching within the real estate sector: A Canadian case study. *International Journal of Urban and Regional Research* 25(4): 740–758.
Christophers B (2016) For real: Land as capital and commodity. *Transactions of the Institute of British Geographers* 41(2): 134–148.
Christophers B (2018) Risking value theory in the political economy of finance and nature. *Progress in Human Geography* 42(3): 330–349.
Clarke J (2015) Stuart Hall and the theory and practice of articulation. *Discourse: Studies in the Cultural Politics of Education* 36(2): 275–286.
Cook I (2015) Link work: Land and housing brokers in Mangaluru, India. *Journal of South Asian Development* 10(3): 292–317.
Cowan T (2018) The urban village, agrarian transformation, and rentier capitalism in Gurgaon, India. *Antipode* 50(5): 1244–1266.
D'Costa AP and Chakraborty S, eds. (2017) *The Land Question in India: State, Dispossession, and Capitalist Transition*. Oxford: Oxford University Press.
Deng Y, O'Brien K J and Zhang L (2020) How grassroots cadres broker land taking in urbanizing China. *The Journal of Peasant Studies* 47(6) 1233–1250.
Denis E, Mukhopadhyay P and Zeráh M-H (2012) Subaltern urbanisation in India. *Economic & Political Weekly* 47(30): 52–62.
Fairbairn M (2014) 'Like gold with yield': Evolving intersections between farmland and finance. *The Journal of Peasant Studies* 41(5): 777–795.
Friedmann J (2016) The future of periurban research. *Cities (London, England)* 53: 163–165.
Frykenberg R (1969) *Land Control and Social Structure in Indian History*. Madison: University of Wisconsin Press.
Ghertner DA (2014) India's urban revolution: Geographies of displacement beyond gentrification. *Environment and Planning A: Economy and Space* 46: 1554–1571.
Ghertner DA and Lake RW (2021) Introduction: Land fictions: the commodification of land in city and country. In: Ghertner DA and Lake RW (eds), *Land Fictions: The Commodification of Land in City and Country*. Ithaca: Cornell University Press, 1–25.
Goldman M (2011) Speculative urbanism and the making of the next world city. *International Journal of Urban and Regional Research* 35(3): 555–581.
Goldman M (2020) Dispossession by financialization: The end(s) of rurality in the making of a speculative land market. *The Journal of Peasant Studies* 47(6): 1251–1277.
Goldman M and Narayan D (2021) Through the optics of finance: Speculative urbanism and the transformation of markets. *International Journal of Urban and Regional Research* 45(2): 205–401.
Gotham K F (2009) Creating liquidity out of spatial fixity: The secondary circuit of capital and the subprime mortgage crisis. *International Journal of Urban and Regional Research* 33(2): 355–371.
Grossberg L (1996) On postmodernism and articulation: An interview with Stuart Hall. Journal of communication inquiry. In: Morley D and Chen K (eds), *Stuart Hall: Critical Dialogues in Cultural Studies*. London: Routledge, 131–150.
Gururani S (2020) Cities in a world of villages: Agrarian urbanism and the making of India's urbanizing frontiers. *Urban Geography* 41(7): 971–989.
Halbert L and Rouanet H (2014) Filtering risk away: Global finance capital, transcalar territorial networks and the (un)making of city-regions: an analysis of business property development in Bangalore, India. *Regional Studies* 48(3): 471–484.

Hall S (1985) Signification, representation ideology: Althusser and the post-structuralist debate. *Critical Studies in Mass Communication* 2(2): 91–114.

Humphrey C (2020) Real estate speculation: Volatile social forms at a global frontier of capital. *Economy and Society* 49(1): 116–140.

Keenan S (2017) Smoke, curtains and mirrors: The production of race through time and title registration. *Law and Critique* 28: 87–108.

Lapavitsas C (2013) *Profiting Without Producing: How Finance Exploits Us All*. London: Verso Books.

Leitner H and Sheppard E (2020) Towards an epistemology for conjunctural inter-urban comparison. *Cambridge Journal of Regions*, *Economy and Society* 13(3): 491–508.

Levien M (2015) Social capital as obstacle to development: Brokering land, norms, and trust in rural India. *World Development* 74: 77–92.

Levien M (2018) *Dispossession Without Development: Land Grabs in Neoliberal India*. New York: Oxford University Press.

Li TM (2014) What is land? Assembling a resource for global investment. *Transactions of the Institute of British Geographers* 39:589–602.

Majumder S and Gururani S (2021) Land as an intermittent commodity: Ethnographic insights from India's urban-agrarian frontiers. *Urbanisation* 6(1): 49–63. doi: 10.1177/24557471211021507

Mazzucato M (2018) *The Value of Everything: Making and Taking in the Global Economy*. London: Penguin Allen Lane.

Nair J (2005) *The Promise of the Metropolis: Bangalore's Twentieth Century*. New Delhi: Oxford University Press.

Nelson A (2018) *Dalal* middlemen and peri-urbanisation in Nepal. *Economic & Political Weekly* 53(12): 51–67.

Nielsen K B (2018) *Land Dispossession and Everyday Politics in Rural Eastern India*. London: Anthem Press.

Peluso N and Lund C (2011) New frontiers of land control: Introduction. *Journal of Peasant Studies* 38(4): 667–681.

Piliavsky A, ed. (2014) *Patronage as Politics in South Asia*. Cambridge: Cambridge University Press.

Ranganathan M (2014) 'Mafias' in the waterscape: Urban informality and everyday public authority in bangalore. *Water Alternatives* 7(1): 89–105.

Ren X (2021) The peripheral turn in global urban studies: Theory, evidence, sites. *South Asia Multidisciplinary Academic Journal* 26: 1–8. https://doi.org/10.4000/samaj.7413

Rouanet H and Halbert V (2016) Leveraging finance capital: Urban change and self-empowerment of real estate developers in India. *Urban Studies* 53(7): 1401–1423.

Roy VN (2020). Part-time brokers in financialised rural land markets: Processes, typology and implications. *Review of Development and Change* 25(1): 70–88.

Searle L (2016) *Landscapes of Accumulation: Real Estate and the Neoliberal Imagination in Contemporary India*. Chicago: University of Chicago Press.

Searle L (2018) The contradictions of mediation: Intermediaries and the financialization of urban production. *Economy and Society* 47(4): 524–546.

Searle L (2021) Kaushal land agglomerator. In: Björkman L (ed), *Bombay Brokers*. Durham: Duke University Press, 95–100.

Sud N (2014) The men in the middle: A missing dimension in global land deals. *The Journal of Peasant Studies* 41(4): 593–612.

Sud N (2017) State, scale and networks in the liberalisation of India's land. *Environment and Planning C: Politics and Space* 35(1): 76–93.

Sud N (2020) *The Making of Land and the Making of India*. New Delhi: Oxford University Press.

Tilley L, Kumar A and Cowan T (2017) Enclosures and discontents. *City* 21(3–4): 420–427.

Tsing A (2005) The economy of appearances. In Tsing, *Friction: An Ethnography of Global Connections*. Princeton: Princeton University Press, 55–80.

Upadhya C and Rathod S (2021) Caste at the city's edge: Land struggles in peri-urban Bengaluru. *South Asia Multidisciplinary Academic Journal*, Special Issue on Urban Peripheries. https://doi.org/10.4000/samaj.7134.

Vijayabaskar M and Menon A (2018) Dispossession by neglect: Agricultural land sales in southern India. *Journal of Agrarian Change* 18(3): 571–587.
White B et al. (2013) The new enclosures: Critical perspectives on corporate land deals. *Journal of Peasant Studies* 39 (3–4): 619–647.