# Peripheral Agriculture? Macro and Micro Dynamics of Land Sales and Land Use Changes in the Changing 'Rural' Economy of Kancheepuram

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#### Introduction

On the outskirts of Chennai, land is increasingly being converted from agricultural to non-agricultural use, a process that is often mediated by land sales. This phenomena confirms recent findings that agricultural land markets are increasingly active and that institutional constraints on the sale of agricultural lands are less of an impediment than they were twenty years ago. So how do these land markets function and what are the implications of such markets for agriculture? There are two broadly divergent views about agricultural land markets. The first sees agricultural markets as a way to improve efficiency of agriculture. The second situates such markets in wider processes of development and capital accumulation and often associates it with the phenomena of land grabbing both within agricultural land markets is the result of particular priorities of development, we suggest the need for a much more regionally grounded analysis that unpackages how state policies affect land markets, what the micropolitics of land sales entail and how such land transactions affect different categories of farmers.

Tamil Nadu's pattern of socio-economic development over the last two decades has been characterized by two important features. First, the economy has witnessed a higher overall growth rate than that of the country as a whole. Coupled with declining rates in fertility and advances in public access to education and healthcare, this growth has been accompanied by higher per capita incomes and improvements in human development (Kalaiyarasan 2014; Dreze and Sen 2013). Second, despite having witnessed high levels of both economic growth and social development, the agricultural sector has been stagnant with one of the lowest rates of growth of output in the country and a decline in the gross cropped area (Bhalla and Singh 2009). While declining returns to agriculture and the accompanying crisis has been an all-India phenomenon, it has been more acute in Tamil Nadu (Vijayabaskar 2010). Moreover, despite relatively high growth rates in certain sub-sectors of agriculture in the recent past and new growth strategies, agricultural income has declined as well as returns for farming. Levels of indebtedness are high among farming households and multiple livelihood strategies common. Given the fact that over 50% of

households still remain in rural areas, this suggests that the benefits of overall growth have excluded many (Census of India 2011).

The declining returns from agriculture are believed to have pushed farmers out of farming either by forcing them to leave agricultural land fallow (land use change) or through sales of land. In Tamil Nadu, the gross cropped area has declined from 73.8 lakh hectares in 1970-71 to 58.9 lakh hectares in 2011-12. The amount of land classified under cultivable waste, current fallows and other fallows cumulatively has increased from 21.36 lakhs hectares in 1969-70 to 28.9 lakhs hectares in 2011-12. The share of land devoted to non -agricultural uses has increased from 11.4 per cent in 1970-71 to 16.7 per cent in 2011-12. In the more recent past, between 2006-07 and 2011-12, the share of land left under current and other fallow increased from 18.3% to 19.6% of the total geographical area and the land put to non-agricultural uses has increased from 16.5 to 16.7% (GoTN, Season and Crop Reports).

This paper attempts to understand the process of land use change and the implications of land sales. The case study of a cluster of panchayats near the town of Thiruporur in Kancheepuram District, Tamil Nadu, suggests that both land use change and land sales are significant, hence taking issue with many earlier studies that have suggested that significant institutional constraints prevent land use change and that complex interlocked markets act as a barrier to the establishment of a commercialized land market. We build on an emerging literature that has highlighted an increasingly vibrant land market and suggest that such markets are as important to processes of land use change as state-driven land acquisition. We argue that land use change and land sales have increased because sellers and buyers are able to effectively negotiate the rules and regulations pertaining to land use and land sales. This is possible through a network of actors at the local level including panchayat officials, village administrative officers, and a range of land market intermediaries broadly categorized as brokers.

Our other main interest is to map out how different types of rural households are involved in land sales and land use changes. By documenting the micro-processes of land sales, the paper builds on existing literature on land transactions but also supplements it through a more detailed disaggregated analysis across operational size holdings and caste. Specifically, we analyse which farmers sell land and for what purposes and at what prices they sell land. We argue that land markets, seen in the context of a declining agriculture, dispossess farmers rather than transfer it to its most efficient users. A micro-level examination of the multiple factors shaping land-use change in this set of villages may also contribute to the formulation of policies that will govern and incentivise use of agricultural land in economically sustainable ways.

<sup>&</sup>lt;sup>1</sup>http://www.tn.gov.in/dear/4.%20Agriculture.pdf accessed on 7/4/2013 and Season and Crop Report, Tamil Nadu 2011-12.

We selected a region near Chennai as significant land use change and land sales have taken place over the last couple of decades as the city expands outwards. The cluster of villages range from a village where agriculture continues to be significant to one in which almost all land has been sold with bulk of the sold lands remaining fallow or converted for non-agricultural purposes. It also contains a diversity of castes and some variation in terms of land-size holdings and other endowments

The paper is structured as follows. In the following section (Section 2), we briefly review the recent literature on agricultural land markets and highlight the recent changes in characteristics of land markets in India and Tamil Nadu. We make a case for a regional approach to agricultural land markets. Section 3 describes the regional context of Tamil Nadu and the political economy of development in the state. We attempt to relate/embed changes in land markets in the changes in the emerging growth and welfare regimes in the state- welfarism's need for revenue, growth in informality leading to problems with resource mobilization, declining returns to agriculture, and labour transitions. Section 4 elaborates upon the institutions that govern the functioning of land markets. We pay attention to changes to these institutional variables and how institutional rules have enabled brokers to assume an increasingly important role in the working of land markets. In Section 5, we introduce our study location and identify a few important questions that need further exploration. We also describe our methodology. In Section 6, we put forth our major findings with regard to the declining status of agriculture, the actors shaping the nature of land markets, the processes by which land transactions occur and some key features of an emerging post land transfer local economy. This is done with a view to the wider macro political economy.

#### **Rural Land Markets: Drivers and Outcomes**

It is generally believed that an active land market, i.e. where there is active exchange of rights over use of land is essential to ensure that lands are put to their most efficient use. The market mechanism is held to ensure that over time, lands will be transferred from those who use this resource inefficiently to those who can utilize it more efficiently. Deininger et al. (2009), for example, argue that when imperfections in credit markets, government policies and household characteristics are controlled for, lands are transferred to better cultivators. In a context where considerable evidence pointing to the greater efficiency of small farms vis-a-vis large farms (Sarthak and Mishra 201), it is believed that properly functioning land markets are likely to enable a transfer of lands from large inefficient producers to smaller farmers. Baland et al. (2007) broadly corroborate this finding by arguing that land market transactions in Uganda mitigate inequalities in land endowments.

The counter-argument to this is that land markets are rarely free from imperfections for a number of reasons. Significant credit, insurance and land market constraints persist. New forms of inter-locking of credit and output markets have been identified (Gill 2004). Production and price risks common within the agricultural sector are supposed to have been accentuated in the recent decade. Morriss and Pandey (2009) point to a range of imperfections and information asymmetries in land markets as a result of inadequacies in governance institutions. Further, the expected appreciation of land values makes it more difficult for small farmers to buy land given the inflated costs. In fact, the reverse might be true, namely that farmers choose to sell land. This could be the case because while land is seen as an important hedge against risk and hence property owners do not want to sell, holding on to land is not always possible for marginal and small farmers as they tend to have relatively less access to formal risk mitigation institutions. Another important reason that marginal and small farmers might not hold on to their land is the lack of funds they have to invest in land in a context where returns to agriculture are stagnating or declining.

What we know for a fact is that land markets are more active today than they were a decade or more ago. As Chakravorty (2013) demonstrates, there has been an increase in the levels of activity in rural land markets since the late 1990s which has been accompanied by a tremendous increase in rural land prices in the last ten years or so. Rajashekhar (2013) too maps this phenomenon not only in villages located on the outskirts of large cities but even in villages located far away from metropoles and spread all across the country. <sup>2</sup>

What we also know is that conspicuous consumption increasingly seems to drive these land markets. Chakravorty (2013) argues that India's high income inequality has led to concentration of income in fewer hands and consequently in the buying up of property. Such conspicuous consumption by the wealthy at first led to spikes in urban land prices. Chakravorty (ibid) calculates that the urban prices in India are one of the highest in the world in relation to the average income of the Indian household, with prices of residential properties in many localities in cities like Chennai having increased five times during the period 1999-2011 (2013, 148-150). Spillover effects of such price rises may partly explain increases in rural land prices.

The rising prices are also held to offer an exit option for farmers to move out of poorly remunerative agriculture. The political class too plays an important role in boosting demand and supply. They constitute a growing source of demand given their ability to invest large sums of black money in land. They also seek rents by facilitating conversion of agricultural lands into non-agricultural land paving way for more agricultural lands to enter the market. The expansion of money supply is also a key

<sup>&</sup>lt;sup>2</sup> http://articles.economictimes.indiatimes.com/2013-11-12/news/43981081\_1\_farmland-prices-rs-10-lakh-land-acquisition accessed on September 18, 2014.

factor. According to Chakravortyy (2013), scarcity of land has co-existed with poverty and has kept prices low. He argues that that the land market reached a 'tipping point' somewhere around 2000 with the growth in income and credit. Until then, buyers could buy land only through down payment of cash that excluded large number of buyers with relatively lower incomes. The expansion in credit for housing increased effective demand for land. Given the inelastic supply of land, this resulted in price increases. Expansion of individual incomes including black money and incomes earned by non-resident Indians compounded this demand.

While Chakravorty's (2013) findings appear relevant to our case study area given its situatedness at the periphery of Chennai and the expanding upper middle class in Chennai, it is important to remember that macro-phenomena are shaped by specific regional contexts. There is evidence, for example, to show that land markets in regions with better safety nets tend to promote better investments in agriculture and land compared to regions with poor safety nets that push marginal farmers to sell lands to meet their basic consumption/reproductive requirements. Deininger at al. (2009), based on a study by Vijay (2002) also attribute outcomes to levels of non-agricultural development in the region. Higher levels of non-agricultural development imply better functioning credit and factor markets which in turn may reduce the need for distress sales and therefore allow for land markets to ensure better resource allocation.

Another important issue that might shape land transactions is the actual 'meaning' ascribed to land by those who cultivate it. As Murray Li (2009) points out, land as a resource is quite different from other commodities and hence requires active efforts to ensure that it can be mobilized as a resource/commodity. If the meanings/values attached to land are subjective and vary, it is important to understand such specificities and importantly the factors that shape changes in such subjective valuations over time. Do rising land values alter such valuations for example? And if they do, is it true of all actors within a spatial milieu? In India, peasant and tribal resistance to land alienation or acquisition occurs in certain parts of the country while in other parts acquiescence to land alienation is more common. Even among farming communities that are seemingly open to land sales, there is evidence of resentment among certain segments (Vijayabaskar 2013). Oya (2013) highlights the importance of context specifity in understanding drivers, i.e. the need to move away from a mono-causal analysis.

There are, therefore, a number of possibilities in terms of how land markets might work in rural areas. First, purchase of lands by non-residents of the village may lead to the rise of absentee-landlordism with implications for agricultural productivity. Second, as Rajshekhar (2013) suggests, land markets may lead to the emergence of a new class of educated cultivators who can move into modern high value cultivation. The third possibility is conversion of lands away from agriculture which no doubt would have implications for long term food security. State intervention has to therefore be aimed at intervening simultaneously on both fronts, i.e, to ensure commodification and to regulate or slow down the process of

commodification. Statecraft requires that the exclusions generated by the process of commodification of land does not lead to adverse implications for its users even as it seeks to commodify land through a range of policy and juridical instruments.

Finally, it is necessary to look at these processes at a disaggregated scale. As Sarap (1995) points out, different size classes of farming household might sell land for different reasons. Small and marginal farmers tend to sell more to meet basic consumption requirements or to repay debt. Medium and large farmers, on the contrary, sell lands more as part of rural-urban migration strategies, conspicuous consumption, towards consolidating land holdings, for payment of dowry or to invest in agriculture. These processes are likely to lead to a process of growing concentration of land with consolidation at the top and pauperization at the bottom which is contradictory to the expectations from a well functioning land market (Deninger2009). Krishnaji's (1991) study corroborates these claims. However, authors of another study undertaken in Meerut district of western UP, argue that inequality has increased only marginally despite a large number of transactions (Mani and Gandhi 1994). Importantly, they argue that the role of speculation in land deals is insignificant. However, Firman (2000) based on his study on large scale rural land conversion in the urban periphery in Indonesia, shows how this process aided by policy measures has led to creation of 'idle lands' with implications for agricultural output, income and employment.

### The Regional Context: Incentives and Disincentives to Stay in Agriculture

Development in Tamil Nadu is seemingly being pulled in two directions that make it difficult to a priori judge the fate of agriculture and the conversion of land away from agriculture. On the one hand, Tamil Nadu has had a strong emphasis on urbanization. It is one of the most urbanized states in the country and its spread of urbanization is wide. Tamil Nadu also has a larger number of towns per unit area compared to other highly urbanized states such as Maharashtra or Gujarat (MIDS 1988: 40; Rukmani 1996; Nagaraj 2006). This expansive and diffused process of urbanization has paved the way for better rural-urban linkages than in other states. This has also led to an intensification of short-term rural-urban migration, for example daily commutation or seasonal migration to an urban area. Some village resurveys provide micro-level evidence for this phenomenon (Harriss–White and Janakarajan 1997 cited in Nagaraj 2006). This process further manifests itself in a 'shortage of labour' observed in the agricultural sector and a consequent shift to less labour intensive crops like coconut. In addition to such labour mobilities, proximity to urban areas is also likely to have land market implications. Dynamism in small towns or large urban agglomerations like Chennai or Coimbatore may induce surges in land prices fostering another set of incentives to convert agricultural land for non-agricultural purposes.

Land is also critical today to the growth strategy of the state embedded as it is within a macroregime of neo-liberal growth. Neo-liberalism requires several measures to be taken to integrate product
and factor markets with the global market. Importantly, this phase of development has also involved a
degree of state rescaling of responsibilities with the regional/state governments invested with the task of
mobilizing resources for investment and growth. This move has led to the rise of what has been referred
to as 'competition states', with state governments competing with one another to attract investments by
offering a range of concessions. Offer of cheap land has become an important dimension of state policy in
this regard. This incentivizes state governments to assemble large parcels of lands free of encumbrances
in what are seen as 'attractive' locations. Tamil Nadu has been a pro-active state in this regard and has
been able to attract several domestic and foreign investments in sectors such as automobiles, electronics
and software. To ensure land for such investors, it has embarked on a policy of creating land banks that
involve a steady process of land acquisition not tied to any specific project but which add up to substantial
lands held under possession by industrial promotion institutions.

Importantly, land has also become critical to the state's resource mobilization efforts in other ways as well. In addition to promoting growth, the state also requires financial resources to sustain its expanding domain of welfare provisioning. In a context, where the informal sector continues to contribute more to the growth process, resource mobilization by taxing incomes from these growth segments become exceedingly difficult. Taxing land transactions therefore become an important source of resource mobilization. Stamp duties have come to constitute a critical source and as Mukerjhee (2013) has shown, the share of stamp duty in the state's own tax revenue had caught up to the national average by 2007-8, being well below the national average from the the mid-1990s (2012, 26). Since 2007-08, the state has also revised the guideline value upwards to ensure that it does not lose out on taxes because of transactions registered at a value much lower than the market value. Despite a fall in the total number of land transactions in the last year, the government has been able to increase revenue generation on account of the revised guideline values to Rs 8055.74 crores in 2013-14. <sup>3</sup> A rise in land prices may therefore have contradictory implications for the state. While an increase in land prices may imply that the state has to give out more to the owners when it comes to acquiring land for promoting investments, it may benefit the state in improving its resource base to sustain its welfarist interventions.

A strong welfarist state has, however, meant that rural people are well-protected and hence might not opt to sell their land. Tamil Nadu is often cited in development literature as a model in terms of its its ability to combine economic growth with high levels of social welfare provision (Dreze and Sen 2013;

<sup>&</sup>lt;sup>3</sup> http://timesofindia.indiatimes.com/city/chennai/Revenue-rises-but-land-deals-in-Tamil-Nadu-hit-a-seven-year-low/articleshow/39318180.cms accessed on September 24, 2014.

Bardhan (2014).<sup>4</sup> The high investments in social welfare have been attributed to the fact that political power in the state has been predominantly drawn from lower castes and classes on the back of a long history of political mobilization among these classes (Harriss 1999; Wyatt 2013). Electoral competition among the two dominant regional parties has led to the emergence of a strong welfare regime, with its universal PDS definitely being the most important. In addition, there are a range of schemes that are targeted at specific population groups like the old aged, widowed, agricultural workers, construction workers, other casual workers, traditional artisanal workers, etc. Land has come to play an important role in this expanding regime. Following the promises made in its election manifesto, the DMK led front that came to power initiated a scheme of distributing two acres of waste lands to the families of landless poor to a limited extent. In addition, governments periodically provide pattas to the poor who often informally occupy public lands (reference).

Moreover, the quality of urban employment has been far from satisfactory. Tamil Nadu has fared relatively poorly in terms of employment generation in manufacturing (Vijayabaskar 2014). In addition to declines in employment absorption, there has been a steady erosion of quality of employment in the sense that much employment generated has been contract-based and casual in nature (Shyam Sundar 2009: 10). In fact, compared to other industrialized and relatively better off states, the state has witnessed a steady increase in the share of the casual workforce over the last decade (Vijayabaskar 2014).

It also needs to be remembered that there has been a marginal turnaround in the growth of the agricultural sector in the country and in the state, in the last five years, particularly in allied sectors like horticulture and livestock rearing. There has also been a marginal increase in the productivity of some of the major crops like paddy and coarse cereals. Both the central and state governments have prioritized the need to revitalize agriculture through a range of measures and schemes to improve the viability of the sector. Finally, in a context of increasing urbanization and improved incomes, it can be expected that the increased demand for high value foods like fruits and vegetables may incentivize farmers to positively respond to this growing demand. The increase in prices of these products over the last three to four years too is likely to provide additional incentives.

In what follows, we will examine which of these 'development pulls' have impacted more on our selected cluster of villages. Before doing that, we look at the institutional set up that mediates land sales and land use conversion and how that may open up avenues for rent-seeking.

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<sup>&</sup>lt;sup>4</sup>http://twocircles.net/2013jan07/only\_high\_growth\_does\_not\_make\_gujarat\_model\_pranab\_bardhan.html#.VCJI uWfbaho\_accessed on September 24, 2014.

#### **Process and Institutions for Land Sales and Land Conversion**

Sale of agricultural lands and land use change are mediated through the institutional structures that govern these processes. Agricultural lands cannot be converted for non-agricultural use without clearances from different departments. When the government acquires lands, such clearances are more easily available to the new buyers. This introduces further distortions and unequal benefits: whereas land exchanged between farmers are valued as agricultural land and hence priced lower, buyers with a clearance for non-agricultural use can resell land at much higher prices. Such a situation opens opportunities for developers who are interested only in seeking rents through land use conversion and sale.

### Land Sales

Both land sales and land conversion vis-à-vis agricultural land in Tamil Nadu involve a set of processes and government departments. There are no restrictions on land sales, but rather a number of concerns that buyers must address to ensure that the land belongs to the seller and that all legal paper work is in order. The first thing that the buyer needs to make sure of is that the seller has the parent document of the land. This, however, is not enough because the parent document says nothing about the current owner of the land. Hence, after verifying the parent document, the buyer must ensure that the seller is the complete owner of the land. The buyer can get an encumbrance certificate (EC) from the sub-registrar's office. An EC is a certificate that shows that there are no loans or mortgages on the said property and that the property is in the name of the seller. While getting an EC, buyers can also examine the history of transactions pertaining to this land for a period of time.

After getting an EC, the buyer is burdened with a number of other concerns. First, the buyer should see the seller's patta of this land as it is the patta document that indicates ownership. The patta document also tells you whether the property tax has been paid and whether or not there are any dues remaining. It is possible to verify the name of the patta holder in the A-Register which is kept by the Village Administrative Officer (Revenue Department) at the village level. The A-Register gives overall details of all land holdings in the village including the survey numbers, the types of land and the extent of land. The Chitta register gives ownership details according to survey number and the Adangal register details crops grown according to survey numbers. Finally, the buyer can get a sketch of the concerned land from the Field Measurement Book (FMB).

The buyer, after ensuring that the land is owned by the seller, must then transfer the patta to his name after purchasing the land. After registering the sale deed at the Sub-Registrar's office, the buyer can get a fresh patta from the taluk office. Buyers will have to update the chitta and adangal registers and also get the latest EC with their name as the rightful new owner.

The sub-registrar's office has a set of guideline values for all land. These guideline values, which give a rough approximation of the value of a given quantity of land, are obtained after an elaborate process of consultation amongst government departments at different levels. The first step is known as *vaakumoolam* or testimony. Vaakumoolam involves discussions with ward members and panchayat members with regard to recent transactions at the village-level. The next step involves discussion between the Block Development Officer, the Agricultural Officer, the Sub-registrar, the tehsildar and the Assistant Director Guideline, Sub-registrar's office. Collectively, they recommend guideline values for different types of land. This is then taken up at the district level by the DTCP, the District Revenue Officer and the District Collector. Finally, the Deputy Inspector General, of Registration 'adjusts' and sets the guideline values.

Guideline values are set according to land use classifications. There are more than fifty different land use classifications but usually within a revenue village at least 10-15 different categories of classification. Lands are generally categorized within the broad categories of irrigated land, rainfed land and special status land. Within these categories, there are sub-classifications based on soil quality.

## **Land Conversion**

The process of converting land from agricultural use to non-agricultural use is a more complicated process as it requires clearance. While lands classified as 'dry' can be brought under non-agriculture use conversion of wet lands requires a No Objection Certificate (NOC) from the Collector. The Collector will send the application for conversion to a number of government departments: the Revenue Department, the Public Works Department, the Agriculture Department, the Department of Town and Country Planning and the Block Development Office. The VAO, on behalf of the Revenue Department, will scrutinize the land records, i.e. the extent of land, the type of land, the usage of the land etc. The Public Works Department sees whether the conversion of land will affect any irrigation source or channel, whereas the Agriculture Department takes note of cultivation on the Land. The Department of Town and Country Planning examines the zonation of this land and finally the Block Development Office and village panchayat see if there are any other possible objections to conversion.

Requirements vary slightly between dry land and wet land conversion. Permission to convert dry lands to other uses is usually cleared by the teshildar at the taluk level and is more often than not a formality as there are no rules that prevent such conversion. On the other hand, conversion of wet land has elicited a fear that it will impact adversely on agriculture. Consequently, the Department of Town and Country Planning amended the Town and Country Planning Act, 1971, by inserting Section 47(A) which stated that the District Collector, not the tehsildar, had to approve the conversion of wet land after inspecting the existing irrigation source, seeing what the present status of cultivation is and ensuring that

any conversion would not affect any irrigation or drainage channel. Revenue officials say that there should have been no cultivation on a given piece of land for at least for four years. It is also important to note that land conversion can also happen as a result of land acquisition by the government.

The multiple rules and actors involved on paper in land use change and land sales makes it possible for different actors to engage in rent-seeking activities. In other words, given the high transaction costs of land use change and land sales, makes it possible for brokers to assume a significant role in these processes and to shape the way land markets work in practice.

## **Study Area and Methodology**

Kancheepuram district, bordering Chennai city, has witnessed significant land use change over the last decade. The most notable change has been in terms of net sewn area and current and other fallow. The net sewn area has declined from 150,036 ha or 33.85 % of total area in 2000-01 to 118,635 ha or 26.8 % of total area in 2010-11. Consequently, the area under current and other fallow has increased from 10,054 ha (2.3%) and 62,348 ha (14.1%) to 32,802 ha (7.4) and 66, 906 (15.1) for the same period.<sup>5</sup>

Our case study is located in a cluster of four panchayats in Kancheepuram district, Manamathy, Amoor, Kunnapattu and Paiyanur, near Tiruporur, a town located approximately 50 km from Chennai. Tiruporur is situated on the Old Mahabilipuram Road, a corridor of industrial and service sector growth. While pockets of agriculture remain, there is evidence to suggest that push factors away from agriculture are in play as farmers face significant constraints in terms of water availability and growing input coststhat are making agriculture increasingly unviable. State policies aimed at promoting the industrial and service sector, on the other hand, act as potential pull factors away from agriculture for farmers who are no longer able to sustain agricultural livelihoods.

There are approximately 2,760 households with a population of around 12,500 in the four panchayats. The four panchayats are comprised mostly of marginal and small farmers and include predominantly Vanniars, Scheduled Castes and Mudaliars. The cluster of panchayats represent a mosaic of land uses, panchayats where agriculture continues to be significantly important and those where most land is no longer under cultivation. It provided us, therefore, an opportunity to analyse land use changes, and land transactions and the reasons behind them.

The paper is preliminary as we are still in the process of data collection. We intend to interview a total of about 165 households, but our arguments are based at present on qualitative interviews. We had two main purposes in mind: (1) to understand the changing role of agriculture vis-à-vis household income and (2) to capture the nature of and reasons for land use changes/land sales. We tried to the extent

<sup>&</sup>lt;sup>5</sup> This data was provided to us by an independent researcher who is collecting and tabulating data for all the blocks in Tamil Nadu for the State Planning Commission.

possible to select a representative sample across the four panchayats in terms of caste and operational holdings both amongst those who have sold land and those who have not. The villages we studied comprised mostly of marginal and small land farmers which is also reflective of the larger state-wide patterns. Less than ten per cent of the households surveyed so far own or owned more than five acres of land.

We also tried to capture the diversity of possible household scenarios, i.e. families who continued to cultivate despite poor monsoons over the last few years, families who did not cultivate land but retained their land, families who had sold land and bought land elsewhere and families who sold land for 'household purposes'.

Our other main aim was to understand the process of land sales. Who were the main actors involved at different scales in facilitating land sales? Who were the main buyers of land and what were their main reasons for buying land? This would supplement our analysis of the political economy of land transactions.

## **Discussion**

## Policy Induced Distress in Agriculture

Most of the households we interviewed either had left their land fallow this current year or had cultivated far less land than they had ten years ago. There are a number of reasons for this. First, sources of irrigation have run dry. On the one hand, this is because the monsoon has been under par for the last three years and hence open wells and borewells are either empty or the water table has dropped significantly. On the other hand, while some of the agricultural land is in the command area of tanks, these tanks have for the most part silted due to neglect by the departments in charge of maintenance. Also there has been extensive sand mining in tank beds. Second, labour shortages are reported by cultivators in the area. Farmers told us that though NREGA wages are not high as compared to agriculture, many labourers chose to engage in it as it required little work. Youngsters, on the other hand, had preferences for nonagricultural work. The household livelihood profile, in other words, has diversified to a considerable extent. Many go to work in pharmaceutical firms, hospitals, educational institutions and factories in periurban Chennai as unskilled or semi-skilled workers. Some work as skilled manual workers in the construction sector and also as drivers. Firms have also mobilised female workers from the villages by providing commuting facilities in 'company buses or vans'. In a Dalit colony, about twenty women work as cleaning staff in a nearby hospital. Though the wages are not high, it does offer a secure source of income. Older residents dependent on agriculture however find it difficult to find employment outside

agriculture. While a few work as security staff in nearby institutions, most continue to rely on agricultural coolie work whereas women tend to go to NREGS work when available.

Having said this, roughly one-fifth of households, mostly from the marginal farmer category we spoke to continued to report agricultural labour as a major source of income. Some of the bigger farmers who are able to invest more to deepen borewells are still able to cultivate and hence require labour. These bigger farmers include farmers who have resided in the area for a long time and others who have more recently bought land in the area. Agriculture, therefore, remains viable for those who have more land and capital available. Most of the bigger landowners in this region are Vanniars and Mudaliars though there are also a few Dalit households, mostly from outside, who have significant operational holdings.

Even as agrarian distress driven by policy failures have incentivized farmers to sell off their lands, land sales in turn create new problems for those continuing to work in agriculture. Fencing off of bought lands by non-locals prevents access to common property resources like grazing lands. Fencing in a couple of instances has prevented farmers from being able to get the harvester or any machine into the farm for working the land. Even getting bullocks was an issue in one case. Another important problem is access to labour. When more households were involved in agriculture, there was enough employment within the village and farmer households often practiced labour sharing. With the decline in agriculture, more labour exited agriculture posing additional problems for labour access. Further, sinking of deep borewells by non agricultural buyers have led to further reduction in water availability for those continuing to work in agriculture. Finally, there is a clear decline in collective action for ensuring proper common asset maintenance such as that of the village tanks. This is clearly visible in the silting of tanks, non-maintenance of bunds and channels of flow and encroachments along such channels.

#### Land Sales

As highlighted above, large areas of agricultural land in our study area remain uncultivated. Equally striking is the fact that approximately 25% of the sampled households have sold land in the recent past. Most of these sales took place from 2004 onwards. According to key informants, till 2004-05, there were hardly any market transactions with outsiders and in fact few sales as a whole. What did exist to some extent was a lease market. A number of the interviewed households had previously leased in land. And a rare case existed where local small farmers bought land from four marginal farmers who had migrated to work as labourers in Chennai.

For the most part, those who sold land did so before the boom in land prices took place. Most sales occurred between 2004 and 2009. Land was sold at prices ranging from approximately 9,000 rupees a cent to 16,000 rupees a cent. Today land in the same area is being sold at 1 lakh per cent. The larger sellers of land invariably sold a part of their total landholdings and remained in the village whereas

marginal farmers sold all their land barring their homesteads. There are clear differences in the bargaining power that marginal farmers bring to the land market compared to small and medium farmers. Depletion of incomes from agriculture have led to distress induced diversification into informal employment in the non-farm sectors. Incurring of debts due to ill health, marrying off of daughters and at times payment of fee for entering their children into higher education push them into selling lands more easily compared to other farming households. Relatively better off farmers on the other hand are better placed to negotiate because of their ability to wait. We came across instances of farmers who sold lands more than a year after the first offer from a non-local buyer came in. In fact, some of them continue to wait to sell off some of their lands which they presume are likely to get higher prices in future. A couple of medium farmers who had refused to part with their lands were offered land parcels in another part of the village in addition to money by the buyer. A medium farmer had also bought lands from neighbouring marginal farmers and then sold them as a consolidated holding to the non-local buyer,

Buyers of land were mostly from Chennai who saw in land an investment. They sell the land after a few years during which period the land values would have appreciated given the new demands for land. However, there are differences in the nature of buyers. Some are institutional-property developers, real estate firms that buy and sell lands to others who require lands, educational institutions and wealthy individuals including NRIs. Brokers report demand from several wealthy households from the city and at times from other places too. The internet has allowed for brokers to reach out to distant buyers including those residing outside the country. Farmland prices are believed to be highly correlated with inflation but do not respond to returns from other investments. Investment in farmland is therefore seen as a hedge against inflation and also a means to reduce portfolio risks (Fairburn 2014). In the case of land, though investment for speculative purposes happens its appreciation in value is based on its returns when put to productive uses. However, even non-financial investors in land are increasingly seeking to tap into its income streams as a financial source rather than as productive source.

Our case study area also encompasses an industrial park known as Japan City. Land for this park was bought directly from farmers and consolidated by brokers who then sold it to the industrial consortium. In other words, the provision of land for industry took place more through consolidation of small holdings as opposed to through land acquisition.

The above brief narrative of land sales in our study area suggests that land transactions have not been about improving the efficiency of agriculture but rather about speculative investment and in a few instances for claimed activity expansion of firms. Importantly, most buyers have left their land vacant and continue to live in the city. Presumably, over time they might sell the land and invest further south

down the OMR. The sharp increases in land prices, therefore, appear to have been primarily due to demand for land from real estate and other urban actors from Chennai city. In other words, value of land is increasingly determined by its location rather than by its productivity.

Farmers, on the other hand, while benefiting to some extent from the spike of prices when agriculture was down, have witnessed the price of land soar through the roof and the benefits accrue more to these urban buyers. Moreover, the currently high prices appear to prevent farmers from being able to consolidate their holdings into economically viable units. In one of the villages, Amoor, out of nearly 2000 acres of cultivable land, key informants say that less than 100 acres continue to remain with local owners. Traditionally the uneconomical size of agricultural landholdings was attributed to the lack of adequate development of lease and sales markets. However, in these villages, despite sales markets being active, there is not as mentioned above a single inter-village transaction that has taken place among the households surveyed during the last decade. The villages are dominated by marginal and small farmers with many of them holding not more than 1-2 acres of land, with some of them even owning less than an acre. Clearly the land sizes are smaller than the threshold size and interviews with small and marginal farmers reveal that the land price increases have made them unaffordable.

Simultaneous to the land market booming, the lease market has gradually declined. Key informants did report the presence of leasing markets till about 15 years ago. At present however, leasing markets have virtually ceased to function. None of the households surveyed report to be leasing in lands though a few mentioned they had leased in land ten years ago.

The factors underlying the decline in leasing markets are to be sought in regional politics and partly in the regional agricultural sector. Over the last 15 years or so, there has been active political mobilisation of Parayars, the numerically largest Dalit community in north eastern Tamil Nadu. Viduthalai Chiruthaikal, the party that has been the backbone of this mobilization, has a substantial presence in some of the field villages. This mobilisation is held to have worked against leasing according to some key informants in the village. Landowners are wary of leasing out as they feel that tenant farmers by virtue of their political strength and what are perceived as allowances in tenancy reform laws may prevent any efforts on their part to take control over their lands. Traditional forms of labour control via caste hegemony that allowed for labour to be tied to certain farming households no longer hold true in these villages and this has increased the uncertainty around returns through leasing. In terms of demand, Dalit and Vanniar households do not find it attractive enough to lease in lands given the declining returns and uncertainty in agriculture. The other factor that contributes to this lack of interest in farming is the growing demand for labour outside agriculture in the region.

# Skewed Gains and Different Logics across Farm Sizes

Gains are also skewed across farm size. Most small and medium farmers do not sell all of their lands. Rather they sell a portion and retain a portion where agriculture continues to be practiced. Some farmers have started growing vegetables instead of paddy. But this requires family labour and those with smaller families or those households where members have already moved out of agriculture substantially cannot invest in this. Else in the case of some small and medium farmers, they sell lands in these villages and buy lands in more interior villages. During the course of our fieldwork we came across such farmers who were holding on to their lands expecting better prices. This sale for purchase of land elsewhere has led to a creation of secondary land markets. Prices in these villages are likely to have increased as a result of such purchases. Importantly, they are better placed to wait and sell their lands. In the case of marginal farmers, as mentioned above, they tend to sell off all their lands and retain only a homestead plot or move to the cities permanently.

The creation of secondary land markets is partly driven by taxation laws. Income from sale of land will be taxed if it is not reinvested back in land within a period of six months from the period of sale. It has brought along with it a shift from peasant cultivation to absentee landlordism. Medium farmers who were cultivating on their lands have now come to lease lands in distant villages. They say they seldom visiting these villages or take interest in the returns from agriculture. Importantly, farmers with slightly larger land holdings are able to invest the money through land sale in their children's education.

Engineering and medicine continue to be perceived as the most prospective of educational avenues, and educational institutions to cater to these subjects have expanded in the state over the last two decades primarily through privatization. Fifty per cent of the admissions are through payment of fees which vary depending upon the reputation of the colleges which in turn depend on past placement records. Hence farmers who get larger amounts by virtue of larger farm size holdings tend to afford better colleges. On the other hand, in many Dalit and poorer Vanniar households, youth tend to choose vocational streams like ITI or Diploma courses. Career prospects for these streams are clearly lower than that of professional education mentioned above Differential access to land therefore perpetuates inequities in the non-agrarian landscapes.

## Information, Power Symmetries and Asymmetric Gains: The Benefits for Brokers

When lands are bought, sellers are never aware of the uses to which the lands are going to be put to. Often they do not even know who the ultimate buyer is. Buyers tend to employ real estate firms to negotiate on their behalf. For example, EEC, a construction firm, bought 2,400 acres of land, which included lands from the two of the villages that we studied. However, ECC did not directly enter into negotiations. The face of the company as far as the villagers who sold the lands were concerned was a family of three men,

one of whom was a lawyer. This group, we realized later when we did fieldwork in another village, has been involved in identifying local intermediaries in different villages in the district for purchase of land. They use local intermediaries, such as panchayat presidents, to aggregate large parcels of land. This is a gradual process and often gets completed over two to three years.

One of the panchayat presidents, who comes from a most backward caste and from a poor family, was not aware of the purpose for which he bought land. But he feels that he is really privileged to have been identified amidst other well to do presidents by such big players. ECC and a few other institutions have also bought lands in villages adjoining the field area a couple of years ago. According to key informants, since they are politically connected, they get prior information of major projects. They are also aware of agricultural lands that are identified by the government for conversion. With this information access they set to acquire lands even before conversion or major projects are announced. When the state seeks to attract productive investments or when large private actors seek land, they step in with offers of large parcels of contiguous land. The government gives them market rates which are easily three to four times more than the prices at which they had bought the land. However, such lands are not offered merely for productive investments. Often they are fed into large scale real estate/housing projects by leading developers like DLF and others. Clearly, access to information by virtue of proximity to political power is critical to their accumulation through rents. Once again, gains are skewed towards the politically and economically powerful actors.

The political class too gains across these multiple layers of transactions. Announcement of major development projects therefore are accompanied by gains across different levels of party hierarchy. When land holders are reluctant to sell their lands, brokers hint at the possibility that the government may take over their lands at prices lower than what they are offering.

At the local level, residents/farmers who are either economically more powerful or politically better connected are most likely to act as brokers. One broker that we spoke to held a lower position in the Pattali Makkal Katchi, a party with a strong base in this region. He also had good connections with the VAO. Another was a medium sized farmer who was again seen to be an influential person. They are paid two per cent commission and are responsible for getting the *chitta*, *adangal* and EC for the buyer. Also when there are disputes, or when farmers are demanding more, they negotiate on behalf of the buyer.

The role of local intermediaries is, therefore,two-fold. Given the predominance of small and marginal holdings, there is a need to transact with a large number of sellers. Even otherwise, given the poor titling of record in India, transaction costs of verifying titles are high. Intermediaries along with the local political leaders and lower level bureaucrats are essentially required for land aggregation and ensuring of clear titles.

Also brokers, as mentioned above, indirectly threaten farmers by telling them that if they don't sell, the government may take over the land later. Market-based transactions are mediated by local intermediaries, elites, developers and political actors who work the markets to withhold information and limit compensation. Clearly, market based mechanisms are not neutral instruments but rather favour powerful actors who work them to ensure larger gains.

## Elements of the Emerging Local Economy

Even prior to land sales, households have been diversifying their livelihood options in ways that merge them into the urban economy of Chennai or Thiruporur, a taluk town close to these villages. For most marginal farmer households, the dominant non-agricultural jobs include construction labour, sculpting, fencing, toll collection, work as drivers, company supervisors, painters, plumbers, and electricians. Some of them are also involved in illegal sand mining from the tank beds. While such jobs are mostly confined to male members of the household, women from sample households tend to take up housekeeping, unskilled jobs in pharmaceutical firms, educational institutions, hospitals and in a software parks not too far from the villages. The firms or the labour contractors arrange vehicles for women from the villages to commute to work.

Clearly, all the jobs are informal in nature and temporary or casual without any degree of employment security. Most male respondents in the age group 18-30 do not have employment all through the month. Many who work in the construction sector for instance report to work only for 2 weeks a month. Electricians and plumbers again alternate between intense contract work and periods of non-work. However casual wage rates in nominal terms have increased considerably and incomes vary between 10-20k per month. Women employees are employed through contractors and get paid not more than Rs. 6,000-7,000per month. These jobs are invariably dead end jobs with little prospects of vertical mobility or acquisition of skills that allow for mobility through inter-firm mobility. With the sale of lands in the region, this process of incorporation of peasant families as labour in the urban economy has intensified. There is another important change. Earlier, availability of land for cultivation meant that any setbacks in the urban economy could be compensated by returns from agriculture, however meager. In turn, incomes from the non-agricultural sector would feed into investment requirements in the agricultural sector. Land sales ensure the severance of such linkages that ensured a degree of income and livelihood security. The construction boom in this part and the widening social security net have however meant that the sellers do not perceive the growing insecurity of their livelihoods.

Another important dimension of the emerging local economy is the spurt in income opportunities through rents, We have already highlighted the rent seeking opportunities opened up through brokering and mediating land transactions. In addition, farmers who have sold their lands have invested in not only

farm lands but also bought lands in Thhiruporur where they have built small tenements for renting. In addition, some households reported having JCBs, harvesters, tractors, transplanters, transport vehicles like cars and vans for the purpose of renting them out. A few families with connections in the bureaucracy and political parties have moved into real estate activity. Key informants also cited a few who have moved into informal money lending. Some of the older farmers survive on interest income. A few have sunk borewells for supply of water for non-agricultural purposes.

#### **Conclusions**

Looking at factors that induce land use change, Lambin and Meyfroidt (2010) suggest a conceptual dichotomy between endogenous factors, ie, changes to attributes/factors within the land-ecology system such as depletion of critical ecological resources such as water or soil quality from exogenous changes such as changes to the larger socio-economic milieu external to the particular set of lands under consideration. Some examples include urbanization and generation of new uses of land and labour as a result. While literature has focused on larger macro-level factors like need for global capital to seek new outlets for accumulation, the response of local actors with different endowments to these changes have not been examined adequately (Hall 2013). We suggest an approach that takes into account these two sets of factors and the nature of interactions between them. Importantly, we suggest that even endogenous factors are shaped by policy shifts that have led to neglect of agricultural growth. Hence, incorporation of institutional variables is critical to understanding or explaining land use changes and working of land markets.

We have tried to highlight how participation in land markets is very much linked to the prevailing nature of policy interventions and specificities of the agrarian situation. Land markets have led to fallowing of land in the short run and to conversion of land into a speculative asset in the medium term. Our fieldwork, although incomplete, seems to indicate that while income inequality may generate demand for rural land as argued by Chakravorty (2013), this demand in turn appears to generate new inequities. Such inequities are tied to size of land holdings, access to information and access to powerful political actors. Credit markets appear to be lacking for meeting the reproductive requirements of marginal and small farmers pushing them into land sales. Relatively well endowed farming households on the other hand are able to negotiate better terms and reinvest in land and/or other assets or human capital. Local actors often appear to willingly participate in the emerging land economy. However, respondents above the age of forty express concern about the loss of land for agriculture and lack of work for them outside agriculture. Age based differences in response to land markets are therefore evident. We are yet to map the gender based differences in understanding of land in such a context.

Our fieldwork also reveals the emergence of a livelihood structure that is based on rental incomes and casual insecure work. While macro-economic studies point out how the rise of rentier incomes may undermine incentives for productive investments, the implications of such a local economy for productive linkages are not clear. The growing reliance on casual urban employment may however lead to new livelihood insecurities that cannot be offset by some returns from agriculture.

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