TENURE AND LAND MARKETS FOR URBAN AGRICULTURE

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Abstract

Cities are shaped by many elements, but undoubtedly one of the most significant factors is the urban land market. Urban farmers, often producing food on land with limited or no security of tenure, are exposed to the risk of being evicted in order for land to be used for more profitable uses such as housing development. In the absence of a system of land titling, advocacy groups, or secure tenure, urban farmers are pushed to the margins. It then becomes difficult to support, manage and/or regulate the sector. More importantly, without legal status, most forms of credit are inaccessible to farmers and they must rely on kinship and illicit sources for credit.

The influence of land tenure on the security of urban farmers to practice their livelihood is significant. Recent IDRC supported projects suggest that banking systems and economists need to develop a methodology to value lands that are informally controlled by farmers or where there are customary legal systems in place. Moreover, evidence suggests that advocacy groups have manage to increase security and access to land for urban farmers.

Keywords: *Urban Agriculture; Land Tenure; Informal Economy; Urban Development.*

INTRODUCTION

The urban bias of modern economic development has contributed to the rapid growth of cities. Capital is concentrated in urban areas where large pools of labour exist. This in turn is where investment and employment end up being concentrated, thus encouraging rural migrants to come to the city. In the developing world, much of this growth has occurred over the past 40 years. In 1960, West African cities held 13% of the regions population. Today, the proportion has grown to around 40%. In the Middle-East and North Africa (MENA), cities account for 60% of the regions population (2000) and were growing at a rate of 4% to 6% per year (World Bank, 2000).

Average urban growth rates, however, can be deceptive. As figure 1 shows, growth rates in informal areas have far outpaced the overall growth rate for cities. According to the World Health Organisation (WHO, 2000), African growth rates in informal areas have grown, on average, a staggering 27% per year whereby overall urban growth rates are around 4%. It is in these informal settlements, often located on the margins of the city, where the problems of adequate infrastructure provision as well as land status are acute. It is also here, in peri-urban areas, where one finds informal economic systems tied to livelihoods such as urban agriculture.

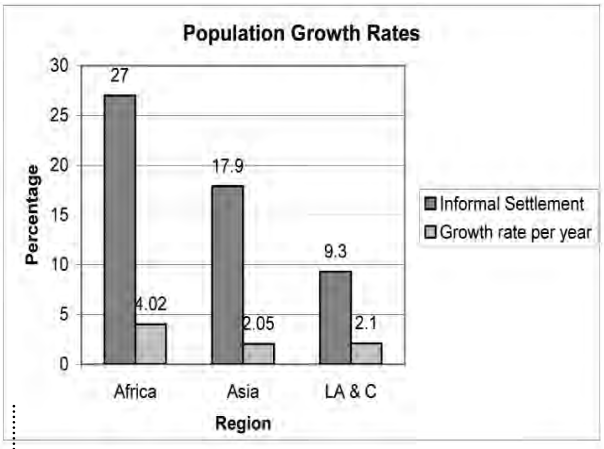

Figure 1. Urban growth rates compared with the expansion of informal settlements in the African cities Source: WHO, 2000

The organic development of land in cities is the result of formal and informal market forces. Settlement patterns are often chaotic as migrants seek employment, housing and land. Turner (1968) identified classic patterns of development whereby migrants would start in core urban areas seeking employment. Once employment is found, migrants would move to peripheral areas where they would settle - or illegally occupy - land. The urban poor make tradeoffs, such as living far from their source of employment, in order to secure land.

At issue with regard to land is the notion of property "rights". The clearest expression of a right

City	Income spent on food (%)
Bangkok (Thailand)	60
La Florida (Chile)	50
Nairobi (Kenya)	40-60
Dar es Salaam (Tanzania)	85
Kinshasa (Congo)	60
Bamako (Mali)	32-64
Urban USA	9-15

Figure 2. Percentage of income spent on food by low-income residents in selected cities. Source: Akinbamijo, Fall and Smith (2002)

to land is held in a land title which is most often non-existent in many urban communities or slums. A major problem is the incoherence between laws, their application and enforcement. Moreover, formal (municipal) and informal (traditional or customary) rules are almost always intertwined. The literature on urban land tenure highlights the complex nature of the question as well as the lack of flexible responses (Toulmin et al. 2000). Given the inherent politics associated with land reform, emphasis needs to be placed on interim measures that fall short of full land titling programs since such programs are not realistic in the short term.

THE PROBLEM

It is well known that the urban poor do not have tenure security for a wide variety of reasons. These reasons include the construction of dwellings on vacant public land, private property, built without permits or are rented without a formal rental contract. The situation of limited land tenure for the urban poor is exacerbated by the fact that urban land markets are dysfunctional due to poor planning, speculation, a lack of access to credit and unfair competition for access to land (UN-Habitat, 2007).

The new landscape of poverty in cities is also one where "urban" and "rural" concepts overlap in "peri-urban" areas (Allen, 2003). Here, agriculture is a common activity and there are overlapping administrative boundaries between different municipalities and utilities responsible for the provision of urban services and regulation. The poor are pressed to marginal lands due to a lack of access to land. It is in these marginal areas - near polluted rivers, waste dumps, flood-prone areas - that they engage in livelihoods to make ends meet. Urban agriculture is a livelihood activity that naturally contradicts the development of land for dwellings and commercial enterprise (in built form).

While urban development no doubt leads to increased economic return on the land in question, its development also represents a significant pressure on the livelihoods of those dependent on the land for an agricultural livelihood. Urban planners involved in the management of lands are pressured to justify and enforce their decisions through formal legal mechanisms. This makes the recognition and support of urban agriculture a very difficult task - one that can rarely be done without explicit political recognition and commitment.

AGRICULTURE AS PART OF THE LIVELIHOOD STRATEGIES OF THE URBAN POOR

The twin facts of rapid urban population growth and poverty has led to an increase in food insecurity, particularly in the South. With the increase in the size of cities has come a change in existing agricultural practices. Food insecurity is the result of either high levels of poverty or the high cost of food Akinbamijo et al. (2002). Food is often the single largest expenditure of poor families - up to 77% for many families -- any savings in its purchase can release a significant portion of income for other uses. In Africa and Latin America, 40% and 50% (respectively) of urban people are involved in farming in some capacity (Egziabher et. al, 1994).

Meanwhile, an extensive survey done in Lusaka demonstrated that 50% of respondents use gardens as their primary source of household food (Ogle, 1990). An additional advantage is the proximity of food production to its market and thus, lower transportation costs and the removal of middle-merchants.

As figure 2 shows, the proportion of income spent on food by low-income families can be very high. In Havana, a survey of families producing mostly for home consumption reported a 40% drop in household food expenditures. A comprehensive study of the overall economic contribution that urban agriculture makes to the economy performed by the Mazingira Institute in Kenya found that in one growing season urban agriculture contributed $4 million USD to the Kenyan economy and the total value of livestock held is around $17 millions USD (Lee-Smith and Lamba, 1998). The same study also found that 2/3rds of urban residents in Kenyan towns grow part of their own food.

The informal economy is made up of a variety of activities that occur outside of formal involvement of the government as regulator. Often, those working in the informal economy are doing a number of jobs at once (Mazumdar, 1976). A wide ranging review of urban agriculture activities in Kenyan towns and cities by the Mazingira revealed that 2/3rds of residents were engaged in farming illustrating the importance of the sector in supplementing incomes through direct marketing of produce or home consumption (Lee-Smith and Lamba, 1998). As an adaptive strategy to fight poverty, urban agriculture is malleable to changing economic situations. Its effectiveness is not limited to poverty reduction as it also increases urban green space, creates economic spin-off industries and employment as well as improves the urban biophysical environment. While modest, the economic output of an urban farm still provides a livelihood to those who are farming the land.

Broadly speaking, there are three major constraints to the widespread adoption of urban agriculture. The first constraint is economic. Setting aside social and cultural "returns" on the investment, urban agriculture does not produce the same economic value on land that would otherwise be developed for housing or commercial development. Naturally, the sum of financial with social returns is large, but as of yet, not analyzed in detail. A second constraint is health. urban agriculture involves the use of solid and liquid waste and crops are often produced on land of marginal quality (Redwood, 2004). The health problems associated with such activities, while manageable, have become the main reason cited by municipal authorities to justify their restrictive stance on the topic.

The constraints outlines above, along with the general perception that urban agriculture is a contradiction in terms, has prevented its formal integration into the economy and its practitioners from benefiting from formal sources of support. Urban policy, with a few exceptions (Kampala, Rosario) is antagonistic towards the practice (Redwood, 2004; Mougeot, 2005). Most urban planners and designers view agricultural land uses as inconsistent with cities. Urban agriculture is either absent from policy or rendered illegal as a nuisance activity through zoning and health regulations. This contrasts sharply with the view of urban agriculture as an activity with positive economic, health and environmental benefits.

FARMER ACCESS TO LAND AND TENURE RIGHTS

The successful integration of agriculture in urban areas is impeded by the problem of unclear tenure. Without legal title, residents are less likely to invest in their properties and household economic activities. Valuable land is instead being developed since the economic return is much greater (Mbaye and Moustier, 2000; Faruqui et al., 2004).

Secure land tenure is cited as a precondition of housing and infrastructure development (Gilbert and Gugler, 1992). This is based on the premise that those with tenuous access to land will be unwilling to support much investment into their households - investments that can enhance livelihoods (Choguill, 1996). Where there is a greater sense of ownership, there is also interest in improving the household. This is especially true among the urban poor because their home and small plot of land is often the only property they own (Hameed Khan, 1996). Even perceived security of tenure and the existence of infrastructure have shown to be important in encouraging incremental household and land improvements.

Tension between formal and informal urban settlements is a recurring, crucial issue in developing cities that is in need of a sustainable solution (Gilbert and Gugler, 1992; Choguill, 1996). Settlements that have been regularized are generally close to the center of town, have legal status

and are thus part of official plans and urban development programs. On the other hand, most of the poor reside in informal peri-urban areas that have tenuous legal status and do not get access to most urban services. In these areas, agriculture is a common economic activity and services are limited. Compounding this problems is the fact that these residents have few rights when it comes to property, accessing credit or even voting and citizenship rights.

What is most striking is that these lands, sometimes occupied for decades, have enormous value. Understanding the value of land held outside of formal systems is critical is an important step is acknowledging the potential of urban agriculture to address urban poverty. Mara and Feachim (2001) estimate that 9$ trillion USD worth of urban land is occupied by urban resident who do not have secure tenure. Credit programs are one of the most important methods to formalize the practice while also enhancing livelihoods by providing a means to increase productivity (Cabannes et al., 2006). Without collateral, such as land, to access credit, small holder urban farmers have limited ability to purchase inputs, invest in new equipment or to enhance the commercialization of their products.

The poor do have assets, but the problem is one of how to unlock those assets. Assets such as land (even informally occupied) and small informal businesses where rights and legal status are not clear can be used to access credit (CIDA, 2006). Evidence suggests that farmers assign high values to land that had access to resources that support agricultural production. In Pakistan, van der Hoek and Hassan (2002), found that urban farmers using wastewater grew five times more vegetables than those using potable water. This higher cropping intensity is reflected in land prices where those plots irrigated with wastewater are, on average, 3.5 times more valuable than areas that are not irrigated with wastewater (van der Hoek et al, 2002). These lands often trade informally, however, a precondition for formal credit is often legal title to property - homes, and especially land - title which many small scale farmers do not have.

SYNTHESIS OF IDRC SUPPORTED WORK ON URBAN LAND TENURE

In recent years, several IDRC projects and researchers have directly or indirectly explored the relationship between land markets, tenure security and urban agriculture. Flynn-Dapaah (2002) explored the relationship between customary kinship ties and access to land in Sub-Saharan Africa. Her finding points out that kinship relationships play a very significant role in how land is parcelled and accessed by farmers. She also suggests that investments by farmers into "soils and trees" are both symbols and strategies to achieve enhanced tenure security (Flynn-Dapaah, 2002). Thus, broad "rights" are secured through kinship ties and first occupation. These rights are governed by unwritten rules. Velez-Guerra furthers this analysis in a study of Bamako whereby he found that farmers would organize as a way to ensure access to land and security from eviction (Velez-Guerra, 2004).

In a study of irrigated farming in Nairobi, Kilelu found that most farmers are squatters (67%) with the remainder a mixture of owners and renters. Only 13% reported owning their own land. Interestingly, many farmers used several very small plots in the area where they were farming as a way to increase the amount of land they are using while reducing the risk of restricted from their plots (Kilelu, 2004).

The Agropolis program of IDRC (1997-2005) involves primary research conducted by Master`s and PhD researchers. Some of the primary data generated under Agropolis tells an important story access to land for urban agriculture. Havorka (2005) found that in Gabarone, Botswana, access to land markets and tenure is more favourable for men than women since they tend to occupy larger plots of land amongst diverse tenure categories (freehold, leasing, squatting) while women are on smaller plots with less security. Bouraoui (2005) notes efforts in both Tunisia and France to minimize the worst excesses of land speculation in order to improve access to land for those with acquired rights or little capital. Research on women and tenure regimes in Harare, Zimbabwe by Gabel (2005) pointed out that women work within groups to ensure that they are not evicted or their access is not limited by external pressures. Her work reinforces Maxwell`s (1995) thesis that rights are acquired in informal ways through having an early and continuous presence on a plot of land.

More recent empirical work supported by Agropolis finds that serious pressure on urban land for development is changing the nature and function of urban agriculture. Access to land is limited by increasing urban sprawl and upward pressure on land markets. For example, in Carapongo - a suburb of Peru - land used for farming was reduced

by 26% between 2002 and 2006, in the same time, the amount of land housing increased by 75% (Maldonado, forthcoming). In some cities, the global property boom of the early 2000's has stimulated rampant urban development offering higher rents than agriculture. In other cities, ambitious plans of architects and planners are not fulfilled leaving urban agriculture to fill the void.

Land tenure should also be seen as a more nuanced concept with a spectrum of options from squatting through to full title. A current project with the Colombo Municipal Council is reviewing the land tenure status of underserved communities and asking what interim measures - short of the unlikely event of full tenure security - can be taken to improve perceived security of land tenure. Temporary leasing of vacant public and private lands to illegal occupants for urban agriculture is a another feasible strategy that is employed by several cities (van Veenhuizen, 2006).

CONCLUSIONS

A great deal of urban land is occupied with limited or no tenure security. City authorities are aware of the existence of informal settlements, but in most cases ill equipped to provide legal status to these communities. As a result, land is traded through kinship ties, or in informal markets. As a result, a land market that is not well managed is vulnerable to speculators, criminal gangs and other forms of abuse. The process of regularization is imbued with politics and even with national government involvement and law making, can take years to put in place. Land, as a finite resource, will continue to dominate discussions about urban environmental resources. Access to land will therefore dominate discussions about how to reduce poverty in cities.

The extent of informal transfers and management of land in cities is unclear since it is naturally difficult to obtain data on the topic. Whether a market is formalized or not, it is no doubt active as people trade and negotiate land values amongst themselves. The disadvantage is that these informal markets are wide open to abuse by land speculators, those with more capital and criminal gangs. Economists and realtors have a role to play in designing new methodologies that can assess land values in the absence of formal data since informal markets are playing a very significant role in the development of cities.

Instead, less formal methods - short of full title - of acknowledging the legal status of these communities need to be supported. Addressing tenure along the spectrum of options from squatting to land titling is possible. Some cities (Colombo) provide identity cards to residents. These cards are an acknowledgement that people are indeed occupying land. A limited acceptance by government can have two important influences on the status of urban farmers. First, it allows urban farmers to access credit and to use their land occupancy as collateral for small loans. Second, it encourages a sense of security that will lead to self-help improvements.

The organisation of farmers to fight for collective rights has been one common thread in the fight for secure tenure. In Senegal, the struggle for recognition by a group of 200 farmers in Dakar yielded the support of the national government in their quest for land security (Faruqui et al., 2004). Minor interventions can enhance the ability of farmers to exercise their rights over land they occupy. Governments need also to focus on short-term strategies that address immediate complaints related to tenure in slums and barrios populares - and these options relate to tacit approval of occupancy where possible in order to allow urban farmers some measure of security. Interim "rights", temporary leases and acceptance of occupancy are good first steps. A second step involves reducing risks associated with loans to people with limited property to offer as collateral. Special credit programs for urban farmers who have limited access to capital and backed by government guarantees would reduce the risks associated with lending money to people without formal "property". Such a modest measure would be influential in increasing safe farming by removing stigma sometimes associated to farming by municipal authorities.

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