

# Good Scholarship on Urban Agriculture and Food Systems

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**Scholarly food system research has been criticised for haphazard disciplinary overlap, sometimes not even addressing the same problems or questions, and for being “advocacy driven”. Data on urban agriculture (UA) and food systems has also been criticised as missing, weak or out of date. In response, this paper looks at how interdisciplinary overlaps should be handled. It also presents an overview of quantitative data on households practising UA in Africa over several decades, yielding important empirical results. These can be used to advance debate on the effectiveness of food systems and UA in different settings. Questions are also raised for further research on the relationship of UA to food systems.**

This short article does not permit evaluation of the studies compared, but suffice it to say each uses a household survey of a particular town or city and counts the incidence of various types of UA. Data is analysed by comparing key intervening variables that are available (household size and income, access to land, size of town and, where available, nutrition and food security levels), to observe differences and trends.

## Results

As shown in Table 1, households practising UA form a significant but highly variable proportion of urban African households. This proportion varies with the interacting variables of town size, household income and accessibility of land. Generally, the larger the town or city, the fewer households practise UA. The majority of households farm for their own consumption but also make savings and sell produce; some are even predominantly commercial. An unexplained relationship is that UA households are consistently larger than the norm. Although the positive effect of UA on food security and nutrition seems established, more studies would help confirm this.

Surprisingly, low-income groups are less likely to practise UA than higher-income earners. While the poor predominate over middle- and high-income groups in urban Africa, they are proportionally under-represented among urban farmers. This is probably because they live mainly in dense urban slums and tend to farm opportunistically in open spaces. Higher-income groups are better able to farm, including the more profitable livestock keeping, because they have space: these are mostly backyard farmers.

Food insecurity and malnutrition are at alarmingly high levels in African urban slums. UA households are better off than the norm, with consistently higher-than-average urban incomes. Urban small-scale farmers earn at least twice as much as rural farmers on only about 20 percent of the area, while both commercialisation and higher incomes are

Table 1: Proportion of households engaged in UA in some African towns and cities

City / town	Country	Farming households	Survey date	City population at that date
11 in southern Africa	9 SADC* members	22% - crops and livestock (only poor households measured)	2008	varied
21 in West Africa		20-50% - crops and livestock	2006	varied
Kampala	Uganda	49% - crops and livestock	2003	1,200,000
Mbeya	Tanzania	93% - crops and livestock	2002	266,000
Morogoro	Tanzania	90% - crops and livestock	2002	228,000
Ibadan	Nigeria	45% - crops, 40% - livestock	2000	2,550,593
Nakuru	Kenya	35% - crops and livestock	1998	239,000
Dar-es-Salaam	Tanzania	36% - crops only	1995	2,500,000
Kampala	Uganda	30% - crops and livestock	1991	774,000
Nairobi	Kenya	20% - crops only	1985	1,000,000
Addis Ababa	Ethiopia	17% - vegetables only	1983	1,400,000

Table from Lee-Smith et al., forthcoming  
\*Southern Africa Development Community



*A woman farms vegetables on a plot next to municipal offices in Cape Town, South Africa (2012). The plot was donated by the city Urban Agriculture Unit, and the farmers are also provided with water and manure to assist in production. Photo by Diana Lee-Smith*

associated with livestock production, with its opportunities for the sale of products such as milk and eggs in addition to meat. Irrigated open-space urban vegetable farming can achieve an annual income two to three times that earned in rural farming.

## Discussion

The relationship between UA and income is not yet understood. Is there a causal link between UA and poverty alleviation? Longitudinal cohort studies are needed to understand the direction of the relationship: does UA alleviate urban poverty or does being better off help a household engage in UA? Also, why are UA households bigger and what, if anything, can be learned from this? More and better studies are also needed on health impacts of UA, both positive and negative, following the seminal work of Cole et al. (2008).

Meanwhile the widespread nature of UA in African cities, and its association with better food security, child nutrition and incomes, suggests that supporting it as part of city planning is desirable. However, planners would need to distinguish between residents of low-income informal settlements (most of whom do not farm but whose food insecurity and malnutrition have been measured) and backyard urban farmers who are clearly doing well. This is being done in Nairobi through its UA Act of 2015 for allocating land and water for UA to households in slums - but different planning solutions may be needed in more developed cities with less malnutrition.

UA can never be proved a “right” or “wrong” policy, even though, as claimed in this article, it is a well-established empirical fact in African cities. Policy makers have to decide whether the facts demonstrate a need for UA planning, and in what way. Policy goals are the key when it comes to deciding on a course of action and assessing effectiveness. Alleviating hunger and malnutrition may be a higher-

priority goal than increased GDP – not so until recently, although the case for promoting UA may be argued citing human rights, as a way of alleviating hunger and malnutrition (including lack of dietary diversity causing obesity as well as stunting). Supportive policies can thus be advocated for UA production of animal source foods and fresh vegetables.

## Conclusions

There are not many comparative analyses of empirical data on UA that look at different studies as I have tried to do. Even if data is uneven and most of the studies are out of date, they are still useful in building a general picture: together, their findings reveal certain patterns.

Planning and designing for UA in food systems must rely on sound empirical evidence as well as the calculus of policy and urban land-use priorities. They must also rely on artful solutions to complex dilemmas without single solutions, aptly characterised as “wicked” problems. They require those involved to make choices. Unlike social science problems that can be rigorously tested, such planning problems require participatory argumentation and balancing of various interests. Thus the planning of food systems, and even their day-to-day operation, are inherently political; solutions will also vary from place to place.

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## Note

A longer version of this paper was presented at the scientific event “Connections and missing links within urban agriculture, food and food systems” at the Faculdade de Ciências Sociais e Humanas – Universidade Nova de Lisboa, 26 April 2018.