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The organization of urban agriculture: Farmer associations and urbanization in Tanzania

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ABSTRACT

This paper argues that the degree to which urban farming associations organize is related to the rate of urbanization, specifically demographic changes, the institutional landscape in which they operate, the environmental context, as well as underlying economic structure or local economic base. These structural conditions in turn impact the characteristics of urban agricultural associations; specifically their membership, how they relate to other institutions, the issues they face, and the economic and social roles they play. We utilize semi-structured interviews of farmer associations and interviews with government officials in Moshi and Dar Es Salaam, Tanzania, two cities that differ in terms of their urbanization patterns and economic, environmental and institutional context, to better understand the nature of the relationship between urban agricultural organizations and the context in which they operate. We find that the manner in which groups organize, the economic role they play, the issues they are concerned with, and the degree to which they collaborate are quite variable. These differences are exacerbated by urbanization patterns that impact the role and functioning of urban agricultural organizations by placing pressure on resources such as available land and water and increasing demand for the products of urban farmers.

Introduction

Farmer associations and cooperatives have long been identified as important institutional actors in agriculture in developing countries (Diao & Hazell, 2004; Magingxa & Kamara, 2003; Resnick, 2004). Ortmann and King (2007) review the benefits and reason for the formation of agricultural cooperatives. These include correcting for market failure (due to information and transaction costs associated with farming), coordinating the flow of input supplies and farm products to markets, providing for missing or inadequate services, and enhancing bargaining strength with both suppliers and buyers. In addition, cooperatives and other smallholder farmer organizations have the potential to impact poverty by creating employment and other economic opportunities. As such, the role of community leadership, individual entrepreneurship, as well as public policy and government intervention in incentivizing cooperative formation is not to be underestimated.

However, the role which cooperatives play in urban agriculture is less clear. The literature on urban agriculture research tends to be focused on three different areas: the contribution of urban agriculture to livelihood, economic stability, and food security; the nutritional and eco-system impact of urban agriculture; and finally, the governance of urban agriculture, specifically the role of policy and institutions in supporting urban agriculture (Prain & Lee-Smith, 2010; Quon, 1999; Vazquez & Anderson, 2001). The policy related questions, however, tend to be focused on the role of the public sector, particularly local and national level policy. By contrast, relatively little research has been carried out on the role of cooperatives in the organization and structuring of urban agriculture as an economic activity. This is unfortunate as urban farmer associations and cooperatives serve different roles compared with their rural counterparts, and they often serve as an important support for urban farmers who often fall through the cracks of local or national policy initiatives.

The degree and extent to which urban farmers organize and pool their resources, protect their interests, and collaborate is vital to the successful and efficient functioning of urban farming, just as much, or even more so, as a supportive local government or non-governmental sector. This is because despite their well-intentioned efforts, local governments and nongovernmental organizations have limited resources to devote to urban agriculture, and often operate within larger institutional biases that are unfavorable or even hostile to urban agriculture (Schmidt, 2012). As such, local

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farmer organizations and cooperatives often can serve a vital role, filling both perceived and real policy "gaps" that exist in providing a more supportive and nurturing role for urban agriculture, whether it be at the subsistence level or more investment oriented farming activities.

This paper argues that the degree to which urban farming associations are organized is related to the rate of urbanization, specifically demographic changes, the institutional landscape in which they operate, the environmental context, as well as underlying economic structure or local economic base. These structural conditions in turn impact the characteristics of urban agricultural associations; their membership, how they relate to other institutions, the issues they face, and the economic and social roles they play. We utilize semi-structured interviews of farmer associations and interviews with government officials in Moshi and Dar Es Salaam, Tanzania, two cities that differ in terms of their urbanization patterns and economic, environmental and institutional context, to better understand the nature of the relationship between urban agricultural organizations and the context in which they operate.

The rest of the paper is organized as follows. First we discuss the organization of urban agriculture, in particular the role of urban agricultural cooperatives operating within the urban environment. Next we discuss our methodology, and how we organized semi-structured interviews of farmer associations. We then compare and contrast urbanization patterns, institutional and environmental conditions in both Moshi and Dar Es Salaam, as well as urban agricultural patterns in both cities. Finally, we analyze the results and present some discussion.

The organization of urban agriculture

The organization of agricultural activity, and in particular the use of the cooperative structure, has a long history in Tanzania, dating back to colonial times when they were established to market and export coffee, cotton, cashew nuts, and cocoa. The larger cooperatives still focus on export crops, but in post-colonial times, the cooperative structure was increasingly introduced to support the development of domestic food markets. However, according to Chambo (2009), the inherited cooperative structure has some inherent weaknesses. First, cooperatives tend to be organized according to type or sector, and rarely integrated. Second, the primary purpose of the cooperative still tends to revolve around constituent services and tends to be driven by patronage rather than enhancing long term economic viability and sustainability. Third, the state continues to be the main promoter of cooperatives and as such, cooperatives are generally interpreted as part of a larger state controlled movement, generally bereft of input and contributions from their membership. Recently, the Government has attempted to reform the organization of cooperatives and has restructured the process by which new cooperative unions are formed and others are merged.

The introduction of cooperative forms of organization to urban areas has added additional complexity. Urban agriculture has generally been interpreted as a response to urbanization, but without the subsequent economic growth and development normally associated with urbanization (Bryld, 2003; Drakakis-smith, Bowyer-bower, & Tevera, 1995; Maxwell, 1999). However the relationship between urbanization patterns and the *organization* of urban farming is unclear. On the one hand, we should expect to find the cooperative structure to be difficult to introduce in urban areas, given the history of cooperatives in Tanzania, and the unique challenges posed to organizing an economic activity such as farming in an urban area. On the other hand, we should expect to find that farmer associations can play a strong role in light of a policy vacuum at the national level (Schmidt, 2012) and limited capacity and resources at the municipal level to address the specific needs and concerns presented by urban agriculture.

Edwards (2009) notes that the process of urbanization coupled with structural adjustment has encouraged a proliferation of associations and organizations to mitigate some of the negative economic consequences. Additionally, the urbanization of agriculture has resulted in a changing demographic and socioeconomic landscape in terms of the type of population attracted to urban farming, its role in the local and regional economy, as well as the political and institutional context. We would therefore expect to find that the organization of urban agriculture is contingent on the specific and unique patterns of urbanization in which farming is occurring.

The organization of small holder agricultural cooperatives is dependent on good governance as well as the appropriate institutional arrangements (Chibanda, Ortmann, & Lyne, 2009). Institutionally, urban farming is organized at a number of different scales. At the municipal level, departments and extension agents serve a number of roles in support of urban farming. Through District Agricultural Development Program (DADP) funding from the national ministry, the municipality offers a range of services. These involve on site workshops, demonstrations, subsidies for agricultural inputs (seeds, power tillers, etc.), livestock provision, irrigation canal construction, and in some cases sending farmers to college training courses. Larger export oriented cooperatives also exist, particularly in regards to coffee production (Kilimanjaro Native Cooperative Union) and other export crops. At a more localized scale, a large number of Savings and Credit Cooperative Societies (SACCOS) also exist, which provide loans, credit and financing for a wide range of employment sectors. Finally, farmers groups tend to be the least structured and most fluent form of association, often organized around a specific objective or target.

Since colonial times, urban agriculture was actively discouraged by national governments who perceived it as economically inefficient (Maxwell, 1995) and an improper use of urban land. It was consistently marginalized, ignored, or under appreciated by planners and local authorities. However, increased awareness and acknowledgement of the role of urban farming, has led to recent efforts to better incorporate urban agriculture into the planning process (Halloran & Magid, 2013). Nevertheless, urban agriculture is largely unregulated and unplanned, and faces a myriad of problems and challenges, some of which are unique to urban environments, and others that are more general in nature. According to Schmidt (2011), issues include:

> ....a general lack of awareness of the role urban agriculture plays in the dietary, economic, and social life of urban residents and consequent marginalization of agriculture by government officials and city planners; an ambiguous and poorly enforced legal environment for urban farmers, insecure tenure arrangements and fear of expropriation of farmers; rapid urbanization and competition for space, particularly in the peri-urban areas, coupled with a lack of protected lands reserved for agriculture; a national and local institutional environment generally biased against the practice of urban agriculture and a consequent lack of support for the specific needs of urban farming; and public health concerns over the relative safety of urban agricultural products, particularly because irrigation is often intermittent and water for urban agriculture is often extracted from polluted sources (Schmidt, 2011, 3). Farmer associations have been able to mitigate some of these concerns by mobilizing farmers, providing assistance, securing common resources (such as power tillers), providing inputs and local knowledge, serving as savings and loan organizations, assisting in food processing and even participating in urban agriculture campaigns.

The relationship between the physical environment and organizations organized around natural resource management is a complex one. The process of urbanization, and the consequent