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# Ethnicity as a determinant of agriculture in an urban setting – Evidence from Tanzania

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ABSTRACT

Ethnicity is an important factor in the configuration of societies as a whole as well as of the shaping of individual livelihoods. Agriculture remains one of the main livelihood strategies in Africa not only in rural areas, but also in an urban context. However, little is known about the role ethnicity plays in urban and periurban agriculture. The ability to formulate appropriate support policies and intervention strategies depends on the knowledge of the interactions between ethnicity and agriculture in an urban context. In this study, a household survey was conducted ($n = 404$) in urban and periurban Moshi, a town of about 200,000 inhabitants located at the foothills of Mt. Kilimanjaro in northern Tanzania. The guiding research question was: to what extent is belonging to a specific ethnic group a significant determinant of a household's agricultural activities. The study shows that there are significant differences amongst the various ethnic groups in the overall involvement in agriculture, access to productive resources such as land, and the role of agricultural activities for the households subsistence and income generation. The Wachagga as the traditionally dominant group of the Kilimanjaro area had the most arable land at their disposal, were much more likely to own the land they cultivate, and showed higher levels of subsistence than any other ethnic group. Similar trends could be identified in the involvement in livestock production, marketing, and the degree of social embeddedness. We therefore argue that ethnicity remains a strong factor in agricultural production and marketing, despite the increasing social and ethnic levelling in the course of urbanisation and social transformation of African societies.



## 1. Introduction

In most African societies ethnic background has a significant influence on the livelihoods of individuals as well as for families, and for communities as a whole. As an affiliation resulting from racial or cultural ties, ethnicity can affect where one lives, what occupation one has, with whom one associates, and for whom one votes (Misana et al., 2003). Ethnicity is therefore much more than sharing the same descent, cultural background or origin. Especially in more traditional societies, it has an often indirect and subconscious influence on social ties and the overall livelihood arrangements. Accordingly, ethnicity tends to come with inequality (Omari, 1987).

A wide range of studies has investigated the links between ethnicity and agricultural involvement. While Colfer and Newton (1989), for example, showed that ethnic background can have a significant impact on the choice of agricultural strategies and approaches, Crane et al. (2011: 181) underline the strong links between ethnicity on the one hand and agricultural activities on the other stating that "social and ecological processes (especially subsistence practices) [...] act as a stimuli for constructing collective identities". In one of the rare studies specifically investigating the role of ethnicity in urban and periurban agriculture, Mlozi (1997) noted that over 50% of livestock keepers in Dar es Salaam were agriculturalists from North-eastern Tanzania, notably Kilimanjaro and Arusha: specifically the Waarusha, Wachaga, Wamasai, Wameru and Wapare ethnic groups. In this context, the origin of these groups, and accordingly their traditional knowledge of livestock production, helped them to engage in those activities even in an urban agglomeration like Dar es Salaam.

However, data is still limited on the role of ethnicity as a determinant of agriculture in urban settings. This especially applies to urban and periurban horticultural production. Furthermore, the few studies conducted have concentrated on large urban centres and capital cities, such as Nairobi, Dar es Salaam, or Accra. As Schlesinger (2013) pointed out, the role of urban and periurban

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agriculture in small and medium-sized cities is thereby often overlooked. Large urban agglomerations contribute significantly to global urban growth, yet, for decades to come the large majority of the global urban population is expected to live in urban areas of less than half a million inhabitants (Cohen, 2006; Matuschke, 2009). Accordingly, small and medium-sized cities (SMCs) play an important role in past, current and future urbanisation, especially on the African continent (Schlesinger, 2013). According to the UN (2012), in 2010, more than 150 million Africans lived in SMCs. At the same time, only around 120 million lived in urban agglomerations with a population of more than 500,000 inhabitants. These highly dynamic SMCs are expected to form the urban foundation of many African nations, including Tanzania. However, the coverage of these towns and cities in urban and periurban agriculture research is insufficient.

Knowing about the role ethnicity plays for agricultural activities in an urban and periurban context is important, inter alia, for the formulation of appropriate intervention strategies. This particularly applies to SMCs where steering capacities are sufficient, urban problems are not too big to handle yet, and development can still be navigated in a favourable direction. Compared to their bigger counterparts, SMCs can more easily adjust to rapid changes related to the urbanisation process (Schlesinger, 2013; Martine, 2008). According to UN-HABITAT (2006: 1), in SMCs relationships between citizens and their urban governments tend to be "less conflictive than in larger cities".

When it comes to the formulation of intervention strategies, urban and periurban land use plans, or support schemes for urban and periurban agriculture, it is important to understand the role of ethnicity for people's livelihoods. Data on land ownership and agricultural skills of urban dwellers of different ethnic backgrounds, for example, is essential for better urban development practice as well as improved agricultural policy making, as Gilbert et al. (2002) pointed out. Once the role of ethnicity in this context is recognised, measures can be planned accordingly in order to avoid ethnic tensions and inappropriate policies.

In this study, a household survey ($n = 404$) was conducted in urban and periurban Moshi, located at the foothills of Mt. Kilimanjaro in northern Tanzania. A transect approach formed the basis for all data collection and analysis steps in order to ensure that a wide range of households along the urban–rural gradient, their agricultural activities and ethnic backgrounds were captured. Households were randomly selected using recent remote sensing data and a Geographic Information System (GIS). A standardised questionnaire was used to assess household variables such as ethnic background, migration background, and economic situation. Furthermore, data was collected on the households' involvement in agricultural activities, their agricultural knowledge and means of production, market access, etc. Household data were supplemented by a number of expert interviews conducted, inter alia, with ward executive officers, town planners, and agricultural extension officers.

Based on a case study from Tanzania, this paper contributes to the understanding of ethnicity as a determinant of agricultural activities in urban settings by providing answers to the following guiding question: to what extent is belonging to a specific ethnic group a significant determinant for agricultural as well as selected wealth parameters? Furthermore, we investigated how these interrelations between ethnicity and agricultural activity are manifest and what the reasons are for those effects. We argue that ethnicity is a crucial factor for the access to productive resources and therefore produces inequalities in agricultural production. It is investigated whether Omari's statement (1987: 65) that "ethnicity alliance is an asset rather than a hindrance" is valid in the case of agriculture in and around Moshi. We thereby concentrated on overall involvement in agricultural production, access to land and land tenure arrangements, and involvement in marketing of agricultural products as the respective indicators. Furthermore, we emphasize that urban and periurban agriculture is in many cases an important livelihood strategy for people moving to the city from other parts of the country, making access to these resources even more important.

## 2. Materials and methods

### 2.1. Study site description

The town of Moshi is situated at the foothills of Mt. Kilimanjaro in northern Tanzania. With an estimated population of around 184,000 in 2012 (National Bureau of Statistics, 2013), it is the biggest urban agglomeration in the Kilimanjaro Region. The annual population increase in the last decade was an estimated 2.8%, largely due to a high in-migration from other parts of the country (Donge et al., 2008). Moshi has developed into an attractive economic as well as transport hub for northern Tanzania (Donge et al., 2008), becoming increasingly ethnically diverse. In Tanzania, approximately 120 ethnic groups co-exist, residing in different locales, speaking different languages or dialects and engaging in different economic activities (Kurian, 1992). The Kilimanjaro Region, as the geographical focus of this paper has been traditionally inhabited by two main ethnic groups; the Wachagga who live on and around Mt. Kilimanjaro and the Wapare who live in the Pare Mountains in the south-eastern parts of the Kilimanjaro Region (Misana et al., 2003; Johnson-Hicks, 1998). The Wachagga consist of a wide range of sub-ethnic groups such as the Wamarangu, Warombo, and Wakibosho, each speaking their own dialect. The Wapare comprise of the Wapare as well as the Wagweno. The region is also inhabited by the Wamasai ethnic group in the western Pare Mountains and the western parts of Kilimanjaro (Johnson-Hicks, 1998). Specifically, compared to other ethnic groups the Wachagga of the Kilimanjaro Region have been said to be more active in agriculture – and urban agriculture in particular – due to their effective land tenure system, known as "Kihamba system" that guaranteed them permanent ownership of land (Misana et al., 2003). Indeed, the agricultural activities of the Wachagga have been favoured by fertile land and reliable rains, leading to a highly developed production system that is perfectly adjusted to local environmental conditions (Misana et al., 2003; Hemp and Hemp, 2008). While Moshi's northern outskirts are located on the gently rising slopes of the mountain, the majority of urban and periurban Moshi is situated at altitudes ranging from 700 to 900 m.s.l. Moshi's upper parts are dominated by montane rainforest that have been anthropogenically transformed by the Wachagga for centuries. The lower parts, in contrast, are characterised by less dense vegetation. While agricultural activities in the former are concentrated on agroforestry systems, the latter, "where rainfall is less, [...] maize and beans or, in very dry places, finger millet and cowpeas" (O'Brien et al., 2008: 197) is planted by the dominating Wachaggas. The sophisticated system of agroforestry production in the highlands and large-scale staple food production in the lowlands has been described extensively by Soini (2002a, 2006), Hemp and Hemp (2008), and others.

Today, the secondary and tertiary sectors are increasingly important with persistent growth of the city. Yet, the primary sector remains one of the main foundations for the livelihoods of urban and periurban dwellers. According to Donge et al. (2008) 16% of the urban population were involved in agriculture in 2002, while Schmidt et al. (in press) mention that approximately 5000 households, accounting for about 9.5% of the total households in Moshi, are engaged in urban agriculture. A more recent study by Schlesinger (2013), however, suggests significantly higher shares