

A case study from Dar es Salaam:

Urban agriculture – a key to food security?

Dar es Salaam is one of the fastest growing cities in sub-Saharan Africa. In its rapidly expanding peri-urban fringe poor migrants from distant rural areas settle down on plots they can afford that provide access to urban markets. They engage in commercial poultry farming establishing sustainable livelihoods and improving food security in the city.

The Tanzanian city of Dar es Salaam now has more than 3.5 million inhabitants. Its population has one of the highest growth rates in urban sub-Saharan Africa, skyrocketing at 7 to 10 percent a year between 1952 and 1992. The peri-urban zone of Dar es Salaam has seen an explosion of population influx from both the inner city and the upcountry rural areas, with growth rates of up to 200 percent in the late 1990s. Urban development has concentrated along the four radial roads, with distinctly rural areas remaining in the interstices.

The formal sector offers only insufficient employment, so that the majority of urban residents are still engaged in informal activities to sustain their livelihoods. Livestock keeping in rural niches within fast developing urban areas is a major contributor to monetary income and food security. Chronic urban poverty is giving it even more momentum. Livestock keepers in Dar es Salaam are not a homogenous group. They differ in many respects,



Photo: Aldo Lupala

including the number of animals, landholding, gender, labour and capital input. Also, distances to the urban centre and grazing facilities vary, as do access to animal health services, knowledge of livestock husbandry and transmittances to the rural areas as part of rural-urban linkages.

Cyclists from Nyantira market eggs in the city of Dar es Salaam.

with crops such as coconuts, cashew nuts and cassava. Today, Nyantira is a good example of successful economic development in a relatively remote peri-urban zone despite a lack of basic community services. An in-depth survey in Nyantira has helped to uncover the strategies which the poor households applied to improve and stabilise their livelihoods through integration into the city-wide economy with livestock keeping (Aldo Lupala: *Peri-urban Land Management for Rapid Urbanisation – The Case of Dar es Salaam*. Dortmund 2002).

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The peri-urban community of Nyantira

The settlement of Nyantira is located on the periphery of Dar es Salaam, 18 kilometres south-west of the city centre. Before 1973, only sparsely located homesteads could be found in this area; the land was farmed

Cattle breeders from the Kurya tribe immigrated from their homeland at the Kenyan border to Nyantira to establish a foothold in the vicinity of a large city. They took to poultry because the initial investment is moderate and the demand for eggs on the urban market promised quick and sustainable returns. In order to solve the transport problem arising from a location without a motorable road, the settlers called upon young men from their home region who were able to transport 30 egg cartons and more riding bicycles along 15 kilometres of sandy tracks and forest paths to the city.

The poultry is kept indoors in poultry sheds of about 35 square metres that accommodate about 300 chickens. All poultry keepers started by building simple sheds made out of mud and poles and corrugated iron sheets. Within two to three years, most are able to redevelop the structures by replacing wooden poles with concrete sand cement blocks for the sub-structure.

Animal feed and vitamins which initially had to be carried from city outlets can now be bought from vending kiosks recently established in Nyantira. The opening of animal feed shops in the settlement marked a major development because poultry feed and medication no longer had to be transported to Nyantira by the egg-ferrying cyclists on their way back home.

The poultry business is doing extremely well. Within just a year or

two, the young cyclists are able to acquire plots of land and start breeding their own chickens. The peri-urban economy of the Kurya migrants is thus a striking example of linking rural production locations with urban markets and with the outlying tribal homeland (Einhard Schmidt-Kallert, Kreibich, Volker: *Split households*. In: *Development and Cooperation* 12, 2004).

Productivity in poultry keeping was initially rather low due to a lack of extension services and poor animal health. Even today, poultry keepers have to take sick chickens over a distance of 14 kilometres to the veterinary service in the city centre.

Access to clean water is ranked as problem number one – not only for animals but also for human consumption. Together with the increasing shortage of affordable plots of land, it has significantly limited the further expansion of the poultry industry in Nyantira despite its success to date.

Like in other areas with peri-urban agriculture, a variety of organisational links have developed with the city in Nyantira in addition to the supply of inputs and services and the marketing of produce. Better-off livestock keepers tend to live in the city centre but keep their livestock at peri-urban locations where local households take care of these animals. The owners in turn provide their workers with free accommodation and cover the costs of medical services.



Dar es Salaam is one of the fastest growing cities in Africa with many immigrants from the upcountry rural areas.

Impact on food security

Livestock keepers have to apply a wide range of strategies and techniques to cope with market challenges like hampered access to market information, rising transportation costs, or limited flexibility due to inappropriate storage facilities for delicate products. In Nyantira, however, local networks based on kinship ties seem to be working efficiently in informing the egg producers about changing market determinants and in providing mutual support.

Poultry keeping accounts for a significant improvement in food security, as poor livestock keepers sell livestock products and buy food for their household members. This results in a noticeable nutrition gain in some communities. However, most livestock is mainly kept for commercial purposes and is rarely used for home consumption. In Nyantira, poultry keeping contributes about 90 percent to the household cash



Photo: Volker Kreibich

The peri-urban community Nyantira offers affordable land for poultry keepers who migrated from rural areas.



Photo: Matthias Krämer

vegetable gardening using the same distribution network.

Livestock keeping in peri-urban areas such as Nyantira relies on appropriate local factors, such as affordable land being available, which is the case in low-density areas in the outskirts. Strong organisational links between livestock owners, labourers and egg-ferrying cyclists within the poultry value chain which are based on their common origin in the same rural region and their tribal identity represent a highly supportive factor. This asset allows them to make use of the multiple benefits peri-urban livestock keeping offers, including access to land, the ability to feed the households involved as part of the rapidly growing urban population, continuity of employment, accumulation of capital, and improved housing.

Although Nyantira has only had poor access to socio-economic services so far, its growth is motivated by the availability of consumer goods. The market networks with backward and forward commodity flows facilitated by the daily interactions between Nyantira and the city provide up-to-date information. The high profits achieved stimulate the

growth of the settlement through the increase of existing enterprises and the establishment of new ones. As a result, the population is growing rapidly, land use patterns are changing and local initiatives to buy land for community services are increasing. In order to cope with the demand for land, more plots have been parcelled. The transformation of a poor subsistence economy to commercial poultry and gardening represents a new practice in peri-urban land use change.

In the Nyantira case, poultry and gardening have emerged as profitable urban land uses based on strong social cohesion among the immigrants and with their home people. Their socially crafted institutions provided the bottom line of the economic and social success of the Nyantira community in the absence of extension services and any other state intervention. The importance of social capital can be only partially substituted by capacity building in running economic activities, particularly poultry, gardening, horticulture, floriculture and dairy, although tailor-made training will enable peri-urban farmers to compete more effectively on urban markets.

income. There, the average monthly income of established poultry breeders is ten times higher than the minimum monthly salary of a government employee in Tanzania. In addition, livestock keeping contributes substantially to food security through extra nutrition for children and family members (15 %) and increased purchasing of food (75 %). Most households have complemented poultry breeding by

Zusammenfassung

Der Beitrag stellt einige der Ergebnisse einer fünfjährigen Forschungsarbeit vor, mit der untersucht wurde, in welchem Maß arme Gemeinden in Stadt- und Stadtrandgebieten der schnell wachsenden Städte um Dar es Salaam, Tansania, in der Lage sind, Armut mit Mitteln der Selbsthilfe zu besiegen. Am Beispiel der Gemeinde Nyantira wird aufgezeigt, wie Zuwanderer eine hoch produktive Nische im stadtnahen Wirtschaftssystem besetzt haben: Sie haben sich auf billigem Land mit schlechter Verkehrs-anbindung angesiedelt und produzieren Eier für die städtischen Märkte. Den Transport übernehmen junge Leute aus ihrer Gegend mit Fahrrädern. Diese funktionierende Wertschöpfungskette wurde praktisch ohne fremde

Hilfe aufgebaut und beruht weitgehend auf starken Familienbindungen. Dieses soziale Kapital wird zunehmend zu einem überaus wertvollen Faktor bei der Armutsbekämpfung in Familien, deren Mitglieder zwischen den Stadtrandbereichen und dem abgelegenen ländlichen Hinterland verstreut sind.

Resumen

Este documento presenta algunas de las conclusiones de una investigación de cinco años sobre la forma en que las comunidades pobres locales en las zonas urbanas y peri-urbanas en rápida expansión de la región de Dar es Salaam, Tanzania, logran erradicar la pobreza aumentando sus ingresos mediante la auto-ayuda. El estudio de caso de la comunidad de Nyantira

revela cómo un grupo de inmigrantes oriundos del interior ha conquistado un nicho altamente productivo en la economía peri-urbana: al asentarse en terrenos de bajo costo y con accesibilidad deficiente, producen huevos para el mercado urbano distante que son transportados en bicicleta por hombres jóvenes provenientes de sus regiones de origen.

La cadena de valor – que funciona con gran eficiencia – ha sido creada virtualmente sin apoyo externo, tomando como base sobre todo los fuertes lazos de parentesco. El capital social resulta ser un activo muy valioso cuando se trata de combatir la pobreza de los hogares divididos entre la zona marginal peri-urbana y las distantes provincias rurales de origen.