

***Machambas* in the City** **Urban Women and Agricultural Work** **in Mozambique**

Women in Southern and Eastern African cities commonly devote time and energy to cultivating an urban garden¹. This activity makes an important contribution to family nutrition and sometimes income, but despite this it was long neglected in studies of urban informal activities, food supplies to urban areas, household labor, and development. Urban agriculture has been the subject of several reports, but it is usually presented as a new activity taken up in response to economic crisis, and only occasionally has women's role been researched as well (Rakodi 1985, 1988 ; International Development Research Centre 1994 ; Maxwell 1995 ; Mudimu 1996). In this paper I investigate the past and present practice of agricultural labor by urban women in Mozambique to demonstrate that they have cultivated urban gardens for many decades, and that women from a broad range of socio-economic groups do this work. These findings broaden the scope of current research on this topic, as both the focus on Mozambique and on the history of urban farming offer new information. The evidence further indicates that the inclusion of this area of female endeavor improves our understanding of the process of urbanization from an African perspective.

It has been suggested that Africans « made something of the city which their colonizers had not intended » (Coquery-Vidrovitch 1991 : 33). In earlier urban studies, the attention paid to male workers has had the effects of emphasizing an urban-rural dichotomy, and of hiding the important activities of women that contributed to urbanization. Urban residents

1. An early version of this paper benefited from the advice of Judith Carney, Steve Tarzynski, and my colleagues in the affiliated scholars program at the Center for the Study of Women, University of California, Los Angeles (UCLA) : Jaclyn Greenberg, Dorene Ludwig, Paulene Popek, and Jill Cheneff. I presented this material at the 1989 annual meeting of the U.S. African Studies Association in Atlanta, Ga., where Karen Tranberg Hansen and the audience had helpful comments, and at the *V° Congresso luso-afro-brasileiro de ciências sociais* in Maputo, Mozambique, 1-5 September 1998 where Amélia Sumbana and others made suggestions. An earlier version of this paper is included in the compact disk of the proceedings of that conference. I would also like to thank Alice Hovorka, whose interest in this topic motivated me to return to this paper after several years of neglect (HOVORKA 1998).

commonly experienced urbanization as a series of changes that incorporated rural practices in the urban milieu, rather than a sharp break with their rural past. In Bishwapriya Sanyal's study in Zambia (Sanyal 1987), he found that one of the factors that contributed to people choosing to garden was longer term residence in the city. While feeling « settled » encouraged an increase in urban gardening, longer residence also improved access to land, an access that new migrants did not have. Women's urban gardening is a clear indication of a growing sense of urban identity and attachment, an important aspect of African urbanization.

I have previously discussed the intersection of women and urbanization in African cities (Sheldon 1996). In this paper, after an overview of women and urban agriculture in Eastern Africa, I focus on the history of women and urban agriculture in Mozambique. Before I went to Beira, Mozambique, where I lived for two years from 1982 to 1984, I had a schematic idea about the division between rural and urban life. It seemed self-evident that rural women were engaged in agricultural labor, and probable that urban women were not. Urban women might sell produce in the market, or find other sources of income in the informal economy, but I expected that agriculture itself was outside the urban areas. Beira, however, was noted for its extensive fields and gardens, called *machambas*. There were many small gardens in backyards and empty lots, as well as alongside modern multi-story apartment buildings. Also important were rice fields in the central area of the city, the presence of small animals (especially chickens and goats), and of mango, papaya, and citrus trees and banana plants in all neighborhoods. These activities did not only appear in the African *caniço* or shanty neighborhoods, nor were they restricted to suburban or peripheral areas: one large rice field was immediately adjacent to the provincial governor's home. Many women had access to fields outside the city, but the extent of agriculture inside the city limits was striking.

The other intriguing discovery was that the majority of women who worked full time in the garment or cashew factories also invested time and energy in urban family agriculture (Sheldon 1988, 1991): this work was not only the province of women who were otherwise unemployed and had time to devote to growing food for their families; it was also a common recourse for women working for a wage during a time of food scarcity. The adaptation of women's rural labor to the urban setting, even for women with full-time waged jobs, speaks eloquently of the rural impact on African city life.

This realization led to a rethinking of the conventional wisdom about urban dwellers. Much research on African urbanization emphasizes the rural-urban connections and migratory patterns that indicate the permeability of rural and urban categories. Richard Stren introduced the idea of the « ruralization » of African cities in part through deepening rural-urban interactions, and Sanyal discusses the dismay of western planners when African cities didn't present a « modern » aspect as they had expected (Sanyal 1987, Stren 1986). Urban gardening suggests an even greater intersection of rural activities and urban settlement, with the connection not being urban-waged men and rural-farming women, but urban-waged men and urban women with gardens, including women who were also working for a wage.

Irene Tinker comments that a variable definition of « urban » makes it difficult to compare studies in different cities (1994: xi). Some peri-urban

areas appear quite rural, though their density and relative proximity to the city suggest their borderline urban character. In this setting, it appears that people identify as urban residents by comparing their lives in peri-urban or urban areas to true rural life. This contrast allows people to consider areas adjacent to cities proper as being within the urban ambit, as they are clearly not rural. In this paper I prefer an expanded concept of urban, including as urban residents those who live in suburban neighborhoods but who consider themselves city-dwellers. A closer look at women's urban gardening will help us develop an Africa-focused history of urbanization.

Urban Gardens in Eastern Africa

Information from countries in the region indicates that urban agriculture is widespread and constitutes an important source of food supplies for urban families, though the role of women in maintaining the practice of urban agriculture is rarely documented. While work on women and agriculture understandably focuses on the rural areas, even sources that discuss urban food supplies and urban agriculture often make no reference to the essential role of women in that activity (Davison, ed. 1988a ; Guyer 1987 ; Mbuyi 1989). For example, one source on African cities comments that « All over tropical Africa urban dwellers undertake some cultivation, and it is the main occupation for many in the smaller towns », without specifying whether women or men or both are doing that cultivation (O'Connor 1983 : 137). A study of Harare details the expansion of illegal urban agriculture, creating « rural landscapes in an urban environment », but does not mention who is doing the gardening (Mazambani 1982 : 138), though later Zimbabwean studies incorporated gender issues (Mbiba 1995). A discussion about agronomists, knowledge, and the practice of agriculture in the Rwandan town of Butare focuses primarily on men involved in cultivating (Pottier 1989). While these apparently gender-neutral depictions seem innocent, women and the work they do remains invisible when not specifically mentioned.

Yet when women were mentioned, it was sometimes in a dismissive way. The following quote from A.L. Epstein (1969 : 89) describing urban dwellers in colonial Zambia aptly summarizes the conventional view that the real urbanites were men :

« The African of the towns no longer lives on the produce of the soil he has cultivated himself. Although a great many African women in Ndola do prepare gardens in the areas of bush which fringe the town, the produce of these gardens remains at most a valuable supplement to a diet of which the basic items are bought with cash. The urban African is essentially a wage-earner, dependent for his livelihood on the opportunities and services provided by the others, particularly Europeans ».

Women's activities defined them as non-urban though Epstein admits they lived in the city.

Other research has corroborated urban agriculture as a female activity in the colonial era mining towns (Chauncey 1981 : 147). Zambia has been the site of some important in-depth research on the practice of urban agriculture, though not all of it is gender aware (Bowa *et al.* 1979). In one study of modern Lusaka, urban agriculture was found to be an important means of

survival for families without access to steady or well-paid jobs (Sanyal 1984), while another observes that women on the urban fringes grew food both for consumption and for sale (Jules-Rosette 1985). Other researchers found that from 40 to over 60 percent of households in some neighborhoods in Lusaka maintained an urban garden (Jaeger & Huckaby 1986). Rakodi has looked at Zambia and urged that the agricultural work of urban women must be viewed within a « framework of the gender division of labour, especially as regards the distribution of tasks and benefits from work within the household » (1988 : 496).

Information from Nakuru, Kenya, demonstrated how urban women engaged in « income-stretching gardening », and used their rural cooperative skills for urban survival (Wachtel 1975-76). In Kenya, urban gardens gained support from development agencies as a way of organizing women into self-help cooperatives (Chege 1986 ; Freeman 1993). Studies of the practice of urban agriculture in Nairobi and other Kenyan cities have included women and gender issues, even when that is not the central theme of the study (Freeman 1991 includes a chapter on women ; Lado 1990 and Memon & Lee-Smith 1993 both include scattered information on women).

In Iringa, Tanzania, Swantz (1985 : 125) discovered that « most town women were engaged in agricultural activities and found it possible to combine urban life with production of basic foods », but did not further elaborate . Willene Johnson, another researcher in Tanzania, found that for women in towns agriculture remained « their most important single source of self-employment income » (1986 : 248-9). Cash crop agriculture was practiced in towns as well as in peripheral areas, and women either maintained access to traditional land or as migrants they rented land or entered into share-cropping agreements. In a sample of self-employed women, 41 percent were primarily engaged in urban agriculture. Johnson found that women continued to practice agriculture for several reasons including their desire and need to provide food for themselves and their children, their skill and experience in agriculture in relation to other possible activities, patterns of land use that allowed agriculture to continue in urban areas, and the low level of capital investment needed. Many women who grew cash crops were also involved in street trading. One Tanzanian example from the 1950s, of a female schoolteacher who matter-of-factly included gardening in her account of her daily work, suggests that urban women working for a wage also cultivated gardens. Her husband did not mention such an activity when outlining his day (Leslie 1963 : 65-67, cited *in* Geiger 1987 : 12).

The practice of urban agriculture appears to fluctuate according to a variety of economic factors, and flourished in the late twentieth-century continent-wide economic crisis. As Aili Tripp (1989, 1992) found in Tanzania, one response to rising poverty is the increased reliance on sources of income and supplies outside the formal economy, and therefore outside State controls such as taxation and license fees. Peri-urban agriculture filled this need, feeding families while operating outside the formal economy. Small-scale urban agriculture can supplement family nutrition in a time of food scarcity or high prices in the market. While some of the urban produce may enter the market, usually there is too little surplus, and potential vendors hesitate when faced with the need to pay market fees. Although the rise in urban cultivation has led to more research on urban agriculture, the accumulation of information from throughout the region indicates that this is

not a new phenomenon. Urban agriculture was practiced by women in the colonial era, and by women of professional as well as working-class and peasant backgrounds.

Twentieth-Century Colonial Mozambique

While there is some indication that families increasingly turned to urban gardens in the 1980s and 1990s as a result of the international economic crisis and the new impoverishment of African urban residents, the evidence from Mozambique demonstrates that this is not a new phenomenon. In Mozambique, and in Beira in particular, available information suggests that women have long been involved in urban agriculture. The persistence of this work through time shows that it is more than a short-term survival mechanism or a new strategy for coping with troubled times in the 1980s. For decades city dwellers relied on their household gardens to get by, and women played the central role in this work. This is not to undercut the importance of rural food-supply networks, but to point out that that food supply was not always adequate for urban African families, especially poorer families who could not afford market prices for food. There are differences in the outcome of this labor, however. It appears that in colonial times individual women were more apt to sell some surplus crops in the market for a cash income, while by the 1980s it was more often a source of additional food for family consumption, especially for waged women.

Geographer Maria Clara Mendes (1985 : 103), in her study of colonial Lourenço Marques (now Maputo), Mozambique, comments on the prevalence of gardens in the periphery of that city. The gardens were located in the peri-urban Vale de Infulene, as well as in the non-industrial areas of Choupal, Benfica, and Matola and Machava. Mendes does not specify whether men or women were cultivating, and there are no statistics available that indicate the gender of land owners. But testimony from women still cultivating in the area in the 1980s indicated that women were among those hired as farm labor on the white-owned farms during the colonial era (White [1985]). The sale of food grown in those fields formed an alternative source of income for Portuguese settlers as well as for African residents who had fewer options for earning an income. Agricultural land was taken over for residential and industrial construction in the 1950s, sometimes by subterfuge on the part of Portuguese colonialists (Gentili 1985 : 196 ; Penvenne 1983 : 150). It is clear from the testimony of two women whose land was taken over in the 1980s by Green Zones projects that women had control of some of this land in earlier decades (White [1985]). Despite a pattern of higher density occupation, the areas named above as agricultural centers in the 1940s continued to be farmed into the 1990s, when they formed the Green Zones, the term for the agricultural belt just outside the city with extensive gardens belonging to both cooperatives and individuals.

Statistics assist in pinpointing the role of women in urban agriculture : in 1940 the city of Lourenço Marques counted 45,070 African residents, of which 28,525 were men and 16,545 were women. Two-thirds of the women (10,321) were « *nas terras* » or on the land, an indication of their agricultural work. Only 2,576 men (under 10 percent) were similarly listed. Statistics for the smaller cities of Inhambane, Quelimane, and Tete indicate that around

half of all urban women were engaged in agriculture (Moçambique 1944 : 4-7).

Beira began to exist as a city in the 1890s when Portuguese settlers started building at a site where there was no previous permanent settlement, hoping that the bay would be suitable for a port. The Mozambique Company, the charter company that administered the central Mozambican region of Manica and Sofala, established its headquarters there in 1892. A railroad to the interior, largely financed by British investors, was built to serve Rhodesia and Nyasaland.

Beira's residential neighborhoods, as was common throughout the region, were racially segregated under colonialism. The Portuguese built modern homes and apartment buildings for themselves along the coast where ocean breezes minimized the impact of the climate. They viewed themselves as the urban residents, with rural-based Africans providing the necessary labor in the port and in European homes. Men who came to work for the Mozambique Company in the port or railroad often lived in barracks-style housing. But African workers and their families also began to settle in nearby areas, generally without the benefit of paved roads or regular water supply. This simultaneous development of family-based African communities in the center and periphery of Beira went unrecognized by the Portuguese. Many women in these areas continued their accustomed cultivation to supply food to their families.

In Beira in 1940, where men were able to find work at the port or railway, only 230 men out of 14,534 male residents (under 2 percent) were considered *nas terras*. However, 2,023 women were listed as *nas terras* out of 3,564 urban female residents (57 percent). Twenty years did not change this disparity greatly : in 1960, 33,183 official African urban residents included 25,585 men and 7,598 women. Of these residents only 601 men were listed as being engaged in agriculture, while 1,166 women fell into that category (that is, 2.3 percent of men and 15 percent of women) (Moçambique 1960 : 400-401).

These numbers, of course, can only give us an incomplete and possibly erroneous picture. In Beira for many years the bulk of the African population was considered transient, and the numbers listed for specific occupational categories are suspect. Official statistics for Beira divided the African population into « fixed » (permanent) and « fluctuating » (transient) categories. The transient population was estimated at a steady 44,000 from 1956 to 1968, an indication that this was not based on an actual count (Câmara municipal da Beira 1968). Authorities assumed that most African residents were men on short term labor contracts, and ignored evidence of increasing settlement and community development in the center of the city. If anything, the numbers of women engaged in urban agriculture were greatly underreported in these censuses².

Descriptions from various observers corroborate the statistics and indicate that the most common productive activity for urban women in colonial Beira was agriculture, despite the difficult terrain of that city (Muchangos 1989). Beira's location at the juncture of the Pungue River and the Indian Ocean meant that much of the land was either swampy due to the river delta or sandy closer to the shoreline, making gardens difficult in many areas.

2. For a more general discussion of problems in measuring women's agricultural labor, see Benería 1982.

Flooding was also a common problem as Beira is a low-lying city. Nonetheless, in my interviews with women working for a wage in the 1980s, several who had been born and raised in Beira described their mothers as peasant women (*camponesas*) who had been residents of Beira themselves, where they had *machambas* in earlier decades.

During the 1950s and 1960s there was some recognition of the absence of waged work for women in Beira, in contrast to men's more common experience of participation in the work force. A Portuguese study of Mozambican labor commented on the lack of waged women workers (Junta de investigações do ultramar 1959 : 80). African women were also aware of the problem. A « person-on-the-street » interview (« *Falam os Leitores* ») in the local African newspaper, *Voz Africana* (9 June 1962), elicited the following response from twenty-year-old Beatriz Dimitre,

« Ah ! The problem that most bothers me is the lack of support for the African girls, all of whom have difficulty in finding work. To prove this, just look at the offices and businesses of our city, and we can conclude that the percentage of girls in these businesses is minimal or none ».

At the time this complaint was voiced, the newspaper reported on women working at rural tasks in Chipangara, said to be Beira's most typical neighborhood (« *Chipangara, o bairro mais típico da Beira* »). Describing the neighborhood as « neither city nor country », the writer referred to the many gardens in peoples' yards. An accompanying photograph showing women pounding maize in their *pilões* (large wooden mortars) was captioned : « In Chipangara old and young women pound as in the country » (*Voz Africana*, 21 July 1962 : 6-7). Some of these women sold produce in the local markets, as they had no other way of earning an income (« Um Mercado Improvisado », *Voz Africana*, 17 November 1962 : 12). That men had other recourse even within the informal sector is indicated by reports of men in Chipangara sewing at machines in their doorways, and by the 187 members of the Association of African Carpenters, Painters and Barbers in Beira (« A Associação de carpinteiros, pintores e barbeiros africanos da Beira », *Voz Africana*, 16 June 1962).

Two Portuguese studies from the late 1960s also reveal the widespread presence of *machambas* in the African neighborhoods of colonial Beira (Coimbra 1970 ; Rodrigues 1967). Rui Neves da Costa Rodrigues, an urban planner, mentioned that the neighborhood of Massamba-M'Chatazina had many small *machambas*, although he stated that other neighborhoods were too susceptible to flooding for gardens to be successful. There was evidence of Chinese residents' vegetable gardens, with the crops being grown for sale in the city's markets, though these were disappearing by the late 1960s (Rodrigues 1967 : 110). Rodrigues gave only cursory attention to the African neighborhoods while admitting that those areas had been neglected in Beira's urban planning efforts. But even in his brief description of the neighborhood of Chipangara, he referred to its proximity to downtown Beira, the density of the settlement of the houses, and the existence of household agriculture (*ibid.* : 141-142).

Ramiro Duarte Henriques Coimbra, a geographer who also studied Beira's African neighborhoods in the 1960s, paid much closer attention to the economic life of those communities. He observed that in areas where gardening was difficult, families would still try to grow some peppers or tomatoes in their yards. In presenting a typical family budget, he stated that

the male head of the family was the only one with a salary, and all families had a small *machamba* (Coimbra 1970 : 33, 65). He also described how men would at times prepare the land for a new season's planting, but noted that this was usually limited to cultivating sweet potatoes. Women commonly combined their agricultural work with other domestic chores, as in the rural areas, and often did their work with infants on their backs. *machambas* tended to be small, often twenty-five meters square, and were primarily dedicated to sweet potatoes or rice (*ibid.* : 79-84).

Women's continuation of agricultural labor throughout the colonial period occurred in part because they were restricted from other possible sources of income. Additionally, they could rely on an established skill and access to seeds and supplies, all continued from rural connections. The unregulated nature of African community settlement allowed families to appropriate plots for gardens, though it may also have made it easier for Portuguese settlers to expropriate land. Local chiefs (*régulos*) who controlled land could charge rent for access to land and for permission to build housing (Åkesson 1988 : 4, Doc.1). Thus the capital input was minimal, and the labor was readily available from women skilled in agriculture. Women in Beira had a history of agricultural work that continued through the colonial era into independence.

Post-Independence Mozambique

The Mozambican government has long regarded urban agriculture as a way to increase food supplies to the city. The rural production of food was disrupted for several years as a result of drought and the activities of Renamo (*Resistência nacional de Moçambique*), the anti-Frelimo force supported by South Africa in the 1980s (Renamo was transformed into a legitimate political party in the 1990s). Poor economic decisions by the State also worked as a disincentive for rural farmers to produce food for sale to the urban areas as they did not in return have access to consumer goods such as soap, matches, or clothing. By 1980, census information indicated that most urban women (and many fewer urban men) continued to be involved in agricultural production. Countrywide, the census reported that 187,862 women were economically active in urban areas ; of that total, 132,173 (70 percent) were in agriculture. Comparable figures for men counted only 55,951 men in agriculture out of a total of 370,913 urban working men (15 percent) (Moçambique 1983a : 34 ; for comparable figures from a smaller study see Ibraimo 1994 : 25).

After independence the State encouraged people to cultivate abandoned truck farms on Maputo's periphery. It provided seeds and tools as incentive, and local *grupos dinamizadores* mobilized residents to form cooperatives (dynamizing groups were neighborhood-based organizing committees). In Maputo in the early 1980s, the availability of vegetables was assisted by the presence of « between 40 and 50 cooperatives with more than 3,000 members and an even larger number of individual farmers, all of whom were permitted to sell produce either at their fields or in market stalls reserved for their use » (Isaacman & Isaacman 1983 : 160 ; Zonas verdes de Maputo 1984). A report on the development of Green Zones activities in Maputo during the 1980s also describes an increasing reliance on small gardens in peoples' yards and on the expansion of Green Zones cultivation as the

economic situation deteriorated in the mid-1980s. During that period, aid from a wide variety of foreign-aid organizations and governments supported the establishment of Green Zones cooperatives (Sambane 1988)³. Unfortunately, these reports do not disaggregate male and female input in either cultivation or marketing. In general, however, government agricultural policy was divided between rhetoric in support of family-oriented farmers and funding for larger enterprises such as State farms (Sheldon 1994).

Women cultivated small *machambas* in the early 1980s in response to the shortages of food caused by the war in the rural areas, but the need for family gardens continued in the late 1980s despite the increase of produce in the markets. The impact of the World Bank and International Monetary Fund-designed Economic Restructuring Program (PRE), which was instituted in 1987, was to open up the markets while simultaneously raising prices. The overall effort in Mozambique as elsewhere was to support the establishment of free-market trading, while diminishing the role of the government in regulating prices and providing services (Green 1989 ; Hermele 1990 ; Loxley 1988 ; Marshall 1990 ; Roesch 1988). While food was simply not available in the early 1980s, prices were controlled and kept to an affordable level. Although the market stalls were frequently empty, or filled only by piles of spoiled cucumbers, what fruits and vegetables were available were priced at about 35 meticaïs per kilogram in the early 1980s, when 40 meticaïs equaled about US\$ 1.00. By July 1989, the rate had spiraled up so that 800 meticaïs equaled \$1.00. There was a wide variety of vegetables for sale in 1989, but the cost per kilogram had risen to ten times that of five years earlier. After PRE in 1989, the cheapest vegetables (tomatoes and cabbage leaves) were 300 or 400 meticaïs per kilogram, with some less common vegetables such as eggplant up to 500 or 600 meticaïs.

Salaries had also been increased, but not by the same percentage. An average garment worker's salary in 1983 was around 8,000 meticaïs a month. In 1989 an office worker for the women's organization in Beira was earning 26,000 meticaïs a month, a fairly typical monthly salary for an educated worker. A salaried young man selling non-food supplies in a cement stall in a Maputo market in August 1989 earned only 10,000 meticaïs a month. It was commonly understood that an urban family dependent on a single wage earner would only have enough money for two to three weeks of food supplies each month. Thus the appearance of fruits and vegetables in the urban markets did not signal the end of urban hunger.

Studies by Mozambican anthropologist Ana Loforte (1987, 1989) indicate how urban immigrants continued to rely on rural survival skills. These skills involve more than simple agricultural activity, as rural-based values that focus on family, ethnicity, and religion are predominant among new urban residents. Residents of the « cement city » in Maputo generally do not have gardens. However, in the city's suburban neighborhoods women continue to be involved almost exclusively in agricultural labor (Loforte 1987 : 58 ; 1989 : 24). In research conducted in the neighborhood of Mahlazine on Maputo's periphery, Loforte (1987 : 60-61) found that 80 percent of the families had *machambas* close enough for daily work. A further 10 percent of families had *machambas* at a distance of twelve to fifteen kilometers. Some of the women had market stalls where they sold a portion of their produce, but the

3. Aid came from Norway (Norad), Canada (Cuso), Unicef, Usaid, Italy, France, and the Friedrich Ebert Foundation based in Germany.

productivity of the land varied from area to area, and not all families produced a surplus (Lundin 1986 : 3).

A system of agricultural fields in the urban periphery received support through the government's Office of Green Zones, which had branches in major cities. In Maputo many agricultural cooperatives have access to land in the Green Zones. These cooperatives are noted for the high level of female involvement, with up to 90 percent of the total membership being women⁴. The cooperatives do not always pay a living wage to members, but the members can purchase harvested food at low cost. They also have access to amenities such as day-care centers and literacy classes organized by the cooperatives. Many cooperative members continue to cultivate a personal *machamba* as well as contribute several hours each day to the cooperative fields⁵.

While all land was nationalized in 1975, people continued to follow customary usages when considering ownership. Land cannot be owned by individuals. Land titles allowing access and use are governed by the land law established in the Constitution at independence, and reconfirmed in the new Constitution passed in 1990 (Sachs & Welch 1990 : 27-45)⁶. Many people consider the land they farm as belonging to themselves or a family member, as they have continued to have access to it since independence. This ambiguity may become problematic in the urban areas in particular, as land becomes scarce and conflicts develop between inhabitants who wish to cultivate land for themselves and wealthier, more powerful individuals who crave that land for housing, industry, or corporate farming. Private landowners in Harare, Zimbabwe, reportedly considered piecemeal cultivation as « a form of trespassing on their lands » (Mazambani 1982 : 134). The confusion that can arise from the existence of conflicting customary and profit-oriented land allocation systems is discussed in a number of sources, though the specific system of government ownership in Mozambique is unusual (Mabogunje 1990 : 163-166 ; Mbuyi 1989 : 154-158 ; Simon 1989). Additionally, much of the debate on access to land has focused on issues pertaining to rural communities rather than to access to urban plots (Casimiro 1994, Kloeck-Jenson 1998).

In the late 1980s and early 1990s there was a continuing struggle in the Green Zones over land access and use between the female farmers and those who wanted to build residences or factories. Those who tried to deprive the cooperatives of their land claimed that the women did not know how to use the land properly. While women were vulnerable in this situation,

4. I do not include all Mozambican cities in this article. Information on cooperatives in the northern city of Nampula can be found in MARSHALL & ROESCH 1993. They report that membership in the Nampula cooperatives was « overwhelmingly male. Women made up only about 5 per cent of the membership. Virtually all male members, however, depended on the labour of their wives and other female members of the households to do the agricultural labor » (*ibid.* : 255). The cooperative union was instituting a system of « family memberships so as to include the women who were doing the work » (*ibid.* : 270).

5. Some of the many studies and reports on the Maputo cooperatives are found in AYISI 1995 ; BENJAMIN & DANAHER 1988 ; GENTILI 1985, 1989 ; MARSHALL 1988 ; MULDER 1988 ; SALVADOR 1986.

6. Also see « People's Assembly Approves New Constitution », *Mozambiquefile*, 172, November 1990 : 4-11 (land ownership discussed on p. 7). Further debates over land ownership in Mozambique's Parliament in 1997, though focused on rural land, maintained the prohibition against individual land ownership ; see « Assembly Passes New Land Law », *Mozambiquefile*, 253, August 1997 : 4-9.

they found their access to agricultural land was protected through membership in the cooperatives⁷.

Celina Cossa, president of the General Union of Cooperativists (UGC for União geral de cooperativistas) spoke out repeatedly for the rights of urban farming women. In 1989 she spoke fervently to the Fifth Party Congress of Frelimo (Mozambique Liberation Front) about attempts to take over cooperative land, characterizing it as a form of banditry, though the bandits « do not carry machine-guns, [but] are armed with the cannons of opportunism with which they want to restore exploitation »⁸. She described the struggles over land as a « war » (interview by author with Celina Cossa, 21 August 1989). Speaking to a UGC conference in 1990, she was explicit about the attitudes of some entrepreneurs toward the cooperative women :

« Some people, arguing as ever that we are illiterate, incapable, ignorant and above all, almost all women, sum it up by saying that we don't know how to manage our property, our land. They say that with the PRE, what is important is private initiative. But there are many ways of developing private initiative. As poor people, we feel the need to unite and work together in cooperatives » (Marshall 1991 : 7).

President Joaquim Chissano responded by supporting the contribution made by the cooperative women to the nation's political and productive effort. He said : « We are aware that there are those who want to kill the cooperative movement. But we know that the cooperatives do not merely produce food. They also develop men and women, they liberate men and women »⁹. Individual women's economic insecurity was ameliorated by the political activity of the cooperatives. For poor female-headed households in particular access to land in the Green Zones was a significant factor in improving family nutrition (Green 1991). Despite evidence that the cooperatives were not profitable, Frelimo committed itself to supporting urban farmers for principled reasons, recognizing the importance of collective effort.

Women and *machambas* in Beira Urban agriculture in Beira has not been as well documented as that in Maputo (two exceptions are Jkesson 1988 and Ayisi 1995). The information presented here is drawn from two primary sources : interviews I conducted in the early 1980s with urban women working for a wage and information I collected during a visit to Beira in August 1989. The 1989 data include my observations of activities sponsored by the Women's Project of the Green Zones Office of the City of Beira. Though I did not conduct a quantitative survey, the information reveals the importance of women's urban agriculture in Beira. At the end of the twentieth century the city continued to have a formerly-Portuguese sector, including a downtown area of shops and cement office buildings and apartments

7. However, this point of view is contested by some of the interviews included in WHITE [1985] which suggest that some of the land claimed by the cooperatives had previously been held by women. Those women, in consequence of losing their land, were angry with the cooperative and with the government, and one woman reportedly damaged a water pump and other facilities on the property when the cooperative took it over. White wonders whether the land was easier for the cooperatives to claim because the female owners were more vulnerable, but with no statistics on the gender of land owners during colonialism and after, this is difficult to prove one way or the other.

8. « Cooperatives Fighting a Double War », *Mozambiquefile*, 157, August 1989 : 13.

9. « Peasant Land Being Stolen by Private Farmers », *Mozambiquefile*, 153, April 1989 : 16, and « Cooperatives Fighting a Double War », *Mozambiquefile*, 157, August 1989 : 13. This point of view is corroborated by WHITE (1985).

centered around a town square. However, the greater urban area spread out and encompassed a variety of suburban and peri-urban neighborhoods. Residents in the outlying areas consider themselves to be living in Beira despite their distance from the city center. As Gunilla fkeson commented, « A woman in the city with a *machamba* does not belong to a peasant family. She is part of a working family that is urban or in the process of urbanization with a family budget based above all on her husband's salary and on products in the market for the subsistence of the family. But even though they are urban women many of them dedicate themselves to agriculture on a small scale in the city » (1988, Doc.7 : 13).

Census information from 1980 indicated the predominance of agricultural work for women. The official number of residents in Beira was still overwhelmingly male : out of a total population of 87,114, there were 61,663 men and 25,451 women. Of 22,708 workers in agriculture in the city, 19,991 were women (Conselho Coordenador do Recenseamento 1983b, 43, 45). In another example of the involvement of Beira's households in urban agriculture, figures indicated that 70,000 families in Beira had one or more members cultivating rice in the 1980s (« Beira's Rice Crop Fails », AIM Information Bulletin 129 (1987) : 12-13). About 5,000 hectares of city land was dedicated to rice production, which resulted in 8,000 tons of rice in 1987 (Muchangos 1989, 283-286). Discrepancies in census counts reflect in part the uncertainty of Beira's outer boundaries. Unofficial estimates, including central Beira and the surrounding peri-urban neighborhoods, indicated that greater Beira's population of 250,000 in the early 1980s had risen to over 400,000 by 1987, with the unprecedented growth blamed on the war in the rural areas.

The Green Zones office in Beira stated that 88 percent of the 9,060 hectares of agricultural land were used for family agriculture. For the most part, the work was done by women who did not have their own waged work, but whose husbands held jobs in the city's businesses¹⁰. Muchangos's discussion of agriculture in Beira differentiated between three types of cultivation : agricultural fields and enterprises on the peri-urban outskirts and in neighboring towns, open fields devoted primarily to rice, and small plots in individual yards where food for family consumption was grown. The outlying areas were formerly cultivated by Portuguese and Chinese residents as truck gardens, and have the space for more extensive chicken and pig husbandry. Regarding the vegetable gardens, he comments that the prevalence of these gives the city a notably green aspect, as « each family, generally the women, tries to cultivate vegetables and fruit trees next to their home, which also contributes to improving environmental quality » (Muchangos 1989 : 283-286).

The agricultural land was located in all parts of the city. A newspaper article listed the following neighborhoods as possessing numerous *machambas* : Estoril, Macuti, Macurungo, Munhava, Chota, Vaz, Manga, and Inhamizua¹¹. These neighborhoods were near the center of the city as well as

10. « Agricultura em minifúndios alivia orçamentos familiares », *Notícias*, 25 August 1989 : 3, special supplement to mark Beira's 82nd anniversary.

11. « Agricultura em minifúndios », *op. cit.*

in more suburban areas ; for instance, Estoril and Macuti are formerly Portuguese seaside areas, while Manga was a large peri-urban neighborhood¹².

In examining the practice of urban gardening in the early 1980s in Beira, it is clear that the conditions created by the South African-sponsored war of destabilization played a role. Food cultivation in rural areas was disrupted, and the transport of food to the city was often impossible. This directly impacted the cashew and garment workers in my study, who had to become much more creative in finding food for their families. The agricultural work was primarily women's responsibility, despite their waged activity. Even nurses, who had not described their own mothers as peasants as the factory women had, turned to agriculture to deal with the shortages. Åkesson (Doc.4 : 2), in her report on Green Zones agriculture, mentions in passing that social groups such as professionals, technical workers, nurses, business people, and civil servants were among those cultivating *machambas*.

Two garment workers mentioned that their male household workers helped some, especially if the day's work of cleaning and laundry was not too demanding. One woman's children helped clean the harvested rice. But most of the cultivating had to be left until the women could do it themselves, after work on Saturday afternoon and all day Sunday. One cashew worker mentioned that her husband was making a *machamba* ; when I commented that very few men did such work, she replied : « With hunger, he does it », to the laughter of other women present. This woman's mobility was restricted by her newborn infant, and it is likely that the family faced the prospect of no sweet potatoes unless the husband prepared the garden. Researchers in the colonial era had commented that men often prepared the land, but it was more common to observe women preparing the ground for planting in the 1980s.

While the nurses were less apt than the factory workers to have a garden, one nurse said she was growing onions and other vegetables in her yard, and another nurse showed me her duck's new ducklings when I visited her home in the former Portuguese neighborhood of Ponta Gía. Due to their full-time jobs, waged workers were often unable to spend time standing in line to buy food when it was available in the shops. One cashew worker said that she would run from the factory to the shops hoping to find food. Another told me that she had had no food for two days because she could not manage to wait in line to buy supplies. Growing food for themselves directly alleviated this problem.

Of the seven garment workers interviewed at the Belita factory, five had had a *machamba* in Beira at some time in their lives. The two women who had not had an urban garden had disparate backgrounds : one was the daughter of a woman who had herself worked as a garment worker and a teacher, and was the most distant from a rural family background. The other was the youngest garment worker interviewed and she was still childless. As

12. One obstacle in pursuing this research was the inconsistency of neighborhood names in Beira. Massamba-M'Chatazina, one of the two neighborhoods studied by Coimbra in the 1960s, did not appear on any maps that I consulted in the 1980s. There was no official map of the city, and existing maps from the Green Zones Office and other sources do not agree on neighborhood boundaries or names.

some of the others had only begun to garden in the 1980s, she may also turn to an urban *machamba* as her family's food needs grow.

Sixteen of the twenty-six cashew workers interviewed stated that they had a *machamba*. Most of the *machambas* were in Beira, though one was in the nearby town of Mafambisse. Because I asked whether they had a *machamba* in Beira, women who had one in Dondo or Mafambisse, outside the city, may have answered « no » to the specific question without elaborating. Likewise, a cashew worker first answered « no » when asked if she had a *machamba*, and then went on to say that she only had a small garden in her yard. It may well be that still other women discounted food grown in their yards as not constituting a proper *machamba*. For example, one garment worker described hers as « a small *machamba*, just a hobby ». But despite its location in the yard by her home in Vaz neighborhood, she grew rice as well as greens and cabbage.

Two garment workers had previously had *machambas*, but had stopped cultivating them. One discontinued it because her plot was located in the neighborhood of Munhava, and she felt this was too distant from her residence. The other had experienced a poor year in 1982 after the arduous work of planting and weeding, and so had decided not to invest the effort in a garden in 1983. The drought of the early 1980s in Southern Africa was clearly a contributing factor, and she may opt to plant again in the future. Her land belonged to her father in Munhava, and she continued to claim rights to it.

One garment worker had begun a *machamba* on land in Beira she said belonged to her aunt, and had planted rice and sweet potatoes for her children. Another mentioned paying rent to the government for her rice field. She had previously had an extensive rice *machamba*, but had to cut back when her legs began bothering her and her doctor ordered her to stop working in the wet rice fields. She began to work at Belita garment factory when she was forced to reduce her *machamba*. She continued to grow rice for her family, but her yield of three to four large sacks a year was much less than her earlier output.

Part of the confusion over whether the land they cultivated constituted a *machamba* may stem from the idea that a « real » *machamba* results in food for the market, with the small amounts consumed by the family being too minimal to consider. In only one case did a factory woman say that her crops were for sale. She had worked for six months selling produce in the market before coming to the cashew factory, and lived with an aunt who still went to a stall to sell their surplus. Acknowledging that they cultivate a *machamba* may also be related to how these women define themselves, whether they feel they are peasants living in the city or urban women who happen to keep a garden. The research project focused on them as waged workers, so this issue did not directly arise in the interviews. But it appears that there was a continuum. At one end were women who earned a factory wage and later began a garden and who might consider themselves urban working women. At the other end were women who had devoted most of their time to cultivation in the urban periphery and then found factory work while cutting back on their agricultural labor. Such a woman might view herself as a newly-employed peasant despite a history of urban residency.

Women market vendors working on their own account indicated that they purchased their supplies from truck farmers cultivating farms in Chimoio and

other areas outside the city limits. When one market vendor sold fruit in the downtown market in the early 1970s she would purchase bananas, oranges, tomatoes, and other fruit, which she then sold at her stall. As that supply ceased in the early 1980s she began to cultivate manioc for sale. She had not previously cultivated a *machamba*, but was driven by necessity to plant manioc and sell the leaves for *matapa*, a common sauce served with rice.

The testimony of these women illustrates that agricultural labor within the city boundaries was an important part of women's responsibilities, and that it supplied a crucial part of a family's food. The efforts of these women on weekends, and in at least one case early in the morning before work, reflected the necessity of growing food in the face of extreme shortages.

Green Zones in Beira

Although most women worked their *machambas* as individuals, Beira did have a Green Zones Office which supported their efforts. However, in contrast to Maputo, the women were generally not organized into cooperatives. In a study of land distribution and women's work organization, Jean Davison (1988b) compared women's participation in a cooperative in Dondo outside of Beira with an irrigated rice scheme in Beira's Macurungo neighborhood. She found that the restructuring of agricultural labor into new collective forms did not appreciably diminish women's work load, although women in the cooperative were able to develop their leadership and decision-making activities.

The Women's Project within the Office of Green Zones for Beira received UNICEF (United Nations Children's Fund) support for a six-month program of courses directed at women who work in the Green Zones. Six neighborhoods were considered to be dedicated primarily to agriculture, and thus were part of the official Green Zones efforts: Macurungo, Vaz, Chota, Mascarenhas, Ndunda, and Vila Massanga (the last two are more properly suburbs). The program offered classes in literacy, arithmetic, agriculture, and health. Women attended afternoon classes after working in their fields in the morning. The courses began in 1986 with 100 women and 12 teachers in four different neighborhoods. This number has increased each year (120 women in 1987, 182 in 1988, and 218 through August 1989). Participants in each session selected a small number of women as monitors who continued as liaisons after the course ended. In addition to information, the Green Zones office supplied seeds, hoes, and other materials to the women who participated¹³.

By 1995 the program had further expanded to the neighborhoods of Aeroporto, Muchatazina, Maraza, and Munhava, and courses in sewing and cooking had been added to those on education and health. Over 640 women participated, still supported by UNICEF funding. The entire program could last three years and the women who completed that would have the equivalent of a fifth class, or third level of adult education. The program also

13. Nelton Guta, director of the Women's Project of the Beira Green Zones Office, conversation with author, 15 August 1989.

offered classes for children who had not found space in the overcrowded official schools¹⁴.

While admirable, this program suffered from many shortages – as did the whole society. For example, in August 1989 the teachers at the Chota child care center had not been paid for two months, and the food supply for the children was limited to *massa*, the maize porridge eaten by Mozambicans. The children sang a song with the words « Every day, every day, only *massa*, only *massa* ». These problems became a disincentive for women to participate, as they could not be sure that their children were being well cared for in the center (Sheldon 1992).

The individual *machambas* belonging to women affiliated with the Green Zones project were generally under a half hectare in size, although some ranged up to one and a half hectares. Many of the participants had only small gardens in their yards where they grew vegetables such as eggplant, lettuce, cabbage, carrots, and onions¹⁵. While rice was commonly grown all over Beira, the Green Zones course was just introducing rice cultivation to their curriculum in 1989. Certainly the limited size of these *machambas* indicated that the food was grown to supplement rather than entirely supply the food needed by a family. Though in general the food grown was for family consumption, the Green Zones Office was also supporting women who wished to begin selling their produce in the markets. In 1992 they sponsored a workshop designed to help women assess their abilities and potential for being successful in marketing their produce. The women worked together to learn such business basics as how to calculate their expenses, how to gauge their receipts and earnings, and whether there would be a customer base for what they intended to sell. The workshop included examples of women selling greens (*hortaliça*) in the market as well as discussion of the courage needed to start a business (Projecto Mulheres nas Zonas Verdes 1992).

The Green Zones programs also raise the issue of State involvement in women's urban agriculture. Urban agriculture has been mentioned as a way for women to contribute to their family budgets while avoiding paying taxes or other fees, in effect remaining outside the reach of the State. In Mozambique, however, the involvement of the government in supporting women's urban farming has contributed to the success of women's economic activity. The city government in Beira is developing support systems for urban farming women that could increase women's production and provide important backing to efforts to improve urban nutrition. Despite the continued shortages and problems in implementing assistance to those women, the policy currently recognizes the importance of the work they are doing.

* * *

Labor in African cities includes agricultural work, and women's work load is undercounted when this essential sector is omitted or ignored. Women in Mozambique have pursued this activity for decades under Portuguese colonialism as well as in the 1980s in the face of a debilitating war and

14. « Mulheres camponesas formam-se na Beira », *Notícias*, 14 August 1995, reporting an interview with Adelaide Alfeu from the Women's Project of the Beira Green Zones Office.

15. « Agricultura em minifúndios ».

economic suffering. It is not simply a carry-over from rural life, but a conscious choice made in the course of adapting to urban life. The fact that women of varying class backgrounds cultivate gardens in the cities is a further indication of the importance of this activity to urban life in general in African cities. Urban agriculture has played an important role in maintaining a viable family life, and in developing African urban communities. It is clear that the effort invested by African women in urban farming has been substantial. Acknowledging the widespread practice of women's urban gardening forces a reassessment of African patterns of urbanization.

Septembrer, 1998 / May, 1999

Kathleen SHELDON

Center for the Study of Women, University of California at Los Angeles

<ksheldon@ucla.edu>

REFERENCES

- ÅKESSON, G. 1988, *Documentos de trabalho : documentos sobre o trabalho sociológico nas zonas verdes na Beira, Agosto 1986-Julho 1988*, Doc. 1 : « Relatório e indicações para o trabalho sociológico nas zonas verdes da Beira », Doc. 4 : « Posse e utilização de terras », Doc. 7 : « Investigação e extensão rural », Beira, MONAP Projecto 22 (copy held at Centro de Estudos Africanos, Universidade Eduardo Mondlane (CEA/UEM)).
- AYISI, R.A. 1995, « Supporting Women Farmers in the Green Zones of Mozambique », in A. LEONARD, ed., *Seeds 2*, New York, Feminist Press : 41-63.
- BENERIA, L. 1982, « Accounting for Women's Work », in Lourdes BENERIA, ed., *Women and Development : The Sexual Division of Labor in Rural Societies*, New York, Praeger : 119-147.
- BENJAMIN, M. & KEVIN D. 1988, « Mozambican Women Make the "Green Zones" Bloom », *Sisters*, Summer : 26-28.
- BOWA, M. *et al.* 1979. « Gardening in the City », Lusaka, Institute for African Studies, University of Zambia, typescript (shared by Karen Tranberg Hansen).
- CÂMARA MUNICIPAL DA BEIRA 1968, *Relatório : Exercício de 1968*, Beira.
- CASIMIRO, I. 1994, « Género e terra em Moçambique », Maputo. Typescript (copy held at Land Tenure Center, UEM).
- CHAUNCEY, G. Jr. 1981, « The Locus of Reproduction : Women's Labour in the Zambian Copperbelt, 1927-1953 », *Journal of Southern African Studies* (Oxford), VII (2) : 135-164.
- CHEGE, R. Njeri 1986, « Communal Food Production : The Mukuru-Kaiyaba Women's Group in Nairobi », *Canadian Woman Studies*, VII (1-2) : 76-77.
- COIMBRA, R. Duarte Henriques 1970, *Bairros do caniço da cidade da Beira (Tentativa de interpretação humana)*, Thesis, Instituto superior de ciências sociais e política ultramarina da universidade técnica de Lisboa.
- COQUERY-VIDROVITCH, C. 1991, « The Process of Urbanization in Africa (From the Origins to the Beginning of Independence) », *African Studies Review*, 1991, XXXIV (1) : 1-98.
- DAVISON, J., ed. 1988a, *Agriculture, Women, and Land : The African Experience*, Boulder, (Col.), Westview.

- DAVISON, J. 1988b, « Land Redistribution in Mozambique and Its Effects on Women's Collective Production : Case Studies from Sofala Province », in DAVISON, ed. : 228-249.
- EPSTEIN, A.L. 1969, « The Network and Urban Social Organization », in J.C. MITCHELL, ed., *Social Networks in Urban Situations : Analyses of Personal Relationships in Central African Towns*, Manchester : 77-116.
- FREEMAN, D.B. 1991, *A City of Farmers : Informal Urban Agriculture in the Open Spaces of Nairobi, Kenya*, Montreal, McGill-Queen's University Press.
- 1993, « Survival Strategy or Business Training Ground ? The Significance of Urban Agriculture for the Advancement of Women in African Cities », *African Studies Review*, XXXVI (3) : 1-22.
- GEIGER, S. 1987, « Women in Nationalist Struggle : Tanu Activists in Dar es Salaam », *International Journal of African Historical Studies* (Boston), XX (1) : 1-26.
- GENTILI, A.M. 1985. « Da Lourenço Marques a Maputo : la trasformazione delle aree agricole suburbane », *Africa* (Roma), XL (2) : 183-219.
- 1989, « Donne e Lavoro : Il movimento cooperativo delle Zonas verdes di Maputo », *Africa* (Roma), XLIV (1) : 1-24.
- GREEN, R. 1989, *Estudo SDA : Social Dimensions of Adjustment*, Maputo, Ministry of Finance.
- 1991, *A pobreza, o sector familiar e a terra*, Maputo, Comissão Nacional do Plano, Projecto do SDA – Alívia da Pobreza.
- GUYER, J.I., ed. 1987, *Feeding African Cities : Studies in Regional Social History*, Manchester.
- HERMELE, K. 1990, *Moçambique numa encruzilhada : Economia e política na era de ajustamento estrutural*, Bergen (Norway), Chr. Michelsen Institute, Department of Social Science and Development (Report 1990 : 3).
- HOVORKA, A. 1998, *Gender Resources for Urban Agriculture Research : Methodology, Directory & Annotated Bibliography*, Ottawa, International Development Research Centre.
- IBRAIMO, M. Assiate 1994, *Pobreza, emprego e a questão demográfica nas cidades capitais de Moçambique*, Maputo, Ministério do Plano e Finanças (Série « População e Desenvolvimento », 12).
- INTERNATIONAL DEVELOPMENT RESEARCH CENTRE 1994, *Cities Feeding People : An Examination of Urban Agriculture in East Africa*, Ottawa, IDRC.
- ISAACMAN, A. & ISAACMAN B. 1983, *Mozambique : From Colonialism to Revolution, 1900-1982*, Boulder (Col.), Westview.
- JAEGER, D. & HUCKABAY, J.D. 1986, « The Garden City of Lusaka : Urban Agriculture », in G.J. Williams, ed., *Lusaka and its Environs : A Geographical Study of a Planned Capital City in Tropical Africa*, Lusaka : 267-277.
- JOHNSON, W.A. 1986, « Women and Self-Employment in Urban Tanzania », in M.C. SIMMS & J. MALVEAUX, eds., *Slipping Through the Cracks : The Status of Black Women*, New Brunswick (N.J.), Transaction : 245-257.
- JULES-ROSETTE, B. 1985, « The Women Potters of Lusaka : Urban Migration and Socioeconomic Adjustment » in B. LINDSAY, ed., *African Migration and National Development*, Penn, University Park, Pennsylvania State University Press : 82-112.
- JUNTA DE INVESTIGAÇÕES DO ULTRAMAR 1959, *Estudo sobre o absentismo e a instabilidade da mão-de-obra Africana*. Vol. I, Lisbon.
- KLOECK-JENSON, S. 1998, *Locating the Community : Local Communities and the Administration of Land and Other Natural Resources in Mozambique*, Maputo, Land Tenure Center-Mozambique.
- LADO, C. 1990, « Informal Urban Agriculture in Nairobi, Kenya », *Land Use Policy*, 7 : 257-266.
- LESLIE, J.A.K. 1963, *Survey of Dar es Salaam*, London.
- LOFORTE, A.M. 1987, « Migrantes e sua relação com o meio rural », *Trabalhos de arqueologia e antropologia* (Maputo), 4 : 55-69.
- 1989, « A persistência dos valores "tradicionais" nas comunidades urbanas e a etnicidade », *Trabalhos de arqueologia e antropologia* (Maputo), 6 : 21-27.
- LOXLEY, J. 1988. « Strategic Defeat or Tactical Retreat ? », *Southern Africa Report* (Toronto), IV (2) : 3-5.

- LUNDIN, I.B. 1986, *Survival Strategies in Maputo City: An Anthropological Investigation*, Maputo, UEM, Department of Archeology and Anthropology.
- MABOGUNJE, A.L. 1990, « Urban Planning and the Post-Colonial State in Africa: A Research Overview », *African Studies Review*, XXXIII (2) : 121-203.
- MARSHALL, J. 1988, « Life on the Frontline: Mozambique Diary », *Southern Africa Report* (Toronto), III (4) : 7-9.
- 1990, « Structural Adjustment and Social Policy in Mozambique », *Review of African Political Economy*, 47 : 28-43.
- 1991, « Resisting Adjustment in Mozambique: The Grassroots Speaks Up », *Southern Africa Report* (Toronto), VII (1) : 3-8.
- MARSHALL, J. & ROESCH, O. 1993, « The "Green Zones" Agricultural Cooperatives of Nampula City: A New Phase in the Mozambican Cooperative Movement », *Journal of Southern African Studies* (Oxford), XIX (2) : 240-272.
- MAXWELL, D.G. 1995, « Alternative Food Security Strategy: A Household Analysis of Urban Agriculture in Kampala », *World Development*, XXIII (10) : 1669-1681.
- MAZAMBANI, D. 1982, « Peri-urban Cultivation within Greater Harare », *Zimbabwe Science News* (Harare), XVI (6) : 134-138.
- MBIBA, B. 1995, *Urban Agriculture in Zimbabwe: Implications for Urban Management, Urban Economy, the Environment, Poverty and Gender*, Aldershot (UK).
- MBUYI, K. 1989, « Kinshasa: Problems of Land Management, Infrastructure, and Food Supply », in R.E. STREN & R.R. WHITE, eds, *African Cities in Crisis: Managing Rapid Urban Growth*, Boulder (Col.) : 149-175.
- MEMON, P.A. & LEE-SMITH, D. 1993, « Urban Agriculture in Kenya », *Canadian Journal of African Studies*, XXVII (1) : 25-42.
- MENDES, M.C. 1985, *Maputo antes da Independência: geografia de uma cidade colonial*, Lisbon, Instituto de investigação científica tropical (« Memórias do IICT », 68).
- MOÇAMBIQUE (COLÓNIA DE) 1944, *Censo da população em 1940. IV. População indígena, população por grupos de idades, segundo o sexo e a ocupação*, Lourenço Marques, Repartição técnica de estatística.
- 1960, *III° Recenseamento geral da população na província de Moçambique. IV. Distrito de Manica e Sofala*, Lourenço Marques, Direcção provincial dos serviços de Estatística.
- MOÇAMBIQUE (REPÚBLICA POPULAR DE) 1983a, *1° Recenseamento geral da população: informação pública*, Maputo, Conselho coordenador de recenseamento.
- 1983b, *Os Distritos em números, 7. Sofala*, Maputo.
- MUCHANGOS, A. dos 1989, « Aspectos geográficos da cidade da Beira », *Arquivo: Boletim do Arquivo histórico de Moçambique* (Maputo), 6 : 239-296.
- MUDIMU, G.D. 1996, « Urban Agricultural Activities and Women's Strategies in Sustaining Family Livelihoods in Harare, Zimbabwe », *Singapore Journal of Tropical Geography*, XVII (2) : 179-194.
- MULDER, A. 1988, « The Participation of Women in the Agricultural Cooperatives in Maputo, Mozambique », M. Sc. thesis, University of London. Also published in L. MAYOUX, ed. [n.d.], *All Are Not Equal: African Women in Cooperatives*, London : 57-60.
- O'CONNOR, A. 1983, *The African City*, London.
- PENVENNE, J. 1983, « Here Everyone Walked with Fear: The Mozambican Labor System and the Workers of Lourenço Marques, 1945-1962 », in Fr. COOPER, ed., *Struggle for the City: Migrant Labor, Capital, and the State in Urban Africa*, Beverly Hills, Sage, 131-166.
- POTTIER, J. 1989, « "Three's a Crowd": Knowledge, Ignorance and Power in the Context of Urban Agriculture in Rwanda », *Africa*, LIX (4) : 461-477.
- PROJECTO MULHERES NAS ZONAS VERDES 1992, *Guia para fazer curso sobre estudo de viabilidade*, Beira, typescript, [copy held at Forum Mulher, Maputo].
- RAKODI, C. 1985, « Self-Reliance or Survival? Food Production in African Cities, with Particular Reference to Zambia », *African Urban Studies*, 21 : 53-63.
- 1988, « Urban Agriculture: Research Questions and Zambian Evidence », *Journal of Modern African Studies*, XXVI (3) : 495-515.

- RODRIGUES, R. Neves da Costa 1967, *Um ensaio de geografia urbana : a cidade da Beira*, thesis, Lisbon, Instituto superior de ciências sociais e políticas ultramarina da Universidade técnica de Lisboa.
- ROESCH, O. 1988. « Classes in Formation ? », *Southern Africa Report* (Toronto), IV (2) : 6-10, 28.
- SACHS, A. & WELCH G. Honwana 1990, *Liberating the Law : Creating Popular Justice in Mozambique*, London, Zed.
- SALVADOR, J. 1986, « Uma camponesa presidente que sabe o que quer : entrevista com Celina Cossa da União das cooperativas », *Tempo* (Maputo) 802, 23 Febr. : 13-16.
- SAMBANE, L. 1988, *Boletim da Informação*, Maputo, Gabinete das Zonas Verdes da Cidade de Maputo, 1.
- SANYAL, B. 1984, *Urban Agriculture : A Strategy for Survival in Zambia*, Ph.D. diss., University of California, Los Angeles.
- 1987, « Urban Cultivation Amidst Modernization : How Should We Interpret It ? », *Journal of Planning Education and Research* VI (3) : 197-207.
- SHELDON, K. 1988, *Working Women in Beira, Mozambique*, Ph.D. diss., University of California, Los Angeles.
- 1991, « Sewing Clothes and Sorting Cashew Nuts : Factories, Families, and Women in Beira, Mozambique », *Women's Studies International Forum* XIV (1/2) : 27-35.
- 1992, « Creches, Titias, and Mothers : Working Women and Child Care in Mozambique », in K. Tranberg HANSEN, ed., *African Encounters with Domesticity*, New Brunswick (N.J.), Rutgers University Press : 290-309.
- 1994, « Women and Revolution in Mozambique : A Luta Continua », in M.A. TÊTREAU, ed., *Women and Revolution in Africa, Asia, and the New World*, Columbia, University of South Carolina Press : 33-61.
- 1996, « Urban African Women : Courtyards, Markets, City Streets », in K. SHELDON, ed., *Courtyards, Markets, City Streets : Urban Women in Africa*, Boulder (Col.), Westview : 3-27.
- SIMON, D. 1989, « Colonial Cities, Postcolonial Africa and the World Economy : A Reinterpretation », *International Journal of Urban and Regional Research*, XIII (1) : 68-91.
- STREN, R. (with C. Letemendia) 1986, *Coping with Rapid Urban Growth in Africa : An Annotated Bibliography*, Montreal.
- SWANTZ, M.-L. 1985, *Women in Development : A Creative Role Denied ? The Case of Tanzania*, New York, St. Martin's.
- TINKER, I. 1994, « Urban Agriculture is Already Feeding Cities », in INTERNATIONAL DEVELOPMENT RESEARCH CENTRE (IDRC), ed., *Cities Feeding People*, Montreal, IDRC : vii-xiv.
- TRIPP, A.M. 1989, « Women and the Changing Urban Household Economy in Tanzania », *Journal of Modern African Studies* XXVII (4) : 601-623.
- 1992, « The Impact of Crisis and Economic Reform on Women in Urban Tanzania », in L. BENERIA & S. FELDMAN, eds., *Unequal Burden : Economic Crisis, Persistent Poverty, and Women's Work*, Boulder (Col.), Westview : 159-180.
- WACHTEL, E. [1975-76], « A Farm of One's Own : The Rural Orientation of Women's Group Enterprise in Nakuru, Kenya », *Rural Africana*, 29 : 69-80.
- WHITE, C. Pelzer [1985], *The Role of the Cooperative Movement in Transforming Labour Relations and Gender Relations : Experiences from the Green Zones, Maputo, Mozambique*, Maputo, Universidade Eduardo Mondlane, Centro de Estudos Africanos.
- ZONAS VERDES DE MAPUTO 1984, *Movimento de cooperativização do campo : 1/ Análise da situação e plano de 1984*, Maputo [copy held at CEA/UEM].