



University of Groningen

Crops and Copper

Pesa, Iva

Published in: Journal of Southern African Studies

DOI: 10.1080/03057070.2020.1750872

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version Publisher's PDF, also known as Version of record

Publication date: 2020

Link to publication in University of Groningen/UMCG research database

Citation for published version (APA): Pesa, I. (2020). Crops and Copper: Agriculture and urbanism on the Central African Copperbelt, 1950-2000. *Journal of Southern African Studies*, *46*(3), 527-545. https://doi.org/10.1080/03057070.2020.1750872

Copyright Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: https://www.rug.nl/library/open-access/self-archiving-pure/taverneamendment.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): http://www.rug.nl/research/portal. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.



Journal of Southern African Studies

ISSN: 0305-7070 (Print) 1465-3893 (Online) Journal homepage: https://www.tandfonline.com/loi/cjss20

Crops and Copper: Agriculture and Urbanism on the Central African Copperbelt, 1950–2000

Iva Peša

To cite this article: Iva Peša (2020) Crops and Copper: Agriculture and Urbanism on the Central African Copperbelt, 1950–2000, Journal of Southern African Studies, 46:3, 527-545, DOI: 10.1080/03057070.2020.1750872

To link to this article: https://doi.org/10.1080/03057070.2020.1750872

© 2020 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



Published online: 28 Apr 2020.

|--|

Submit your article to this journal 🗹

Article views: 1561



View related articles 🗹

View Crossmark data 🗹



Citing articles: 2 View citing articles 🗹



Crops and Copper: Agriculture and Urbanism on the Central African Copperbelt, 1950–2000

Iva Peša

(University of Groningen; University of Oxford)

Agricultural production has historically been integral to the central African Copperbelt's urban growth. None the less, urban agriculture has rarely received attention in the otherwise rich Copperbelt historiography. Government and mine officials, as well as social scientists, have persistently framed urban agriculture as an informal, subsistence and feminised activity. Growing maize or vegetables has, in such views, been interpreted as a sign of rurality that is 'out of place' in urban areas, at best a response to poverty and crisis or a practice engaged in only by 'thrifty housewives'. Such narratives have distorted a proper understanding of urban agriculture. Drawing on new archival sources and oral history, this article presents a different view. It compares the Zambian and the Congolese Copperbelt from 1950 until 2000 to re-evaluate urban agriculture as a normal part of everyday life, an activity central to urban livelihood, identity and belonging. Growing crops has evolved over time in response to socio-economic change, but it has always been vital to the urban life of the diverse Copperbelt population. Considering agricultural production thus contributes to debates on urbanism in central Africa and beyond.

Keywords: Urban agriculture; urbanism; gender; oral history; Zambia; Democratic Republic of Congo

If the subsoil of Haut-Katanga [the Congolese Copperbelt] is one of the richest in the world, its agriculture has been and continues to be considered as an auxiliary activity, incapable of satisfying the food needs of the countryside, let alone of the industrial centres.¹

The richly mineralised Copperbelt region, straddling the border between present-day Zambia and the Democratic Republic of Congo (see Figure 1), was portrayed throughout the 20th century by government officials, social scientists and Copperbelt communities, as quintessentially urban, industrial and, indeed, modern.² Such characterisations rely on a stark

© 2020 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

¹ J. Wilmet, Systèmes agraires et techniques agricoles au Katanga (Brussels, Koninklijke Academie voor Overzeese Wetenschappen, 1963), p. 7.

² J. Ferguson, Expectations of Modernity: Myths and Meanings of Urban Life on the Zambian Copperbelt (Berkeley, University of California Press, 1999); M. Larmer, 'At the Crossroads: Mining and Political Change on the Katangese–Zambian Copperbelt', Oxford Handbooks Online (2016), available at https://www. oxfordhandbooks.com/view/10.1093/oxfordhb/9780199935369.001.0001/oxfordhb-9780199935369-e-20, retrieved 27 December 2019.

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (http://creativecommons.org/licenses/by-nc-nd/4.0/), which permits noncommercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

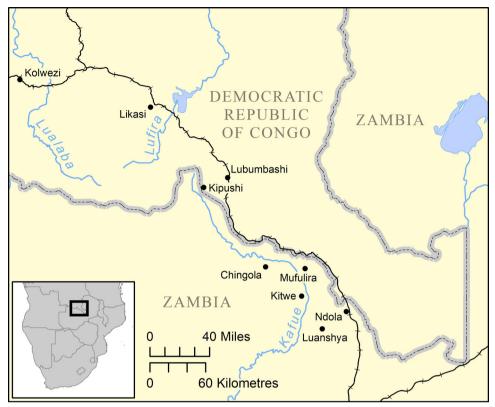


Figure 1. Map of the Copperbelt (drawn by Dr Rachel Taylor).

rural–urban dichotomy that is, this article will show, at odds with social reality. In the 1950s, the Rhodes Livingstone anthropologist A.L. Epstein described 'the urban African' as a 'wage-earner'. Important in this conception was that 'the African of the towns no longer lives on the produce of the soil he has cultivated himself'.³ In the transition from rural agriculture to urban industry and services, agricultural production in urban areas – negatively interpreted as a misplaced 'rural remnant' – received scarcely any attention.⁴ Yet agricultural production, in its diverse forms, has played a pivotal role in the urban centres of the central African Copperbelt in the 20th century. Ever since the establishment of Copperbelt towns, women and men have grown vegetables and maize and reared chickens to supplement their food rations, as a source of income and as a central part of their urban lives.⁵ By historicising the role of agricultural production in Zambian and Congolese Copperbelt towns from 1950 until 2000, this article asserts urban agriculture as 'an essential but still neglected element of ... actually existing' urban life.⁶

³ A.L. Epstein, 'The Network and Urban Social Organisation', in A.L. Epstein, *Scenes from African Urban Life: Collected Copperbelt Papers* (Edinburgh, Edinburgh University Press, 1992), p. 61.

⁴ R. Jacobs, 'An Urban Proletariat with Peasant Characteristics: Land Occupations and Livestock Raising in South Africa', *Journal of Peasant Studies*, 45, 5–6 (2018), pp. 884–903.

⁵ J. Smart, 'Urban Agriculture and Economic Change on the Zambia Copperbelt: The Cases of Ndola, Kitwe and Luanshya' (PhD thesis, University of Otago, 2015); G. Chauncey Jr., 'The Locus of Reproduction: Women's Labour in the Zambian Copperbelt, 1927–1953', Journal of Southern African Studies, 7, 2 (1981), pp. 135–64; D. Dibwe dia Mwembu, Bana Shaba abandonnés par leur père: structures de l'autorité et histoire sociale de la famille ouvrière au Katanga 1910–1997 (Paris, L'Harmattan, 2001).

⁶ Larmer, 'At the Crossroads', p. 6.

In cities such as Mufulira, Likasi and Lubumbashi, urban agriculture is an omnipresent phenomenon that is central to livelihoods, identity and urban life.⁷ Yet a persistent rural-urban dichotomy has distorted its significance, generating misunderstandings about 'the nature of urbanisation and urban economies'.⁸ Through scrutiny of government and mining company archives and oral history among Copperbelt communities, this article provides a different view, one that understands agriculture as a fully urban phenomenon. It examines how agricultural production both challenges and informs perceptions of urbanism.⁹ The first section provides necessary background, unpacks various narratives through which urban agriculture on the Copperbelt has been understood and explains the methodology. The second section looks at urban agriculture in late colonial Zambia and Congo, showing how labour and population control policies affected opportunities to grow food in urban areas. The third section looks at the immediate post-independence period, when governments lifted restrictions on urban residence, but distinctions between legitimate and illegitimate cultivation endured. The fourth section examines the period of the 1980s and 1990s, when copper prices fell dramatically and urban agriculture was characterised as a crisis response. The final section uses oral history to show urban residents' varied motivations for engaging in agricultural production.

This article compares the Zambian and Congolese Copperbelt from 1950 until 2000. Such a focus brings out parallels and differences in both government policies and characterisations by social scientists who theorised about urbanism and social change. Government policies varied considerably on either side of the border, yet knowledge production about urban agriculture utilised remarkably similar discourses.¹⁰ Studying agriculture in urban areas as part of everyday life, this article sheds new light on long-standing debates about urbanism in Central Africa.¹¹

Perceptions of Urban Agriculture on the Copperbelt

Urban agriculture can be defined as 'the growing of food and the rearing of livestock within or immediately adjacent to urban areas'.¹² In this sense, urban agriculture is as old as cities themselves. Pre-colonial accounts mention ample food production in central African centres such as Bunkeya or Musumba.¹³ Writing on urban agriculture on the Zambian Copperbelt, Smart acknowledges its longevity and argues that what is new in the 20th century is rather 'the idea that agriculture does not belong in urban areas'.¹⁴ Assumptions about migrant

⁷ J-C. Bruneau, D'ici et d'ailleurs: quand les immigrés se font autochtones: citadins et paysans du Haut-Katanga (Yaoundé, University Press of Yaoundé, 1999); G. Hampwaye and C.M. Rogerson, 'Economic Restructuring in the Zambian Copperbelt: Local Responses in Ndola', Urban Forum, 21, 4 (2010), pp. 387–403.

⁸ D. Potts, 'Worker-Peasants and Farmer-Housewives in Africa: The Debate about "Committed" Farmers, Access to Land and Agricultural Production', *Journal of Southern African Studies*, 26, 4 (2000), p. 831; J. Ferguson, 'Mobile Workers, Modernist Narratives: A Critique of the Historiography of Transition on the Zambian Copperbelt [Part One]', *Journal of Southern African Studies*, 16, 3 (1990), pp. 385–412; [Part Two] JSAS, 16, 4 (1990), pp. 603–21; H. Macmillan, 'The Historiography of Transition on the Zambian Copperbelt – Another View', *Journal of Southern African Studies*, 19, 4 (1993), pp. 681–712.

⁹ J. Robinson, Ordinary Cities: Between Modernity and Development (London, Routledge, 2006).

¹⁰ Larmer, 'At the Crossroads'; Dibwe, Bana Shaba; J. Parpart, "Where Is Your Mother?": Gender, Urban Marriage, and Colonial Discourse on the Zambian Copperbelt, 1924–1945', International Journal of African Historical Studies, 27, 2 (1994), pp. 241–71.

¹¹ Ferguson, Expectations of Modernity; Robinson, Ordinary Cities.

¹² L.J.A. Mougeot, 'Urban Agriculture: Definition, Presence, Potentials and Risks', in N. Bakker *et al.* (eds), *Growing Cities, Growing Food: Urban Agriculture on the Policy Agenda, A Reader on Urban Agriculture* (Feldafing, DSE, 2000), p. 1.

¹³ D. Gordon, 'The Abolition of the Slave Trade and the Transformation of the South Central African Interior During the Nineteenth Century', *William and Mary Quarterly*, 66, 4 (2009), pp. 915–38.

¹⁴ Smart, 'Urban Agriculture', p. 28.

labour and the course of urbanisation – positing that, over time, rural peasants were being transformed into an urban working class dependent on mining¹⁵ – have caused a relative under-appreciation of urban agriculture in the historiography of the central African Copperbelt. More negatively, some interpret urban agriculture as 'out of place', or even 'indicative of failure in the urban development process'.¹⁶

These ideas originated with the spectacular growth of Copperbelt towns in the first half of the 20th century. Spurred on by the opening of industrial copper mines in Élisabethville (now Lubumbashi) in 1907 and Luanshya in 1928, an almost continuous cross-border urban agglomeration developed from Kolwezi in the north-west to Ndola in the south-east by the 1940s.¹⁷ Urban growth in the sparsely populated Copperbelt relied on migrant labour from rural areas to ensure a workforce for the mines. As a result, colonial officials and social scientists, notably those of Centre d'étude des problèmes sociaux indigènes (CEPSI) and the Rhodes Livingstone Institute (RLI), conceived labour migration and urbanisation within a rural-urban dichotomy.¹⁸ Clyde Mitchell argued that 'towns and cities' are 'distinct social phenomena', where the way of life differs markedly from 'rurally based tribal life'.¹⁹ Colonial officials in Congo in the 1950s similarly identified a 'contrast between ... industrial and commercial activities in urban centres and ... the still very precarious situation of the traditional customary [agricultural] environment'.²⁰ For these observers, urbanisation necessarily involved a distancing from rural life and agricultural production. Ferguson critiqued such views, which suggested a progressive transition from 'migrant labour' to 'permanent urbanisation', as part of a misleading 'modernist narrative'.²¹ Debates on urban stabilisation, prominent in the 1950s and 1960s, asserted that, over time, mine workers would form a 'settled, permanent urban class of Africans who would rapidly lose their rural and traditional attachments'.²² Industrialisation, according to Marxist-inspired scholars, would transform rural peasants into an urban working class, divorced from rural modes of production and access to land, a proletariat depending on urban wages as their sole source of income.²³ Such analyses understood continued connections to rural life, such as agriculture in urban areas, as a sign of 'backwardness'.²⁴

Morally constricting oppositions between rural tradition and urban modernity shaped portrayals of urban agriculture on the Zambian and Congolese Copperbelt for many decades. In 1980s Zambia, Sanyal still identified actors 'who had envisioned modern industrial cities as symbols of economic development and technological progress'. To them, 'urban cultivation' was a manifestation 'of rural habits – "a remnant of bush life"²⁵ Surprisingly, the rich Copperbelt historiography mostly overlooked urban agriculture.²⁶ This article argues that considering agriculture enriches understandings of urbanism in central Africa. The

¹⁵ Ferguson, 'Mobile Workers'.

¹⁶ R.J. Slater, 'Urban Agriculture, Gender and Empowerment: An Alternative View', *Development Southern Africa*, 18, 5 (2001), p. 637.

¹⁷ Dibwe, Bana Shaba; Ferguson, Expectations of Modernity.

¹⁸ Larmer, 'At the Crossroads'; B. Rubbers and M. Poncelet, 'Sociologie coloniale au Congo belge: Les études sur le Katanga industriel et urbain à la veille de l'Indépendance', *Genèses*, 99, 2 (2015), pp. 93–112.

¹⁹ J. Clyde Mitchell, 'Theoretical Orientations in African Urban Studies', in M. Banton (ed.), *The Social Anthropology of Complex Societies* (London, Routledge, 1966), p. 37.

²⁰ Archives africaines, Brussels (hereafter AA), AGRI81, Paysannats indigènes, 20 December 1956.

²¹ Ferguson, 'Mobile Workers', p. 386.

²² Ibid., p. 617; Dibwe, Bana Shaba.

²³ C. Perrings, Black Mineworkers in Central Africa: Industrial Strategies and the Evolution of an African Proletariat in the Copperbelt, 1911–41 (New York, Africana Publishing, 1979).

²⁴ J. Robinson, 'In the Tracks of Comparative Urbanism: Difference, Urban Modernity and the Primitive', Urban Geography, 25, 8 (2004), p. 711.

²⁵ B. Sanyal, 'Urban Cultivation Amidst Modernization: How Should We Interpret It?', *Journal of Planning Education and Research*, 6, 3 (1987), p. 197.

²⁶ Exceptions are: Parpart, 'Where Is Your Mother?'; Chauncey, 'The Locus'; Dibwe, Bana Shaba.

following sections examine the distorting discourses within which urban agriculture was portrayed by colonial officials, mining companies and social scientists. To reach a deeper understanding of agriculture on the Copperbelt, it is necessary to lay bare the assumptions about urbanisation and social change adopted by these observers. Even today, 'a linear reading of history continue[s] to obscure the relevance of the agrarian question' on the Copperbelt.²⁷

In separate literatures in social science and agronomy, urban agriculture was popularised from the 1980s in debates on the 'informal sector'.²⁸ Such works study urban agriculture in the global south within development-oriented frameworks of livelihood procurement, poverty alleviation and crisis management as a coping strategy to procure food for survival.²⁹ Binns and Lynch attribute the 'ebbing and flowing' of interest in urban agriculture to macro-economic fluctuations.³⁰ Across newly independent Africa in the 1960s, it was optimistically assumed that high commodity prices would spur urbanisation, industrialisation and economic development.³¹ While the urban labour force would become increasingly skilled and focused on industrial and white-collar waged employment, agriculture would be relegated to rural areas. Urban agriculture was thus considered incompatible with 'proper' urbanisation.³² In the 1970s and 1980s, however, the rural-urban income gap narrowed, and attention focused on the supposedly new 'urban poor'. Structural adjustment programmes and food price inflation in the 1980s and 1990s made urban residents increasingly reliant on 'coping strategies', such as 'the diversification of household income sources ... and the cultivation of basic foodstuffs'.³³ The interest in urban agriculture as a response to crisis arose in this period of socio-economic decline.

In Zambia and Congo, the economic recession was particularly severe, and Smart argues that, on the Copperbelt, 'urban agriculture increased significantly ... in response to local experiences of economic downturn'.³⁴ A fragile economic upturn notwithstanding, interest in urban agriculture has boomed since 2000. Much of this literature adopts similar assumptions to those of earlier RLI and CEPSI scholarship, interpreting agricultural production as the 'ruralisation' of cities.³⁵ The preconception remains that people involved in urban agriculture are poor and disadvantaged, perhaps recent urban immigrants who engage in agriculture because they have no other livelihood options.³⁶ Hampwaye and Rogerson describe cultivators in Ndola in such terms: 'the majority are women, [with] poor levels of formal education ... pushed into urban agriculture as a result of economic necessity'.³⁷ These rigid narratives have shaped understandings of urban agriculture on the Zambian and Congolese Copperbelt.

Certainly, urban agriculture is a gendered activity, in which women play a prominent role. Debates on gender in urban agriculture revolve around its productive or reproductive

²⁷ Jacobs, 'An Urban Proletariat', p. 899.

²⁸ Mougeot, 'Urban Agriculture'; C. Rakodi, 'Urban Agriculture: Research Questions and Zambian Evidence', Journal of Modern African Studies, 26, 3 (1988), pp. 495–515.

²⁹ J. Crush, A. Hovorka and D. Tevera, 'Food Security in Southern African Cities: The Place of Urban Agriculture', *Progress in Development Studies*, 11, 4 (2011), pp. 285–305.

³⁰ T. Binns and K. Lynch, 'Feeding Africa's Growing Cities into the 21st Century: The Potential of Urban Agriculture', *Journal of International Development*, 10, 6 (1998), pp. 777–93.

³¹ Ferguson, *Expectations of Modernity*; D. Potts, 'Counter-Urbanisation on the Zambian Copperbelt? Interpretations and Implications', *Urban Studies*, 42, 4 (2005), pp. 583–609.

³² Sanyal, 'Urban Cultivation'; Slater, 'Urban Agriculture'.

³³ Binns and Lynch, 'Feeding Africa's Growing Cities', p. 780.

³⁴ Smart, 'Urban Agriculture', p. iii.

³⁵ Bruneau, D'ici et d'ailleurs.

³⁶ Crush, Hovorka and Tevera, 'Food Security', p. 296.

³⁷ Hampwaye and Rogerson, 'Economic Restructuring', p. 399.

functions, its subsistence or entrepreneurial nature and the level of women's independence from men in terms of land access, capital and marketing.³⁸ During much of the 20th century, the emergence of a working class on the Copperbelt was imagined as a primarily male phenomenon. Government officials, mining companies and social scientists erroneously assumed that a male wage-earner would provide for the household and that female agricultural production would be a supplementary activity at most.³⁹ In this context, urban agriculture has been dismissed 'as an unimportant pastime indulged in purely by city housewives, one that might be regarded more properly as a form of recreation or disguised unemployment⁴⁰, For the Congolese Copperbelt, Rubbers asserts that, from the 1950s onwards, mine workers regarded agriculture 'as a low-prestige activity' and that 'cultivating the land was seen as something to be left to village women'.⁴¹ Yet, once economic difficulties increased in the 1980s and 1990s, female agricultural production became indispensable. Negatively interpreted as a 'survival mechanism', female farming signified that the male breadwinner model had failed to secure a stable livelihood for the Copperbelt population.⁴² Tambwe, typifying women as 'a vulnerable population', explained 'their massive presence' in agriculture in Lubumbashi 'by their lack of education, which deprives them of jobs that are more lucrative'.⁴³ It is imperative to move beyond such interpretations of urban agriculture as a last resort or a subsistence activity undertaken by 'thrifty housewives', and instead to appreciate 'the diversity and complexity of motivations' of both men and women in urban agriculture, which offered them 'possibilities for economic and/or social advancement'.⁴⁴ Studying Angola's diamond mines, Cleveland argues that female cultivators 'were not fringe actors involved in "devious" acts in the local informal economy, but rather vital members of the formal community of mine workers'.⁴⁵ On the Copperbelt, female cultivation shaped everyday urbanism. Oral histories, in particular, show the interrelated factors informing urban agriculture, involving livelihood, lifestyle and urban identity.

The contemporary Copperbelt is, according to Smart, Nel and Binns, 'a region where the practice of urban agriculture and the role it plays in urban livelihoods appears to be more significant than in many other urban contexts'.⁴⁶ Urban agriculture is clearly not a 'transitional phase' towards prosperous mining towns the vitality of which derives solely from industry.⁴⁷ For the Congolese Copperbelt, Dibwe has documented the prominence of agriculture since the colonial period, especially among mine workers' wives.⁴⁸ Following the economic downturn of the mid 1970s, urban agriculture, Tambwe, Rudolph and Greenstein maintain, spread pervasively to 'vacant open spaces in schools, hospitals and the

³⁸ J.L. Parpart, 'The Household and the Mine Shaft: Gender and Class Struggles on the Zambian Copperbelt, 1926–64', *Journal of Southern African Studies*, 13, 1 (1986), pp. 36–56; Chauncey, 'The Locus'; D. Dibwe dia Mwembu, 'Les fonctions des femmes africaines dans les camps de l'Union Minière du Haut-Katanga (1925–1960)', Zaïre-Afrique, 272 (1993), pp. 105–18.

³⁹ Parpart, 'Where Is Your Mother?'; Dibwe, Bana Shaba.

⁴⁰ P.A. Memon and D. Lee-Smith, 'Urban Agriculture in Kenya', *Canadian Journal of African Studies*, 27, 1 (1993), p. 28.

⁴¹ B. Rubbers, 'Towards a Life of Poverty and Uncertainty? The Livelihood Strategies of Gécamines Workers after Retrenchment in the DRC', *Review of African Political Economy*, 44, 152 (2017), p. 196.

⁴² Slater, 'Urban Agriculture'.

⁴³ A.N. Tambwe, 'Agriculture urbaine: Une stratégie de lutte contre l'insécurité alimentaire à Lubumbashi', in A.N. Tambwe *et al.* (eds), *Le développement du Katanga méridional* (Paris, L'Harmattan, 2015), p. 122.

⁴⁴ A.J. Hovorka, 'The No. 1 Ladies' Poultry Farm: A Feminist Political Ecology of Urban Agriculture in Botswana', *Gender, Place and Culture*, 13, 3 (2006), p. 218.

⁴⁵ T. Cleveland, Diamonds in the Rough: Corporate Paternalism and African Professionalism on the Mines of Colonial Angola, 1917–1975 (Athens, Ohio University Press, 2015), p. 13.

⁴⁶ J. Smart, E. Nel and T. Binns, 'Economic Crisis and Food Security in Africa: Exploring the Significance of Urban Agriculture in Zambia's Copperbelt Province', *Geoforum*, 65 (2015), p. 37.

⁴⁷ Potts, 'Worker-Peasants', p. 814; Ferguson, 'Mobile Workers'.

⁴⁸ Dibwe, Bana Shaba, p. 64.

university, alongside streets, roads, or railways, and under power lines'.⁴⁹ In a 2010 Zambian Copperbelt survey, Smart found 84 per cent of 679 households practising agriculture, and, in Luanshya, the figure reached 93 per cent.⁵⁰ Such studies provide an excellent starting point to engage with urban agriculture on the Copperbelt from a historical perspective.

To explain why, despite its importance, agriculture 'is seldom recognised as a significant urban economic activity or land use',⁵¹ this article unpacks the narratives through which urban agriculture on the Copperbelt has hitherto been understood. Straddling the colonial/post-colonial divide and comparing Zambia and Congo, it provides a close reading of secondary sources and new archival sources. These include material from the National Archives of Zambia, the Zambia Consolidated Copper Mines (ZCCM) archives, the archives africaines and the Institut National pour l'Étude Agronomique du Congo Belge (INEAC) collection, as well as CEPSI and RLI publications. These sources are read for the discourses they contain, as well as to trace changing urban agriculture policies. To complicate official views, this article uses oral history interviews conducted from May to August 2018 in Likasi, Congo and Mufulira, Zambia. These interviews present far more intricate motivations for urban agriculturalists than those advanced by government officials or social scientists. Existing works on urban agriculture have mainly interpreted it as a strategy adopted by those retrenched from the mines or who have no other livelihood options, a response to poverty or crisis.⁵² However, urban agriculture has equally been a conscious choice and a pathway for wealth-generation. Despite the recent interest in urban agriculture, the meaning of agriculture in urban areas, its history and its voluntary uptake as a valuable source of livelihood and sociality have received little attention.⁵³ This article reveals how agriculture mediates forms of urbanism on the central African Copperbelt.

Labour Migration, Urbanisation and Colonial Attitudes towards Urban Agriculture

Copperbelt towns, planned for a transient migrant labour mine workforce, initially assumed that the provision of food rations to mine workers made local agriculture unnecessary.⁵⁴ Mining companies conceived of workers, irrespective of their family situation, as single men with neither willingness nor time for agriculture. Moreover, overcrowded accommodation with limited outdoor space did not allow for gardening.⁵⁵ Although companies contributed to feeding their workforce, urban agriculture instantly gained prominence.⁵⁶ On the Northern Rhodesian Copperbelt in 1947, Brelsford noted the ubiquitous cultivation of vegetables and grains within towns and on peri-urban fringes.⁵⁷ The Copperbelt further attracted a population of non-mine workers (traders, clerks, domestic servants and others) who relied on

⁴⁹ N. Tambwe, M. Rudolph and R. Greenstein, "Instead of Begging, I Farm to Feed my Children": Urban Agriculture – An Alternative to Copper and Cobalt in Lubumbashi', *Africa*, 81, 3 (2011), p. 398.

⁵⁰ Smart, 'Urban Agriculture'.

⁵¹ Rakodi, 'Urban Agriculture', p. 495.

⁵² Rubbers, 'Towards a Life'; P. Mususa, 'Mining, Welfare and Urbanisation: The Wavering Urban Character of Zambia's Copperbelt', *Journal of Contemporary African Studies*, 30, 4 (2012), pp. 571–87.

⁵³ Exceptions are: Slater, 'Urban Agriculture'; Hovorka, 'The No. 1 Ladies'.

⁵⁴ Dibwe, Bana Shaba; M. Larmer, 'Historical Perspectives on Zambia's Mining Booms and Busts', in A. Fraser and M. Larmer (eds), Zambia, Mining, and Neoliberalism: Boom and Bust on the Globalized Copperbelt (New York, Palgrave Macmillan, 2010), pp. 31–58.

⁵⁵ B. Rubbers, 'Mining Towns, Enclaves and Spaces: A Genealogy of Worker Camps in the Congolese Copperbelt', *Geoforum*, 98 (2019), pp. 88–96.

⁵⁶ Larmer, 'At the Crossroads'.

⁵⁷ W.V. Brelsford, Copperbelt Markets: A Social and Economic Study (Lusaka, Government Printer, 1947).

self-provisioning or trade for their food requirements.⁵⁸ Among this diverse population, urban agriculture was vital. The variety and scale of farming notwithstanding, colonial officials and mining companies created a discursive division between mine workers and their wives, supposedly reliant on wages and engaging in agriculture only as a form of leisure, and the non-mining population, who practised unregulated and generally undesirable agriculture to earn a living.⁵⁹ These largely fictitious divisions shaped long-standing attitudes towards urban agriculture on the Copperbelt.

Colonial policies in Belgian Congo differed markedly from those in Northern Rhodesia.⁶⁰ Because industrialised mining had started 20 years earlier, workforce stabilisation was already under way in Katanga by 1927.⁶¹ Ample rations served to keep workers content but proved difficult to supply.⁶² To minimise costly imports, officials sought to stimulate agricultural production in rural Katanga and in urban centres themselves. In 1951, Grévisse explained that 'the Governor General insists that in proximity of the urban centres each household head, encouraged, advised and directed by Government agents, by missionaries and traders, becomes a small exploiter of the soil'.⁶³ Agricultural policies in 1958 called for 'extensions of cultivation to satisfy heightened food demands [and] to provision continuously growing urban centres'.⁶⁴ To alleviate 'overurbanisation' - 'the almost uncontrollable growth of population⁶⁵ – and to supply industrial centres with food, colonial authorities created extra-customary centres (centres extra-coutumiers) and rural quarters (quartiers ruraux), where urbanites could devote themselves to food cultivation. Officials subsequently noted that 'surrounding the extra-customary centres and the workers' camps, we find fields everywhere on all the land that is still able to yield a meagre harvest'.⁶⁶ Stimulated by the award to each worker's household of a plot on which to grow food, urban agriculture gained considerable prominence.⁶⁷

Belgian colonial authorities conceived agricultural production within a broader civilising mission, especially among non-mine workers.⁶⁸ The 1944 Élisabethville annual report noted that 'a community of 60,000 natives, usually pejoratively called extra-customary or detribalised' had established itself in the city. Because these people had the 'intention of permanently settling in the large centres', officials considered 'the need to ensure land for cultivation' to be 'beyond doubt'.⁶⁹ The retired, unemployed and youth – a 'detribalised population' that had 'progressively detached themselves from their customary environment' – were the explicit 'object of agricultural action'. The authorities recognised the 'need to find something to occupy these people', to cover dietary requirements and earn revenue.⁷⁰ Agricultural production provided a means of subsistence for non-mine workers, who might otherwise become an unwelcome burden on limited urban amenities. By improving peri-urban and rural lifestyles through agricultural development, colonial officials sought to

69 AA RACCB(XYZ)422, AIMO rapport annuel, Élisabethville, 1944.

⁵⁸ Chauncey, 'The Locus'; Dibwe, Bana Shaba.

⁵⁹ Larmer, 'At the Crossroads'.

⁶⁰ Rubbers, 'Mining Towns'; Larmer, 'At the Crossroads'.

⁶¹ AA H(4566), Gouverneur M. Paelinck, 18 January 1956; Dibwe, Bana Shaba.

⁶² B. Jewsiewicki, 'Rural Society and the Belgian Colonial Economy', in D. Birmingham and P. Martin (eds), *History of Central Africa, Vol. 2* (New York, Longman, 1983), pp. 95–125.

⁶³ F. Grévisse, Le centre extra-coutumier d'Élisabethville: quelques aspects de la politique indigène du Haut-Katanga industriel (Brussels, Institut Royal Colonial Belge, 1951), p. 152.

⁶⁴ AA AGRI81, La promotion des milieux ruraux au Congo Belge, 7 November 1958.

⁶⁵ Archives Générales du Royaume 1, Brussels (hereafter AGR1), INEAC 4043, Exposé d'un projet au centre de la Kipopo, 1956.

⁶⁶ A. Debra, 'La femme noire dans les centres extra-coutumiers et les camps de travailleurs au Congo', CEPSI Bulletin, 9 (1949), p. 136.

⁶⁷ Grévisse, Le centre extra-coutumier.

⁶⁸ Rubbers and Poncelet, 'Sociologie coloniale'.

⁷⁰ AGR1 4043, Programme socio-économique des grands centres, 1956.

restrict rural–urban migration, especially of 'unproductive' non-wage earners. This would 'unclog the overpopulated native urban quarters by creating a large belt of stable and attractive ... customary rural communities around the centres, clustering populations that are satisfied with their lot and little inclined to adventures'.⁷¹ Such policies subscribed to a rural–urban divide, but also suggested a link between agriculture and urban stabilisation. A 1956 report underlined how agricultural development would help 'the families that lived cramped in the extra-customary centres and ... bring them to a more stable and normal mode of life'.⁷² A 1958 report on land tenure in Jadotville (now Likasi) reluctantly admitted that 'many natives inhabit the Centres clandestinely', making a living by cultivating. Although officially undesirable, such cultivation strengthened claims of urban belonging, as 'the possession of a plot of land and a house in the Centre gives a sense of security'.⁷³ These discourses suggest that, in the 1950s, rather than being a rural hangover, agricultural production was a way of stabilising urban residents, who, by growing and selling crops, could envisage long-term settlement in urban areas.

In Northern Rhodesia, agriculture was also practised from the time that mining towns were first established.⁷⁴ In 1954, the chief agricultural officer spoke of 'hundreds, perhaps thousands of African cultivators' in Copperbelt towns.⁷⁵ Evidence of the popularity of the phenomenon is provided by a 1959 report, which identified the 'need for gardens for recreational use around the high density housing areas', as 'at present gardens are cultivated up to 5 miles away from the suburbs'.⁷⁶ Land on the Copperbelt had apparently become so scarce that people had to move long distances to find fertile plots. Despite its extent, policy attitudes towards urban agriculture were much more negative than in Belgian Congo.⁷⁷ A 1963 report argued that 'social and political factors combine to make it very much in the company's interest to keep a close control over settlement'.⁷⁸ Under specific circumstances, however, mining companies did allow and even encourage agricultural production on the Copperbelt. A 1956 report stated that 'employees of the Mine are issued, on application, with garden allotments'. Because these 'gardens are one of the very best of all kinds of recreation for mine employees – especially underground workers', officials urged that 'every encouragement and assistance' should 'be given' to them.⁷⁹ The legitimacy or illegitimacy of cultivation practices depended on official concerns over the control of urban space.⁸⁰

By regulating cultivation, mining companies and authorities on the Northern Rhodesian Copperbelt sought to control labour, mobility and urbanisation. Officials repeatedly complained about the occupation of urban space by agriculture: '... there is always strong pressure from Africans to filter in and make, first gardens, then settlements, in any "empty" piece of unwatched bush. Settlements often establish themselves in a matter of a few weeks. Once "dug in", they are most difficult to shift'.⁸¹ Because of the high value of land, mining companies vehemently opposed giving non-mine workers entitlements to it. In the 1957 land use survey, company representatives declared 'they were anxious to avoid ... giving ... the

⁷¹ R. Wauthion, 'Pour le développement d'une économie rurale indigène dans l'hinterland des grands centres industriels du Haut-Katanga', *CEPSI Bulletin*, 34 (1956), pp. 20–21.

⁷² Aperçu sur l'économie agricole du Katanga (Brussels, Ministère des colonies, 1956), p. 49.

⁷³ A. Binamé and R. Eelens, 'Le rôle social de la "parcelle" au centre extra-coutumier de Jadotville', *Problèmes d'Afrique Centrale*, 12 (1958), p. 231.

⁷⁴ Chauncey, 'The Locus'; Parpart, 'Where Is Your Mother?'

⁷⁵ National Archives of Zambia, Lusaka (hereafter NAZ), WP1/14/27, Soil Conservation, 20 October 1954.

⁷⁶ NAZ Regional Survey of the Copperbelt, 1959.

⁷⁷ Smart, 'Urban Agriculture'.

⁷⁸ ZCCM archives, Ndola (hereafter ZCCM), 12.1.7A, Regional Land Usage, 6 August 1963.

⁷⁹ ZCCM 13.5.5C, Land Use Survey of the Copperbelt, 1956.

⁸⁰ A.L. Stoler, 'Rethinking Colonial Categories: European Communities and the Boundaries of Rule', Comparative Studies in Society and History, 31, 1 (1989), pp. 134–61.

⁸¹ ZCCM 12.1.7A, Regional Land Usage, 6 August 1963.

impression that any Africans had the right to cultivate' on mine land.⁸² Cultivation 'might create an impression of permanency and it would be very much more difficult to remove the cultivators if the land was needed for other purposes'.⁸³ Yet, although officials wished to create 'orderly' agricultural practices, they equally acknowledged:

... the cultivation of a small patch of maize, monkey nuts or sweet potatoes is in itself a comparatively harmless occupation and most people would prefer to see Africans occupied thus rather than brewing illicit beer, or crowding the sidewalks of the main shopping areas. The prohibition of these gardens will generally affect the more law-abiding and industrious of the African urban population.⁸⁴

To colonial authorities, turning a blind eye was more feasible than trying to stop all 'unauthorised' cultivation. Because regulations controlling agricultural production were never fully enforced, cultivators took advantage of regulatory inconsistencies.

Officials considered unauthorised cultivation among the non-mining population particularly problematic, attaching pejorative moral connotations to 'unregulated' agriculture. A 1957 report complained about 'the extent of unauthorised African cultivation'.⁸⁵ Despite 'the regulation forbidding the growing of grain crops', allegedly to prevent malaria,⁸⁶ the 1956 Luanshya annual report stated that 'residents continue to break the law' while claiming that 'by growing their own maize they eke out their very low earnings'. Despite orders to evict 'inhabitants of the unauthorised settlements', the report grudgingly admitted that they would 'make every effort to re-establish themselves'.⁸⁷ The cultivation and sale of crops enabled some urban Africans, most notably mine workers' wives and recent urban immigrants, to generate an independent source of livelihood. Government and mine officials criticised the practice precisely because it was so difficult to control:

[m]ost of the urban Africans cultivate unauthorised plots on Crown and Mine land, on which they produce small crops of maize, beans and groundnuts to supplement their diets and to help them cope with the vicious rise in the cost of living ... It is impossible to control these activities.⁸⁸

Urban agriculture was clearly an omnipresent phenomenon in which both mine workers and non-mine workers engaged. As well as its uncontrollable nature, officials expressed concern that agricultural activities might cause soil erosion along streams, that cultivation on vacant mine land might interfere with mineral prospecting, or that crops and earnings would be difficult to trace and tax: for example, the use of millet for brewing beer.⁸⁹ An ambiguous attitude prevailed during this period, as mining companies and colonial authorities acknowledged the existence of urban agriculture but condoned only certain regulated forms of the practice.⁹⁰

Acknowledging that unregulated cultivation was already taking place on a large scale, mainly by non-mine workers, local government officials advised that 'suitable persons

⁸² ZCCM 13.5.5C, Land Use Survey of the Copperbelt, 9 July 1957.

⁸³ NAZ WP1/2/32, Annual Report, Luanshya, 1956.

⁸⁴ NAZ WP1/14/27, Soil Conservation, 20 October 1954.

⁸⁵ ZCCM 13.5.5C, Land Use Survey of the Copperbelt, 9 July 1957.

⁸⁶ L. Schumaker, 'Slimes and Death-Dealing Dambos: Water, Industry and the Garden City on Zambia's Copperbelt', Journal of Southern African Studies, 34, 4 (2008), pp. 823–40.

⁸⁷ NAZ WP1/2/32, Annual Report, Luanshya, 1956.

⁸⁸ NAZ WP1/2/32, Annual Report, Mufulira, 1956.

⁸⁹ J.C. Scott, Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed (New Haven, Yale University Press, 1998).

⁹⁰ Smart, 'Urban Agriculture'.

recommended by the District Commissioner' should be considered for 'small stands' to be 'leased on short term leases to Africans ... for market gardening purposes'.⁹¹ Crucially, this positive attitude towards farming did not extend to cultivation by 'unauthorised' urban residents.⁹² Even if companies permitted farming by employees and their families, they were entirely hostile towards non-mine workers. Distinguishing 'authorised' from 'unauthorised' cultivation, however, proved difficult. It was impossible to monitor all vacant mine land where 'illegitimate' cultivators were farming. None the less, companies repeatedly attempted to re-establish control, proposing that 'only Mine employees be allowed to cultivate on Mine property' and that 'provisions should exist to debar cultivators from continuing operations if they misuse the land'.⁹³ Northern Rhodesian officials thus endeavoured to demarcate agricultural practices according to occupation (mine employees or non-mine workers), method of cultivation (recreational vegetable gardening or subsistence cultivation of maize) and land category (gardens or allotted plots or land occupied without authorisation). These attempts to create order and control were characterised by the attribution of moral valuations to each type of farming: condemning the unauthorised cultivation of subsistence crops on mine land while generally encouraging the growing of vegetables by mine workers' wives in their gardens.94

Agricultural production by women, particularly by mine workers' wives, received special attention from colonial authorities. In the 1950s, Northern Rhodesian officials complained that 'the primeval urge of the African woman to plant maize wherever she may persists as strongly as ever'.⁹⁵ Mining companies, however, judged that 'small agricultural plots played an important part in the lives of the Africans on the Copperbelt'. These plots 'gave the women a useful occupation, which helped keep them out of trouble, and they provided a useful amount of food'.⁹⁶ The 1959 Northern Rhodesian Copperbelt Survey estimated that 'possibly some 30,000 acres of land are cultivated each year by African women'. Yet, despite its extent, 'the value of the crops' was considered 'of little significance' and the practice largely 'recreational'. None the less, the report recommended that 'the provision of allotment areas is desirable^{,97} On the Congolese Copperbelt, colonial observers praised gardening as 'a healthy occupation for the woman', concluding that 'work on the land has a moral effect'.⁹⁸ Female urban agriculture remained shrouded in narratives of subsistence, recreation and leisure, even if women derived food, income and pride from agricultural activities. The male breadwinner model, though rarely realised in practice, coloured perceptions of female urban agriculture on the Copperbelt.99

It is evident that urban agriculture was widespread in the colonial-era central African Copperbelt. Although Congolese officials generally encouraged agricultural practices, while Northern Rhodesian policies were more hostile, similar distinctions of 'tradition–modernity' and 'rural vs urban' shaped attitudes on both sides of the border.¹⁰⁰ In fact, urban agricultural practices were not signs of rural attachment or incomplete urbanisation but

94 Larmer, 'At the Crossroads'.

98 Debra, 'La femme noire', p. 140.

100 Dibwe, Bana Shaba; Ferguson, Expectations of Modernity.

⁹¹ NAZ MAG3/1/7, Copperbelt Expansion Policy, 20 February 1963.

⁹² B.A. Kasongo and A.G. Tipple, 'An Analysis of Policy towards Squatters in Kitwe, Zambia', *Third World Planning Review*, 12, 2 (1990), pp. 147–65.

⁹³ ZCCM 12.1.7A, Land Policy and Land Usage, 10 April 1964.

⁹⁵ NAZ WP1/2/32, Annual Report, Luanshya, 1956.

⁹⁶ ZCCM 13.5.5C, Land Use Survey of the Copperbelt, 9 July 1957.

⁹⁷ NAZ Regional Survey of the Copperbelt, 1959.

⁹⁹ Dibwe, 'Les fonctions des femmes'; Parpart, 'The Household'.

constituted a specific form of 'urban stabilisation'.¹⁰¹ Women and men grew maize, beans and vegetables both to diversify their livelihoods and to assert urban belonging. The lifting of colonial movement control policies after independence further facilitated the proliferation of agricultural practices in urban areas.

Squatters, Subsistence and Post-Colonial Narratives of Urban Agriculture

In the post-independence period, government and mining officials repeatedly deployed narratives of 'subsistence' and 'squatting' to characterise urban agriculture on the central African Copperbelt.¹⁰² With rapid urbanisation, Copperbelt land became increasingly scarce, and the nexus between land access and urban agriculture consequently generated concern. Government officials, like their colonial predecessors, distinguished between authorised and unauthorised cultivation. Yet agreeing who was allowed to farm where – and who was not – proved extremely difficult. This provoked discussions about the 'squatter problem'.¹⁰³ This section historicises debates on 'squatters', mainly in Zambia, to illustrate the relationship between agriculture and urbanism.¹⁰⁴

Discussions about 'squatting' had their origins in colonial attempts to control migration and cultivation. Despite efforts by city councils and mining companies to restrict migration to the Northern Rhodesian/Zambian Copperbelt in the 1950s and 1960s, 'outsiders' and 'unauthorised migrants' easily managed to settle in town.¹⁰⁵ In 1965, authorities complained about the 'swarm of hangers-on and unemployed about the townships' who practised '(African-type) subsistence farming'. Mining officials remarked with frustration how 'indiscriminate subsistence farming' can 'become an abuse, and some sort of regulation of it becomes desirable'.¹⁰⁶ Mining companies issued cultivation permits, but soon concluded that this was 'onerous and inefficient'. By 1965, 25,000 permits had been issued by one mine with a workforce of 7,000, signifying that "outside" people are borrowing identity cards from Mine employees in order to obtain a plot'. Officials lamented not only that 'crop cultivation is taking place outside defined areas', but also feared that this might lead to 'a great number of unemployed plot holders cultivating on Mine property'.¹⁰⁷ The growing of food on mine land gave cultivators a sense of urban entitlement, which officials sought to deter by encouraging mobility. A 1965 report recommended that, 'the people ... are kept moving and not encouraged to take root or obtain a permanent stake in a piece of land on the outskirts of a Copperbelt town; i.e. to build up Squatters' rights'.¹⁰⁸ Copperbelt authorities resisted urban agriculture and 'unauthorised settlement' precisely because they enabled claims to urban space.

108 Ibid.

¹⁰¹ Ferguson, 'Mobile Workers'; E. Brownell, 'Growing Hungry: The Politics of Food Distribution and the Shifting Boundaries Between Urban and Rural in Dar es Salaam', *Global Environment*, 9, 1 (2016), pp. 58–81.

¹⁰² Kasongo and Tipple, 'An Analysis'; J. Omasombo Tshomba (ed.), *Haut-Katanga: lorsque richesses économiques et pouvoirs politiques forcent une identité régionale, Tome 2* (Tervuren, Musée royal de l'Afrique Centrale, 2018).

¹⁰³ For debates on housing, informality and squatting in South Africa, see O. Crankshaw, 'Squatting, Apartheid and Urbanisation on the Southern Witwatersrand', African Affairs, 92, 366 (1993), pp. 31–51; M. Huchzermeyer, Cities with 'Slums': From Informal Settlement Eradication to a Right to the City in Africa (Claremont, UCT Press, 2011); M. Hunter and D. Posel, 'Here to Work: The Socioeconomic Characteristics of Informal Dwellers in Post-Apartheid South Africa', Environment and Urbanization, 24, 1 (2012), pp. 285–304.

¹⁰⁴ Congolese sources on urban agriculture for this period proved extremely difficult to find.

¹⁰⁵ Kasongo and Tipple, 'An Analysis'.

¹⁰⁶ ZCCM 12.1.7A, Regional Land Policy and Land Usage, 19 March 1965.

¹⁰⁷ ZCCM 12.1.7A, Regional Land Usage, 13 March 1965.

Government officials in both countries sought to plan land use, emphasising issues of order and control. The 1965 Zambian Copperbelt development policy judged that, in some cases, it was good 'for Companies as landowners to make land available to their employees for cultivation', as 'it is a healthy recreation' and 'better from the Companies' point of view than having employees spend their spare time in the townships hanging around beerhalls or political meetings'. Moreover, 'on welfare grounds gardening in fact deserves every encouragement^{1,109} Yet, especially when practised by non-mine employees, complaints about 'unauthorised cultivation' and 'squatter settlement' proved persistent. In Katanga in the 1980s, Bruneau identified 'free planters', urban inhabitants who had appropriated cultivable (peri-urban) lands 'without title and in an anarchical manner'.¹¹⁰ Similarly, a 1997 Zambian report concluded that 'illegal settlements exist in all mine areas', with activities such as 'subsistence farming, charcoal burning and fishing'.¹¹¹ Settlement on mine land represented a specific problem during mine privatisation in the 1990s, as new investors were reluctant to buy land occupied by cultivators.¹¹² None the less, this rarely prompted evictions or a change of policy towards squatters.¹¹³ ZCCM representatives admitted in 1997 that the company 'has had illegal settlers on its land for guite some time and this has been compounded by the lack of political will to address the issue effectively and decisively in the past'.¹¹⁴ In a 2002 report, Zambian officials remarked that 'the main feature of land on the Copperbelt is its special ability to attract squatters and hangers on as former mine employees and their dependants filter in and make, first gardens then settlements'.¹¹⁵ Privatisation, involving the sale of former mine-owned housing, largely compounded the distinction between mine employees and non-mine workers.

Decades earlier, in a trope familiar from the colonial period, Zambian officials in 1965 complained about the process of urbanisation, a 'Drift to the Copperbelt' and a 'Build-up of Squatter and Peri-Urban Population Through Forces Beyond Anybody's Control.¹¹⁶ Congolese and Zambian government and company officials denounced 'squatter settlements' not so much for their agricultural activities but rather because unauthorised cultivation challenged urban planning, regulation and control. In policy debates about desirable urbanism, agricultural production was repeatedly, and usually negatively, discussed.¹¹⁷ Challenging the assumed rurality of agriculture, Copperbelt urbanisation was said to be creating 'a growing demand for African "Mafwamu" [farms] and plots'.¹¹⁸ Officials in Zambia argued that 'the best way to solve the squatter problem' would be to find an 'incentive to leave' by providing 'an effective means of livelihood elsewhere'. Mine companies considered providing 'an alternative area for settlement ... where agricultural pursuits could be carried on', because 'then it would be morally justified' to insist 'on the evacuation ... and demolition of the shanties'.¹¹⁹ Settled agricultural production in periurban or rural areas would thus legitimise the relocation, control and planning of 'informal settlements'. Officials sought to police boundaries between mine workers and non-mine workers, rural and urban areas, as well as subsistence and productivity. Zambian mine companies specifically worried that 'a lot of "outsiders" will want to make gardens on

¹⁰⁹ ZCCM 12.1.7A, Regional Land Policy and Land Usage, 19 March 1965.

¹¹⁰ Bruneau, D'ici et d'ailleurs, p. 161.

¹¹¹ ZCCM 14.4.1C, A Study of Unauthorised Settlements in Mine Areas, February 1997.

¹¹² M. Hansungule, P. Feeney and R. Palmer, *Report on Land Tenure Insecurity on the Zambian Copperbelt*, (Lusaka, Oxfam, 1998).

¹¹³ Kasongo and Tipple, 'An Analysis'.

¹¹⁴ ZCCM TY.2B, Illegal Settlements, June 1997.

¹¹⁵ ZCCM 1.6.1A, Land Policy, 16 October 2002.

¹¹⁶ ZCCM 12.1.7A, Regional Land Usage, 13 March 1965.

¹¹⁷ Kasongo and Tipple, 'An Analysis'; Omasombo Tshomba, Haut-Katanga.

¹¹⁸ ZCCM 12.1.7A, Regional Land Usage, 13 March 1965.

¹¹⁹ ZCCM 17.3.3A, Land Use, Squatters, 27 September 1965.

Company land', using this land 'for subsistence living while they over-crowd the houses in the town'.¹²⁰ In the eyes of mining companies and government officials, an unruly mass of urban agriculturalists was engaged in a precarious, marginal and subsistence activity that needed to be regulated away to make space for planned urban centres, dominated by waged labourers and their families.¹²¹ However, the 'squatter problem' remained unresolved throughout this period. Narratives of 'subsistence' served to justify human, settlement and spatial control, to bolster urban authorities' fragile command over elusive 'unauthorised' settlements.¹²² Yet, as the next sections will show, agricultural production could be remarkably productive and market-oriented.

Crisis and Creativity: Urban Agriculture in Times of Falling Copper Prices

A 1979 Congolese newspaper article on 'copper and maize' noted that 'one cannot have industrial wealth without prior agricultural development'.¹²³ Zambian and Congolese mining companies acknowledged that encouraging agricultural production would help to diversify the national economy away from copper and generate much-needed revenue. When copper prices fell in the mid 1970s, national 'back to the land' policies called for an 'agrarian revolution' and 'self-sufficiency'.¹²⁴ Policy documents of the 1980s and 1990s largely reproduced older narratives that juxtaposed rural and urban areas, tradition and modernity. Meanwhile, urban agriculture gained increasing popularity and expanded significantly in both Congo and Zambia.¹²⁵ This was prompted directly by the fall of copper prices and ensuing economic difficulties. Geographer Bruneau noted how in Congo 'at the beginning of the 80s, the reality of an ample return to the land was evident in the mining basin'.¹²⁶ He characterised this as 'the large-scale ruralisation of city life' among young households, retirees and the urban population, which gave rise to the 'largely spontaneous food growing belt of the copper cities'.¹²⁷ Other social scientists noted the same tendencies, attributing them solely to economic decline:

... the mining industry that formerly still guaranteed to Southern Shaba's [Katanga's] urban residents a wholly exceptional standard of living for Africa is no longer able to feed the population ... These past years peri-urban agriculture has reached an extraordinary extent. Gardening between plots of land, market gardening along river banks and especially fields of maize, beans and cassava in peri-urban open spaces have all developed rapidly ... We are witnessing an important exodus of urban residents who are recolonising the 'bush' of the mining country ... [This is] an original response ... to the apparently irreversible degradation of the quality of urban life.¹²⁸

Confirming the extent of the practice, Bruneau described how 'an arc of several thousand hectares of fields cultivated by urban residents surrounds the majority of workers' camps on

¹²⁰ ZCCM 12.1.7A, Regional Land Policy and Land Usage, 19 March 1965.

¹²¹ Kasongo and Tipple, 'An Analysis'; Smart, 'Urban Agriculture'.

¹²² A. Burton, 'The Haven of Peace Purged: Tackling the Undesirable and Unproductive Poor in Dar es Salaam, ca. 1950s–1980s', *International Journal of African Historical Studies*, 40, 1 (2007), pp. 119–51.

^{123 &#}x27;Copper and Maize', Mwana Shaba, 284 (April 1979).

¹²⁴ Omasombo Tshomba, *Haut-Katanga*; A. Thornton, E. Nel and G. Hampwaye, 'Cultivating Kaunda's Plan for Self-Sufficiency: Is Urban Agriculture Finally Beginning to Receive Support in Zambia?', *Development Southern Africa*, 27, 4 (2010), pp. 613–25.

¹²⁵ Jacobs, 'An Urban Proletariat'; Smart, 'Urban Agriculture'.

¹²⁶ Bruneau, D'ici et d'ailleurs, p. 149.

¹²⁷ Ibid., p. 159.

¹²⁸ J.P. Baudouin, 'Étude de la problématique agricole au Zaïre' (PhD thesis, Faculté des sciences agronomiques de Gembloux, 1993), p. 153.

a seasonal basis'.¹²⁹ Although he praised this productive 'green belt' for mitigating 'the economic stagnation of the city', he none the less interpreted urban agriculture in linear terms.¹³⁰ He concluded that 'the spectre of famine was needed so that ... the wives of mineworkers, manual workers, small traders and the unemployed of the copper towns take up the hoe of their grandmothers and find their way back to the fields'.¹³¹ Such analyses reworked older narratives by interpreting urban agriculture as retrogressive and illegitimate in a properly functioning city.¹³² As has been demonstrated, however, widespread agricultural activities long predated the fall of copper prices. Urban agriculture was not merely a response to economic crisis but was instead an essential element of 'African urbanity'.¹³³

Urban agriculture scholarship has repeatedly drawn out the gendered implications of this crisis narrative.¹³⁴ In the 1990s, Zambian Copperbelt women were described as 'engaged in subsistence farming growing crops ... to supplement their income'.¹³⁵ Similarly, Bruneau argued that 'urban fields ... allow many women to feed their families or to supply a small subsistence trade in town'.¹³⁶ Women were supposedly farming for 'subsistence' as their husbands could no longer feed their families owing to the economic crisis. A 1987 development report was more optimistic about urban agriculture on the Congolese Copperbelt, asserting that fields 'assure better nutritional security for women' while they also 'help women play a greater role in the decisions of their households'.¹³⁷ Farming could offer women the opportunity 'to resolve certain problems for which the man cannot find a solution because of his derisory salary'.¹³⁸ Although acknowledging that female farming could contribute food and income to the household, such analyses still interpreted female cultivation as an aberration from male waged labour, as an informal activity carried out for 'subsistence' only.¹³⁹

Older narratives thus continued to inform understandings of urban agriculture on the post-colonial central African Copperbelt. Both governmental denunciation of unauthorised cultivation and descriptions of the 'ruralisation' of cities by social scientists relied on rural–urban and tradition–modernity binaries.¹⁴⁰ Planning visions of how a modern city should look rarely encompassed agricultural activities. This had less to do with the deficiencies of urban agriculture itself and more with (largely ineffective) attempts by authorities to impose urban order and control. To appreciate the perspectives of Copperbelt residents better, the following section draws on extensive interviews. These demonstrate that agricultural activities in urban areas were not simply of economic importance but also involved attempts to claim urban space and belonging.

140 Bruneau, D'ici et d'ailleurs; Smart, 'Urban Agriculture'.

¹²⁹ Bruneau, D'ici et d'ailleurs, p. 163.

¹³⁰ Ibid., p. 164.

¹³¹ Ibid., p. 174.

¹³² Slater, 'Urban Agriculture'; Brownell, 'Growing Hungry'.

¹³³ J-C. Bruneau and F-K. Mansila, 'Des corons aux villages neufs: le retour à la terre en périphérie de Kolwezi (Zaïre)', in P. Vennetier (ed.), *La péri-urbanisation dans les pays tropicaux* (Bordeaux, CEGET-CNRS, 1989), p. 234.

¹³⁴ Hovorka, 'The No. 1 Ladies'; Rakodi, 'Urban Agriculture'.

¹³⁵ ZCCM 14.4.1C, Study on Unauthorised Settlements in Mine Areas, February 1997.

¹³⁶ Bruneau, D'ici et d'ailleurs, p. 144.

¹³⁷ International Fund for Agricultural Development, 'Rapport d'évaluation Zaïre: Projet de développement agricole de l'hinterland minier du Shaba', 1987, p. 40.

¹³⁸ Mbuyi-Manya Webe, 'La contribution des institutions financières à la promotion de l'agriculture en milieu rural de Likasi', (MA dissertation, University of Lubumbashi, 1993), p. 36.

¹³⁹ Potts, 'Worker-Peasants'; Slater, 'Urban Agriculture'.

Oral History, Agriculture and Urbanism on the Copperbelt

Oral history interviews with 100 long-term residents of Likasi, Congo and Mufulira, Zambia conducted in 2018 found that 97 of them had engaged in some form of urban agriculture on the Copperbelt.¹⁴¹ For some, this involved growing vegetables in their backyard, while others ran full-fledged commercial maize farms on the outskirts of town or in adjacent periurban areas. Many women grew tomatoes that they sold in local markets, while mine workers supplemented their rations by growing maize and sweet potatoes. Although some had started growing food as a response to economic crisis, especially in Congo in the 1990s,¹⁴² most had engaged in agricultural activities from as early as the 1960s. The ubiquity and longevity of urban agriculture among respondents suggests that this practice defied simple characterisation. The following personal accounts reveal the centrality of agriculture to the lives of long-term Copperbelt residents.

In Likasi, a retired railway employee explained: 'in the past, everybody cultivated, just like today. One cannot stay without cultivating!'¹⁴³ Yet such statements underplay the extent to which urban agriculture was a distinct response to town conditions rather than a continuity of rural life. Crops, cultivation techniques and access to land were all different in urban areas. Defa Ngoma, married to a mine worker, started cultivating a plot in the mining concession when she arrived in Mufulira in the early 1970s. After several years, the mine reclaimed this land and evicted Ngoma and others. Ngoma then found new land through the Catholic Church, which she still cultivates today. The church gave her not only a plot but also hybrid maize seeds and advice on using fertiliser, providing a source of food and income.¹⁴⁴ Others cultivated plots in 'informal settlements'. In Likasi, some moved to the peri-urban Toyota area because land access was easier and cultivation restrictions less strict than in the city or in mining areas.¹⁴⁵ By cultivating in peri-urban areas, these men and women achieved an independent livelihood, and some diversified their income from mining or formal employment. Perhaps more importantly, they could envisage long-term urban residence following retirement from jobs. If one wanted to stay in town without formal employment, one needed capital, and agriculture was a viable way of earning a living. Agriculture was thus one way to consolidate urban life.¹⁴⁶

Existing narratives have tended to shroud urban agriculture in a pejorative discourse of 'subsistence'.¹⁴⁷ These interviews, however, demonstrate that many agricultural practitioners were not poor. Instead, they were part of the stabilised working class or even relatively wealthy. Research indeed suggests that 'better-off households are able to farm more easily and efficiently than poor households, most likely because they have access to land'.¹⁴⁸ In Likasi, senior officials (*cadres*) of La Générale des Carrières et des Mines (Gécamines) were particularly likely to farm commercially on the outskirts of town, hiring casual labourers to

¹⁴¹ All respondents in Likasi and Mufulira had lived on the Copperbelt since at least the 1970s. Differences of gender, occupation and residential area were sought to reflect the diversity of these towns' populations.

¹⁴² P. Petit and G. Mulumbwa Mutambwa, "*La crise*": Lexicon and Ethos of the Second Economy in Lubumbashi', *Africa*, 75, 4 (2005), pp. 467–87.

¹⁴³ Interview with André Kabinda, Likasi, 4 June 2018. All interviews for this article were conducted by the author. For those in Likasi, the author was accompanied by Pierrot Monzi Kalonga; for those in Mufulira, by Grant Chisapa and Miles Larmer.

¹⁴⁴ Interview with Defa Ngoma, Mufulira, 3 July 2018.

¹⁴⁵ Interview with Thérèse Kyola, Likasi, 7 June 2018.

¹⁴⁶ I. Peša, 'Water, Housing and (In)Formality in Kitwe, Zambia: Infrastructure, Citizenship and Urban Belonging', in C. Lemanski (ed.), *Citizenship and Infrastructure: Practices and Identities of Citizens and the State* (London, Routledge, 2019), pp. 104–22.

¹⁴⁷ Crush, Hovorka and Tevera, 'Food Security'.

¹⁴⁸ D. Lee-Smith, 'Cities Feeding People: An Update on Urban Agriculture in Equatorial Africa', *Environment* and Urbanization, 22, 2 (2010), p. 495.

weed and harvest crops. Jacques Magenda, for example, declared that agriculture is his preferred pastime: 'I do not cultivate maize just for eating. I see my farm as part of a good life. If the mining industry collapses, how am I supposed to feed myself? Farming gives me security'.¹⁴⁹ Food cultivation was not only livelihood diversification but could secure urban life in economically uncertain times. Despite its own fluctuations, agricultural production offered greater long-term security than mining employment, which has diminished steadily.¹⁵⁰ Linking agricultural production to a distinct form of urban identity, a senior ZCCM employee in Mufulira explained why his wife and children needed agricultural skills. He referred to farming as 'a training ground' for those who had grown up in town without rural experience.¹⁵¹ Even such highly skilled men faced a precarious situation in urban areas, which they sought to obviate through agriculture. After retirement or during economic downturn, urban residents needed an alternative source of income. Magenda explained that it would be extremely difficult to 'go back' to his rural area of origin, which he had left in the 1960s. He preferred to live in town after retirement, so he engaged in agriculture to secure a stable income.¹⁵²

In line with debates on gender in urban agriculture, these oral histories also demonstrate that farming provided urban women with a source of autonomy.¹⁵³ Ana Chilufya, a trader whose husband worked as a barman, explained: 'growing my own maize allowed me to be independent of my husband. I could contribute to my children's school fees and when my husband was fired from his job, we still managed to get by. Without the maize, we would have suffered'.¹⁵⁴ Joyce Nyirenda, who owns a 20-hectare farm, where she grows tomatoes, maize and beans sold in Kitwe's markets, initially depended on her husband's mine job to access land. Without this, she could not apply for a title deed, although today her farm is a profitable self-sustaining enterprise.¹⁵⁵ Despite restrictions on land access, capital or markets, urban agriculture allowed women to assert a degree of independence. Women were neither subsistence nor commercial farmers; they did not practise agriculture for solely productive or reproductive purposes. Engagement with urban agriculture was motivated instead by a set of interrelated factors, involving lifestyle, livelihood and identity.¹⁵⁶

Edward Zulu's experience illustrates connections between agriculture, lifestyle and urbanism on the Copperbelt. Zulu started working as a university lecturer in 1978. The scarcity of fruit and vegetables in local markets prompted him to grow cabbage, onion and tomato in his backyard. In the 1990s, he obtained a larger plot further afield. His successful agricultural activities convinced his neighbours to start cultivating as well. At first, Zulu grew crops to supplement his salary and diversify his diet, but, after retirement, agriculture became his main source of income. For him, agricultural production was not a necessity induced by poverty but rather a lifestyle choice.¹⁵⁷ Sanyal has demonstrated such intangible motivations for Lusaka's urban agriculturalists, noting that people like farming or associate it with a settled lifestyle.¹⁵⁸ Smart notes that 'urban agriculture is widely viewed on the Copperbelt as something meaningful ... and is considered significant to a diverse range of urban residents'.¹⁵⁹

156 Hovorka, 'The No. 1 Ladies'.

158 Sanyal, 'Urban Cultivation', p. 199.

¹⁴⁹ Interview with Jacques Magenda, Likasi, 7 and 25 June 2018.

¹⁵⁰ Rubbers, 'Towards a Life'; Mususa, 'Mining, Welfare'.

¹⁵¹ Interview with Levy Chushi, Mufulira, 11 July 2018.

¹⁵² Interview with Jacques Magenda, Likasi, 25 June 2018.

¹⁵³ Rakodi, 'Urban Agriculture'; Slater, 'Urban Agriculture'.

¹⁵⁴ Interview with Ana Chilufya, Mufulira, 11 July 2018.

¹⁵⁵ Interview with Joyce Nyirenda, Kalulushi, 18 August 2017.

¹⁵⁷ Interview with Edward Zulu, Kitwe, 23 August 2017.

¹⁵⁹ Smart, 'Urban Agriculture', p. 129.

Some respondents did, however, start farming due to economic or political difficulties. In the early 1990s, the collapse of Gécamines and Katangese-Kasaien conflict caused severe food shortages in Katanga. Some respondents survived 'because of their fields'.¹⁶⁰ Others struggled to obtain food and asked for land from church organisations. The Catholic nongovernmental organisation Shalamo provided 'peace fields' (shamba la umoja) in Likasi to occupy people and provide them with a means of livelihood.¹⁶¹ In Mufulira, Dewys Mulenga started farming to make ends meet. In the informal settlement Kawama East he cultivated maize, groundnuts and tomatoes on land obtained from the Anglican Church. After a few years, when the city council recognised Kawama East as a part of Mufulira, he had earned enough by selling vegetables at the local market to expand his fields and build a brick house.¹⁶² What had started as a crisis response became a stable livelihood and a way to claim urban belonging. Many others moved into farming after retrenchment or retirement from the mines.¹⁶³ One group of mine workers voluntarily resettled as farmers in Kakolo, Kitwe, after mine privatisation in the 1990s. Their motivations ranged from funding their children's education to earning post-retirement income, to ambitious goals for commercial agriculture.¹⁶⁴ Former mine workers were fully aware that farming offered alternative income and employment opportunities and consciously chose an agricultural future.

Such oral histories reveal complex, overlapping motivations for practising urban agriculture. Different from the narratives that dominate official reports and analysis, urban agriculture straddled the boundaries of rural and urban, subsistence and commercial farming, authorised and unauthorised, and tradition and modernity. Most importantly, agricultural production in urban areas was not 'out of place' but was a central element of urbanism.¹⁶⁵ By cultivating a plot of land, agriculturalists asserted urban belonging and challenged conceptions of who belonged in town. This had little to do with formal land titles or rights of occupancy – 'squatters' continued to be evicted and informal settlements were occasionally demolished.¹⁶⁶ None the less, by earning a living and occupying land, cultivators established socio-economic relationships that tied them to urban space. The elusive nature of cultivation evoked negative policy responses, but urban agriculture endured precisely because it was so important in claiming and defining central African urban space and identity.

Conclusion

Existing narratives on urban agriculture, informed by tenacious assumptions about urbanisation, poverty and gender, fail to explain the full spectrum of engagement with agriculture on the central African Copperbelt. By historicising government and mining company discourses on urban agriculture, this article has demonstrated its ubiquity and diversity. Oral history suggests that farming on the Copperbelt was practised by a variety of people, with varied motivations. The enduring popularity of urban agriculture cannot be explained solely in terms of its contribution to food and income, but is equally connected to lifestyle, identity and urban belonging. This article argues that urban agriculture on the Congolese and Zambian Copperbelt should be understood and indeed valued as a fully urban phenomenon, which has evolved over time in response to socio-economic change but has always been central to Copperbelt life.

161 Interview with Père François, Likasi, 22 June 2018.

¹⁶⁰ Interviews with Sarah Bulanda, Likasi, 6 June 2018 and Kabwika Mutanda, Likasi, 5 June 2018.

¹⁶² Interview with Dewys Mulenga, Mufulira, 20 July 2018.

¹⁶³ Rubbers, 'Towards a Life'.

¹⁶⁴ Interviews with about seven ex-mine workers, now farming in Kakolo, Kitwe, 16 August 2017.

¹⁶⁵ Slater, 'Urban Agriculture'; Smart, 'Urban Agriculture'.

¹⁶⁶ Kasongo and Tipple, 'An Analysis'.

This article has sought to unpack the persistent historical framing of urban agriculture as an informal, subsistence and feminised activity, in stark contrast to male waged labour in the mines. Such a framing has caused actual practices of urban agriculture to be misconstrued, dismissed as a 'ruralisation' of cities or a crisis response by precarious urban residents. The article has, instead, sought to nuance understandings of urban agriculture, a long-standing historical practice that could contribute to subsistence as well as to commercialisation, by both men and women. Fundamentally, agriculture should be understood as an urban practice, which served to consolidate urban identity and belonging. To support this central argument, three related points have been made. First, urban agriculture on the Copperbelt long predates the protracted fall in copper prices of the mid 1970s. A narrow focus on a crisis narrative to explain urban agriculture therefore fails to capture the complexity and significance of the phenomenon. Second, urban agriculture on the Copperbelt involved from the outset making claims to urban space. By cultivating vegetables in one's garden or maize along the riverside, Copperbelt residents asserted their urban belonging. This explains why unauthorised cultivation consistently evoked such hostile (though often ineffective) policy responses. Contestations over the right to cultivate land simultaneously revolved around the right to occupy urban space. Discussions over who was allowed to cultivate and where therefore persisted throughout this period. Third, urban agriculture as a phenomenon cannot be understood merely in terms of its contribution to food security, however important that might have been. Rather, urban agriculture reflected and shaped lifestyle, gender and identity, which in turn informed what urbanism on the Copperbelt was all about. A contextualised approach to urban agriculture on the Congolese and Zambian Copperbelt thus contributes to wider debates about urban space, identity and belonging, in African towns and beyond.

Acknowledgements

This article has benefited immensely from discussions with Miles Larmer, Benoît Henriet, Rachel Taylor and Enid Guene. I thank Stephanie Lämmert, Kristien Geenen, Rita Kesselring and Katrien Pype for their useful comments on presentations of this article in Belfast and Leuven. Special thanks go to Pierrot Monzi Kalonga and Grant Chisapa, without whom the oral histories could not have been obtained. This article is based on research that has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement number 681657: 'Comparing the Copperbelt: Political Culture and Knowledge Production in Central Africa').

Iva Peša

Department of History, Oude Kijk in 't Jatstraat 26, 9712 EK Groningen, The Netherlands. E-mail: i.pesa@rug.nl

Check for updates