A detailed black and white woodcut-style illustration of a person weaving on a loom in a forest setting. The person, seen from the back, is seated on the ground, wearing a headband and a beaded necklace. They are operating a large, traditional wooden loom that is strung with threads. To the left of the loom, there is a small, rounded earthenware pot on a stand. The background is filled with the dense, textured trunks and branches of trees, creating a sense of being deep in a forest. The overall style is intricate and detailed, typical of 19th-century book illustrations.

Deindustrialization in East Africa:  
Textile Production in an Era of  
Globalization and Colonization,  
c. 1830-1940

Katharine Frederick



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This research was conducted under the auspices of the Wageningen School of Social Sciences (WASS)

# **Deindustrialization in East Africa:**

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Katharine Frederick

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at Wageningen University

by the authority of the Rector Magnificus,

Prof. Dr A.P.J. Mol,

in the presence of the

Thesis Committee appointed by the Academic Board

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## CHAPTER 1

### INTRODUCTION

#### 1.1 Introduction

The development of domestic cotton textile industries has propelled numerous industrial takeoffs, transforming nineteenth-century Britain into the workshop of the world and precipitating the rapid twentieth-century catch-up of several East Asian countries. In Africa, on the other hand, cotton cloth production, which thrived in several locales for centuries, ultimately failed to produce similar long-term economic growth. Rather, many of the region's domestic cloth industries<sup>1</sup> fell into rapid decline by the early twentieth century. However, Africa – particularly East Africa – has been largely overlooked in global studies of the “great divergence,” which saw the West rapidly outpace other world regions through industrialization-driven economic growth.<sup>2</sup> But in line with much global economic history literature, scholars of East Africa have generally accepted *forces of globalization* as the drivers of industrial arrest in the region during the nineteenth and early twentieth centuries, with many settling for a broadly generalized explanation: as nineteenth-century East Africa increasingly integrated into the global trading system, domestic textile industries were devastated by a growing influx of imported cotton cloth from those world regions that had more quickly modernized their own textile industries.

However, as Munro pointed out decades ago, the implications of imported manufactures for domestic African industries have been “less than adequately investigated” as “too often historians have merely assumed their disappearance under competition from imports.” He cautioned against “suppos[ing] that when some branches of handicraft production declined they did so under the pressure of imports,” yet numerous scholars have continued to make this assumption.<sup>3</sup> As this thesis will illustrate, quantitative data suggest that competition is indeed an insufficient explanation for industrial decline. In some cases, deindustrialization in East Africa occurred *before* imports ramped up. Furthermore, cloth producers residing in northern East Africa persevered much longer than their central and southern East African neighbors in spite of comparatively higher per-capita import levels. Similarly, West Africa imported more cloth per capita than East Africa, yet handicraft production continued to thrive in the west long

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<sup>1</sup> In the context of this study, the term “industry” broadly includes handicraft production, which has traditionally served as a forerunner to further manufacturing development.

<sup>2</sup> Much of the spotlight has been placed on Asia and Latin America. See Pomeranz, *The great divergence*; Parthasarathi, *Why Europe grew rich and Asia did not*; Williamson, *Globalization and the poor periphery before 1950*.

<sup>3</sup> Munro, *Britain in tropical Africa*, pp. 62-63. See discussion of the historiography below.

after similar industries waned in much of the east. Competition-centered deindustrialization explanations have thus overlooked other decisive mechanisms that affected different production outcomes in late pre-colonial and early colonial East Africa. However, limited empirical evidence and a paucity of case studies have precluded definitive conclusions on the causes and nature of deindustrialization in East Africa.

The central question of this thesis is *when and why did handicraft cloth industries in East Africa decline?* The major sub-questions are: to what extent did imported cloth influence deindustrialization, and what role did global forces and local forces play in affecting local production choices? This thesis offers a fresh perspective on East Africa's piece of the global textile puzzle by carefully investigating the decline of regional cloth industries and re-evaluating the purportedly central role played by global forces. Insights into the nature and causes of industrial decline are derived from in-depth studies of textile centers in southern and central East Africa. Relatively little work has been done on East Africa's industrial history compared with extensive scholarship on other world regions, including West Africa.<sup>4</sup> However, East Africa, which became increasingly integrated into global trade and open to foreign influence during the nineteenth century, provides excellent underexplored terrain to test existing theories on the mechanisms, both global and local, that affected production outcomes.

This study provides the first long-term quantification of cloth imports into East Africa from the mid-nineteenth to the mid-twentieth century, detailing the scale, composition, and pricing of imports, which is a crucial step in investigating any relationship between cloth imports and deindustrialization. Analytically, I take a comparative approach. In-depth analyses of the rise of cloth imports into East Africa and the decline of cloth industries in nineteenth-century Malawi and nineteenth- and twentieth-century Tanzania are considered in light of existing studies on more resilient industries in northern East Africa and West Africa.<sup>5</sup> Comparative analysis provides new insights into the unique periodization and pathways of industrial decline (or persistence) in different African locales, challenging one-size-fits-all deindustrialization suppositions.

This study will argue that the causes of deindustrialization lie with a number of local structural factors and time-dependent external forces that interacted to diminish industrial production possibilities. In each case, local and global forces interacted very differently to affect production outcomes, underscoring the importance of bringing the local into the

---

<sup>4</sup> Existing studies on nineteenth- and twentieth-century handicraft textile production in East Africa include Kjekshus, *Ecology control*, pp. 105-109; Davison and Harries, 'Cotton weaving'; Alpers, *East Africa and the Indian Ocean*, pp. 79-98; Clarence-Smith, 'The textile industry'; Mandala, *Work*, pp. 41-44.

<sup>5</sup> For the sake of consistency, modern African country names are generally used in lieu of pre-colonial and colonial-era names, which changed over time.

deindustrialization equation. The single most important factor influencing industrial outcomes was the *size and composition of the local labor force*, which was affected by both local and global forces. The most important external force identified in each case was global demand for East African commodities, particularly ivory and agricultural goods. However, the precise *ways* in which global demand influenced the local labor force – and, ultimately, labor allocation choices – differed substantially from case to case, based on time- and location-specific factors.

## **1.2 Forces of globalization and industrial decline**

### *The development of a global periphery: exploitation and the power of the market*

Since the mid-twentieth century, academic debate has raged over the causes of limited industrial growth in much of the developing world compared with the rapid industrial expansion experienced in Europe and North America during the eighteenth and nineteenth centuries. In the early post-colonial period, dependency theorists suggested that underdevelopment had been affected via an exploitative “world system” that was dominated by wealthy “core” countries at the expense of poorer “peripheral” countries.<sup>6</sup> The concept of a core-controlled global economy has been recently revisited by Beckert in his sweeping history of the cotton-driven industrial divergence, whereby Europe – with the use of institutionalized, state-backed violence – usurped Asia’s position as the original textile workshop of the world and undermined burgeoning industries across the globe. Beckert broadly argues that European industrial dominance was actively constructed through an orchestrated system of “war capitalism,” which facilitated Europe’s global control over factors of production and external markets through “slavery, the expropriation of indigenous people, imperial expansion, armed trade, and the assertion of sovereignty over people and land by entrepreneurs.”<sup>7</sup> In the case of Africa, however, he suggests that imperial efforts to secure the continent’s resources often met with failure since many Africans “remained far removed from world markets and experienced little if any commercialization in their lives [and thus] felt little economic pressure to produce cash crops” and instead “favored long-established local exchanges.”<sup>8</sup>

Rodney, on the other hand, famously asserted in the 1970s that Europe had “underdeveloped” Africa through centuries of aggressive trading policies followed by colonial coercion, a dynamic that placed agency firmly in the hands of foreign capitalists. In Rodney’s view, African markets were actively flooded with first Indian and then European cloth brought by European traders from the fifteenth century onward, which progressively crowded domestic cloth out of African markets – particularly as European manufacturing technology advanced – and thus prevented local producers from taking advantage of increasing African demand for

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<sup>6</sup> Frank, ‘The development of underdevelopment’; Wallerstein, *The modern world-system*, vol. III.

<sup>7</sup> Beckert, *Empire*, p. xv.

<sup>8</sup> Ibid., 371.

manufactured goods. Consequently, “by the time Africa entered the colonial era, it was concentrating almost entirely on the export of raw cotton and the import of manufactured cotton cloth.” The region thus suffered a catastrophic “loss of development *opportunity*.”<sup>9</sup>

In line with Rodney, Palat and Wallerstein argue that Indian-made cloth effectively undermined industry in places like East Africa, largely due to the comparatively more advanced technological capacity of producers on the subcontinent.<sup>10</sup> East Africa indeed imported gradually increasing quantities of Indian-made cloth in exchange for primary products from around the fourteenth century onward.<sup>11</sup> According to Machado, domestic East African textiles and Indian-made cloth had enjoyed complementary niches in local markets through much of the early modern period, but an uptick in imports ultimately upset this balance so that “local textile production in East, east central, and south-east Africa was much reduced by the eighteenth century.”<sup>12</sup>

However, most deindustrialization arguments hinging on purportedly unbeatable competition from imported cloth focus on the *nineteenth century*, which saw a substantial increase in East Africa’s global trade integration and the imposition of colonial rule.<sup>13</sup> From around the 1830s, American, European, and Indian traders flocked to East Africa, especially the Tanzania-adjacent island entrepôt of Zanzibar, to exchange manufactures for primary products, like ivory, cloves, gum copal, rubber, and hides and skins, which were increasingly demanded in industrializing regions. While many of these primary products came from coastal and coastal hinterland areas, trading caravans carried imported manufactures inland to exchange for the lucrative ivory found principally in the deep interior. According to Iliffe, interior textile industries simply “could not compete” once imported cloth stocks increased from around the second half of the nineteenth century.<sup>14</sup> Tambila argues that by the last quarter of the century, imports of comparatively cheap, mass-produced manufactures began to “push out the artisan goods of the region” as the domestic economy was “reoriented to production taking place in industrial or industrializing Europe and north America.”<sup>15</sup> In the case of West Africa, Inikori suggests that, while textile production did not necessarily disappear, the progression of industry

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<sup>9</sup> Rodney, *How Europe underdeveloped Africa*, pp. 103-105.

<sup>10</sup> Palat and Wallerstein, 'Of what world system', pp. 36-37.

<sup>11</sup> Riello, *Cotton*, p. 23; Chittick, 'East African trade with the Orient', p. 103.

<sup>12</sup> Machado, 'Gujarati Indian merchant networks', pp. 109-110; Machado, 'Awash', p. 168 (quote).

<sup>13</sup> Koponen, *People and production*, p. 374; Kjekshus, *Ecology control*, pp. 106-110; St. John, 'Kazembe', p. 227; Raum 'German East Africa', pp. 193-194; Davison and Harries, 'Cotton weaving', p. 189; Mandala, *Work*, pp. 43-44, 56, 92, 293.

<sup>14</sup> Iliffe, *A modern history of Tanganyika*, pp. 60, 67.

<sup>15</sup> Tambila, 'A history', pp. 80-81, 162-163.

to a proto-industrial phase was arrested as the region's markets were captured by imported cloth during the nineteenth century.<sup>16</sup>

Some scholars have focused on exploitative colonial influence over development in Africa, which overwhelmingly favored the advancement of cash-crop production over industrial development with the perspective that “dependencies existed in order to supply the metropolis with cheap raw materials.”<sup>17</sup> Rodney broadly described colonialism as a deliberate “system of underdeveloping” the continent for the benefit of European economic interests.<sup>18</sup> With respect to German-controlled Tanzania (German East Africa from 1885 to 1919), Koponen has taken a more nuanced tack, arguing that colonialism did result in development but that the *nature* of that development was influenced by an overarching colonial policy of exploitation, which did not foster *industrial* growth. In this sense, “development was an essential part of the mechanisms of underdevelopment.”<sup>19</sup> Shenton and Freund argue that colonial-era socio-economic dynamics and production choices were strongly influenced by the machinations of newly imposed colonial administrations, which included the imposition of taxation, partly as a “spur to commodity production” to serve the needs of metropolitan capitalists.<sup>20</sup> At the same time, Swainson argues, eager metropolitan industrialists strategically undermined domestic industries in early-colonial East Africa since the region was viewed as an important market for manufactures. Local industries “represented a threat” that was mitigated by swamping markets with imported manufactures, which “effectively wiped out” domestic industries during the late nineteenth century, particularly in British East Africa.<sup>21</sup> Figure 1.1 illustrates the externally oriented dependency model of deindustrialization in the global periphery.

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<sup>16</sup> Inikori, 'English versus Indian cotton textiles'.

<sup>17</sup> Wrigley, *Uganda*, p. 33.

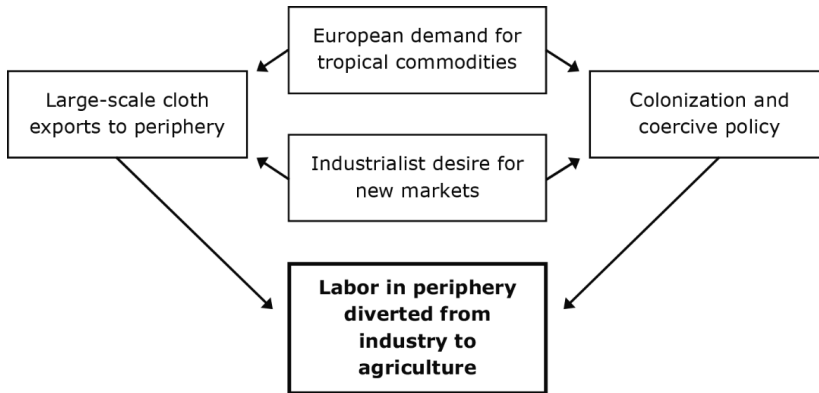
<sup>18</sup> Rodney, *How Europe underdeveloped Africa*, p. 223.

<sup>19</sup> Koponen, *Development for exploitation*, p. 671.

<sup>20</sup> Shenton and Freund, 'Incorporation', pp. 13-19.

<sup>21</sup> Swainson, *Development of corporate capitalism*, p. 26.

**Figure 1.1      Dependency school deindustrialization model**



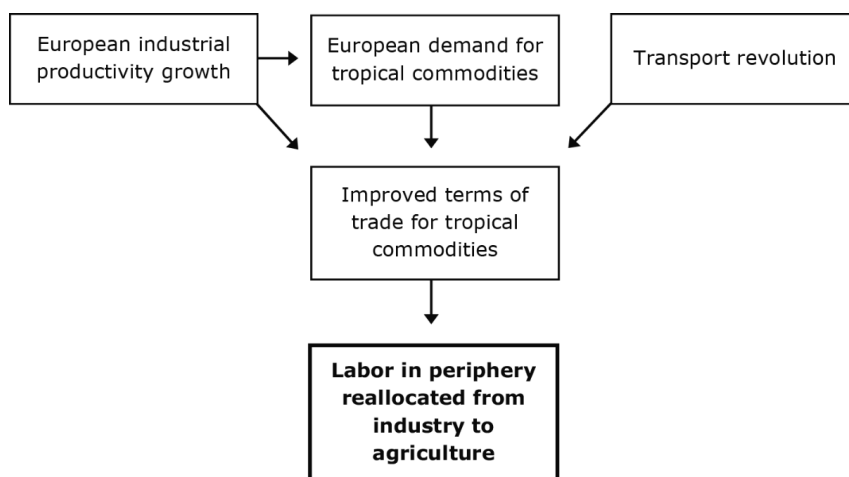
Other scholars have focused on the overwhelming influence of emerging nineteenth-century *global market forces* as the principal driver of deindustrialization in the “poor periphery.” Neoclassical market-centered conceptualizations of deindustrialization prove even more deterministic than dependency theory: global demand and market forces determined all, thus leaving little space for human agency, even among industrial countries. This perspective has been most recently championed by Williamson, who casts aside institutional power relations inherent in the traditional dependency school and instead engages primarily with neoclassical economic theory. Based on Ricardian trade theory, Williamson argues that rapid European industrial labor productivity growth, linked to relative factor prices, gave Europeans an unparalleled manufacturing advantage, while increasing global demand for industrial inputs generated strong terms of trade for primary products from Africa, Asia, and Latin America, particularly between 1820 and 1870. At the same time, a dramatic decline in transportation and transaction costs opened global markets on an unprecedented scale, boosting global market integration. In response, producers in lesser-developed regions – where industrial labor productivity was comparatively low and factor endowments favored primary production – consequently made the seemingly rational economic choice to reallocate labor from handicraft industries to the production and/or collection of raw materials to export to the industrializing core in exchange for manufactures that were becoming increasingly affordable. In places like East Africa, output of primary product sectors increased, while import-competing industrial sectors declined, as illustrated in Figure 1.2.<sup>22</sup> Similarly, in Sheriff’s view, foreign trade led to

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<sup>22</sup> Williamson, *Trade and poverty*. For declining transportation costs, see chapter 3 in O’Rourke and Williamson, *Globalization*. Labor reallocation arguments offer an alternative to Hla Myint’s much-criticized “vent-for-surplus” theory with respect to the rise of agricultural export production in the global periphery. Myint assumed that underdeveloped “subsistence economies” had previously failed to maximize production possibilities and

the development of a “lopsided character” of the East African economy as “backward” sectors, like elephant hunting (to procure ivory exports), mining, and slave-based commodity production, were extensively developed at the expense of a “stunted industrial sector.”<sup>23</sup> As East Africa’s integration into the global trading system expanded, textile industries “showed signs of decline.”<sup>24</sup> This development pattern intensified as global commodity prices, particularly for ivory, climbed during the nineteenth century.

**Figure 1.2 Market-centered deindustrialization model**



### *Contemporary origins of competition-centered suppositions in East Africa*

Globalization-centered deindustrialization arguments differ with respect to principal theoretical drivers (i.e., imbalanced power relations versus pure market forces), but they share a common thread: they take for granted the *capacity of imported cloth to displace domestic textiles*. In recent research on the Javanese textile industry, van Nederveen Meerkerk has illustrated the fallacy of the simplistic Ricardian assumption that traded goods were perfectly substitutable between countries or regions. “Because quality and taste mattered,” she points out, “the assumption of perfect competition makes little sense.”<sup>25</sup>

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argued that these societies first engaged in international trade by simply applying “semi-idle labour” to cash-crop production on underutilized land. Myint, ‘Classical theory’, pp. 318-327.

<sup>23</sup> Sheriff, *Slaves*, pp. 1-4, 13, 247.

<sup>24</sup> *Ibid.*, 13.

<sup>25</sup> van Nederveen Meerkerk, ‘Challenging’, p. 1222.

However, much of the historiography on East Africa also implicitly adheres to the substitutability assumption and suggests that mass-produced imported cloth was largely responsible for undermining locally produced East African cloth. These conclusions are derived in part from accounts of late-nineteenth-century Western travelers who attributed what they viewed as industrial malaise in East Africa to the presence of imported cloth. Edward Hore, for example, hyperbolically lamented, “The sudden flooding of some regions of Africa with cheap European goods has simply obliterated many valuable native industries.”<sup>26</sup> It is no surprise that a number of the historians of the region – influenced by broad statements like Hore’s – have come to take as a fact the deindustrializing impact of cloth imports. However, accounts like these often exhibit significant bias, overgeneralizations, and contextual misassumptions.

Pawelczak has recently suggested that “imported cloth, even that of mean quality, surpassed most of what local weavers could offer.”<sup>27</sup> However, many contemporaries, like Nyasaland (British-controlled Malawi) colonial commissioner Harry Johnston, were genuinely perplexed by the eventual replacement of domestic cloth with imported varieties, given what they deemed substantial differences in quality, particularly durability: “Curiously enough the native-manufactured cotton cloth is far superior to the European introduction [...] woven a hundred degrees higher in taste than the execrable Manchester criterion.”<sup>28</sup> However, from the perspective of observers from rapidly industrializing countries, the *model and scale* of East African cotton cultivation and cloth production was fundamentally uncompetitive. One missionary reflected that he had never seen a “real” cotton farm in the interior of East Africa, with cotton instead cultivated on a small scale in what he considered “the most primitive manner.”<sup>29</sup> Hore believed that domestic industries had great potential, but that the *success* of local producers, burdened by “native ignorance,” would “require [European] encouragement and assistance to utilise the resources of their country and become themselves elevated.”<sup>30</sup> Consequently, for many Western observers, the arrest and decline of domestic industries in the face of machine-manufactured imports seemed an inevitable outcome. This assumption led observers to make hasty conclusions. For example, upon traveling through the Nyasa-Tanganyika Plateau (southwestern Tanzania) in the early 1880s, German explorer Paul Reichard submitted, “The native weavers cannot compete with the cheap European

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<sup>26</sup> Hore, ‘Lake Tanganyika’, p. 595.

<sup>27</sup> Pawelczak, *The state*, p. 56.

<sup>28</sup> Johnston, *First three years*. For a similar contemporary appraisal of southwestern Tanzanian cloth products, see Fülleborn, *Das deutsche Njassa- und Ruwuma-Gebiet*, p. 512.

<sup>29</sup> Rodriguez, ‘Die Baumwollkultur in Deutsch-Ostafrika’, p. 223.

<sup>30</sup> Hore, ‘Lake Tanganyika’, p. 595.

substances.”<sup>31</sup> To the contrary, when Kerr-Cross visited the plateau nearly a decade later, he noted numerous weavers and looms in every village.<sup>32</sup>

Furthermore, many areas had not historically produced cotton cloth on a significant scale, but this critical detail was lost on some observers who took the absence of weaving to be a sign of general deindustrialization. Karl Weule, who spent six months among the Makonde in southern Tanzania in 1906, concluded that cotton weaving in Tanzania had become “obsolete through the cheapness of imported calico.”<sup>33</sup> Crucially, however, the Makonde traditionally specialized in bark and palm cloth production, with only a limited association with cotton.<sup>34</sup> Furthermore, a contemporary ethnographer noted that Weule had only witnessed a small part of a rite incorporating imported cloth into the closing ceremony, whereas participants spent the rest of the weeks-long rite clothed in domestic bark cloth.<sup>35</sup> In spite of flawed qualitative accounts, many scholars steadfastly maintain that imports indeed must have caused industrial decline in East Africa.

### **1.3 The case against competition as the driver of deindustrialization**

#### *Opposition to competition-centered deindustrialization arguments*

However, other scholars of Africa – particularly West Africa – remain unconvinced of the purportedly deindustrializing effects of mass-produced imported cloth. In terms of productivity, Thornton questions the superiority of European production methods, pointing out that “competition [was] not between advanced technology in Europe and underdeveloped technology in Africa. It [was] between hand-produced goods made by very skilled workers in Africa and goods produced by very rudimentary versions of technology in Europe.”<sup>36</sup> In fact, early industrial European machinery, he points out, often produced substandard cloth and regularly broke down, thus diminishing productivity. Importantly, while African manufacturing techniques may have been simple and their productivity comparatively low, the *quality* of hand-made artisanal cloth was generally higher than machine-made imports.<sup>37</sup> Furthermore, Africans were often engaged in manufacturing for only part of the year – during the dry season, when agricultural labor demands decreased – thus lowering the marginal cost of industrial labor. They could consequently deliver high-quality products at competitive

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<sup>31</sup> Reichard, *Deutsch-Ostafrika*, p. 234.

<sup>32</sup> Kerr Cross, 'Notes', p. 94.

<sup>33</sup> Weule, *Native life in East Africa*, p. 225.

<sup>34</sup> Merensky, *Deutsche Arbeit*, p. 149; Schurtz, 'Die geographische Verbreitung der Negertrachten', p. 149.

<sup>35</sup> See translator's note by Alice Werner in Weule, *Native life in East Africa*, p. 277.

<sup>36</sup> Thornton, 'Precolonial African industry', p. 14.

<sup>37</sup> *Ibid.*, 14-15. For Austin's proposed rationale for the prevalence of the productivity-curtailing narrow loom in much of West Africa, see Austin, 'Resources', pp. 602-603.

prices.<sup>38</sup> And, indeed, quality mattered at least as much as price. Richardson has pointed out that consumers in Africa were highly selective. Their particular preferences and demands varied over time and shaped the composition of foreign imports.<sup>39</sup> African consumers readily rejected imported cloth that did not meet their expectations. Prestholdt has shown that in East Africa the particularity of consumer demand was so strong that it directly influenced the output of foreign textile producers seeking to capture the region's market.<sup>40</sup>

Alongside *consumer preference*, the *size of the local market* for cloth could affect how domestic industry was impacted by imports. Thornton notes that the majority of cotton cloth imports were consumed in African regions that had long histories of cloth consumption and could accommodate increases in supply with evenly matched increases in local demand for a wide array of textiles.<sup>41</sup> Similarly, Fage has argued that the mere presence of imported cloth in African markets does not imply that local manufacturing ceased, for high-quality local cloth was often consumed *alongside* mass-produced imports. Thus, an increase in imports was indicative of more people consuming a wider variety of cloth rather than a simple displacement of domestic varieties by imports.<sup>42</sup> Indeed, Kriger has noted that increased West African involvement in cash-crop exporting – the purported bane of textile production in conventional deindustrialization theories – augmented regional purchasing power among increasingly wealthy traders and producers, thereby generating *enhanced demand* for high-quality cloth, both imported and domestic.<sup>43</sup>

Growing textile imports may have also helped stimulate overall African demand for cloth products, including domestic cloth. Kriger noted a dramatic upsurge in cloth production in West Africa during the nineteenth century – just as textile imports began to show a marked increase – with the textile industry becoming the second largest sector in the Sokoto Caliphate, exceeded only by agricultural production.<sup>44</sup> According to Clarence-Smith, East Africa also saw a spurt of productive growth in textile industries between the seventeenth and nineteenth centuries, even as foreign cloth increasingly entered the region.<sup>45</sup> In fact, East African cloth production methods reportedly benefitted from cloth imports, as weavers incorporated thread from unraveled foreign cloth to improve local weaving techniques and designs.<sup>46</sup> Prestholdt

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<sup>38</sup> Johnson, 'Technology', p. 267.

<sup>39</sup> Richardson, 'West African consumption patterns'.

<sup>40</sup> See chapter 3 in Prestholdt, *Domesticating the world*.

<sup>41</sup> Thornton, *Africa and Africans*, pp. 48-52.

<sup>42</sup> Fage, *A history of Africa*, pp. 272-273. See also Hopkins, *An economic history of West Africa*, p. 121.

<sup>43</sup> Kriger, *Cloth in West African history*, pp. 45-47.

<sup>44</sup> Kriger, 'Robes of the Sokoto Caliphate', p. 54.

<sup>45</sup> Clarence-Smith, 'The expansion', pp. 94-95.

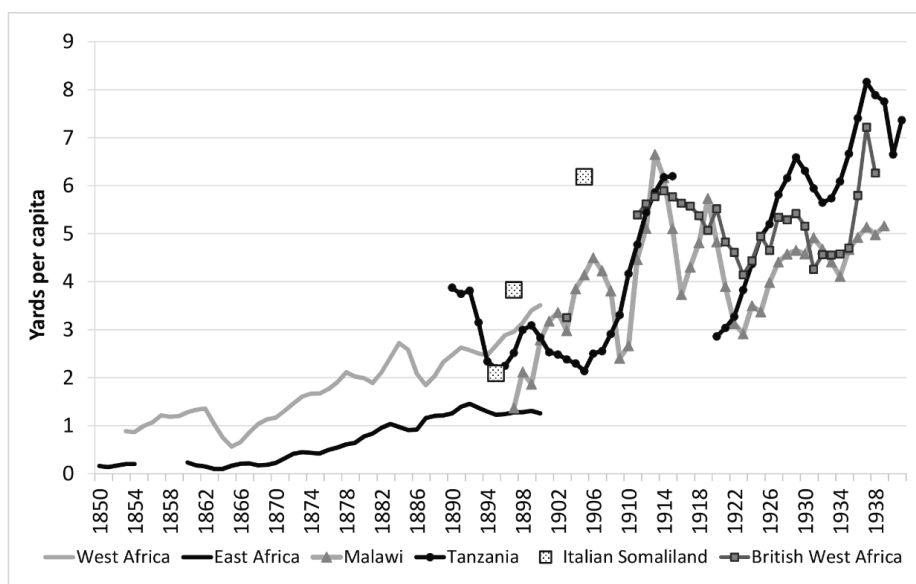
<sup>46</sup> *Ibid.*, 94.

notes that textile imports also encouraged related crafts, like tailoring, dyeing, stamping, and embroidering, as imports were regularly reworked to suit local demand.<sup>47</sup> Kriger has identified similar import-stimulated domestic cloth production innovations in West Africa.<sup>48</sup> Eltis and Jennings, on the other hand, have argued that pre-colonial foreign imports had no substantial impact, positive or negative, on African domestic industries.<sup>49</sup>

### *Relative import levels and the timing of industrial decline*

The debate surrounding the impact of imported cloth on domestic industry has proven difficult to resolve given that contemporary qualitative sources offer only circumstantial – and often shaky – evidence. However, I have compiled and analyzed previously underexploited import data that strongly suggest that we must look beyond competition with imported cloth to understand deindustrialization in East Africa. To begin with, nineteenth-century per-capita cloth import levels were, on average, significantly lower in East Africa relative to West Africa, where imports regularly exceeded East African levels by a factor of two (see Figure 1.3).

**Figure 1.3 Per-capita cloth imports into East and West Africa, 1850-1941**



Sources: See Appendix 1. Note: the data are reflected in three-year moving averages.

<sup>47</sup> Prestholdt, *Domesticating the world*, pp. 69-71.

<sup>48</sup> Kriger, 'Guinea cloth', p. 124.

<sup>49</sup> Eltis and Jennings, 'Trade between western Africa and the Atlantic world', p. 957.

In reality, the nineteenth-century regional disparity in import levels was much greater than reflected in Figure 1.3, for the nineteenth-century data for West Africa *only represent imports from the United Kingdom*, while the nineteenth-century East African data also include imports from India and the United States. Furthermore, cloth imports into coastal regions of West Africa were substantially higher than the regional average. Imports into the Gold Coast, for example, where *kente* cloth has long been produced, numbered roughly ten yards per capita through the 1880s. In spite of a longer experience with higher import levels, West African textile centers thrived long after cloth production disappeared in much of East Africa, persisting in many cases into the post-colonial period.<sup>50</sup>

Looking exclusively at East African cases, it becomes evident that cloth imports do not adequately explain deindustrialization. Cloth production in southern Malawi's Lower Shire Valley declined during the 1860s and 1870s, several decades *before* per-capita cloth imports into the region would show a substantial uptick. Now, let's consider nearby Tanzania. Although disaggregated data only become available for the 1890s, it is clear that Tanzania's imports per capita were *far above* the late-nineteenth-century East African average (4 yards per capita in 1890 versus the regional average of 1.5), suggesting that the majority of the cloth imported into East Africa entered Tanzania. This is unsurprising given that Tanzania was the center of East Africa's growing global-oriented trading activity during the second half of the nineteenth century. However, cloth industries in Tanzania showed *significant variation* during the nineteenth century. In Unyamwezi (west-central Tanzania), cloth production dwindled during the second half of the nineteenth century. However, in the cloth center of Ufipa in the Rukwa region (southwestern Tanzania), cloth production would only begin to wane in the first decade of the twentieth century. Both regions were firmly integrated into the nineteenth-century long-distance caravan system, which provided access to imported cloth, yet the timing of deindustrialization differed substantially.

If we consider Italian Somaliland (eastern modern-day Somalia) in northern East Africa, a rise in cloth imports again does not correspond with deindustrialization. Around the time that Tanzania's Ufipa finally began to show signs of industrial decline, cloth imports into Italian Somaliland shot up rapidly, quickly *surpassing* Tanzanian import levels. This, however, did not lead to industrial decline in the famed Mogadishu textile center on Somaliland's Benadir Coast. The industry took the enhanced market competition in stride, adapted to changing consumer demands, and continued to thrive into the mid-twentieth century.<sup>51</sup>

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<sup>50</sup> See, for example, Aronson, 'Patronage and Akwete weaving'.

<sup>51</sup> See chapter 5 in Alpers, *East Africa and the Indian Ocean*.

### *Alternative conceptualizations: bringing in the local*

Rather than focusing principally on the impact of *external forces*, like imports, in influencing production outcomes in the global periphery, we must look closely at *local conditions* – which interacted with and mediated external forces – to understand the array of factors that swayed local labor allocation decisions. For example, Johnson has argued that it was not direct competition from imports that stymied cloth production in parts of Africa; rather, “alternative employment opportunities” often drew the local labor force away from industry.<sup>52</sup> Of course, these alternative opportunities may have been linked with widely felt global market forces, as suggested by Williamson. However, if external change was the *driving force* behind local labor allocation choices, we would expect a relatively homogenous response throughout the tropical periphery as global demand for tropical commodities increased. To the contrary, labor in Africa – and elsewhere in the global periphery – was not uniformly diverted from domestic industries to export-oriented activity, nor did deindustrializing labor reallocation take place at the same historical moment where this did ultimately occur in various East African locales.

Denemark and Thomas have acknowledged that local conditions influence economic development trajectories, following a tack taken by Brenner in the 1970s, but they maintain the primacy of global forces in affecting local-level circumstances.<sup>53</sup> Recent scholarship, on the other hand, has focused attention on the central role of local forces in guiding unique local industrial responses to external stimuli. Studies on nineteenth- and early twentieth-century textile industries in India and Southeast Asia, for example, have pointed up location-specific variation in confrontations with global market forces. Here, industrial resilience was often facilitated through adaptive strategies based on local labor allocation systems and region-specific demand patterns. These studies underscore the importance of local agency and contest the excessive weight that deterministic deindustrialization theories have placed on the role of outside forces – be they imperial powers or global market forces – in affecting production outcomes.<sup>54</sup> Furthermore, recent work on labor-intensive industrialization in the global periphery has highlighted variable dynamic pathways to industrial development, which differ markedly based on relative local supplies of labor and capital. This innovative research simultaneously undermines long-held Eurocentric conceptualizations of successful modernization strategies and brings to the fore local conditions as critical determinants of economic strategies.<sup>55</sup> Figure 1.4 brings together the wide array of possible production-influencing factors – derived from the theoretical literature – that are explored in this thesis.

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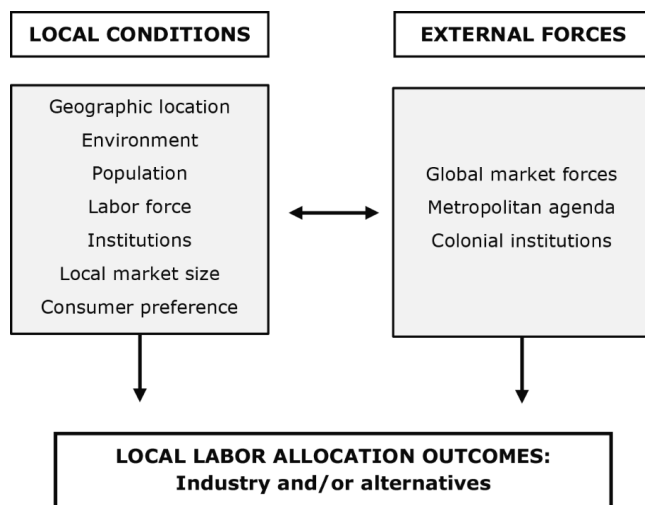
<sup>52</sup> Johnson, 'Technology', p. 267.

<sup>53</sup> Denemark and Thomas, 'The Brenner-Wallerstein debate'; Brenner, 'Origins'.

<sup>54</sup> See van Nederveen Meerkerk, 'Challenging'; van der Eng, 'Why didn't colonial Indonesia'; Haynes, *Small town capitalism*; Roy, 'Labor-intensity and industrialization in colonial India'.

<sup>55</sup> Austin and Sugihara, eds., *Labour-intensive industrialization in global history*.

**Figure 1.4 Location-centered model for production outcomes**



With respect to sub-Saharan Africa, scholars have long suggested that production choices in various locales can only be understood by considering local factor endowments – particularly the ratio of arable land to labor, affected by local geography and environmental conditions – which influence location-specific production possibilities. This perspective closely relates to the Heckscher-Ohlin theorem of international trade, which revises the classical Ricardian theory of comparative advantage and posits that production and trade choices (i.e., resource allocation) are based not only on relative labor efficiency but on the relative local supply (and thus prices) of factors of production (land, labor, and capital). According to the theorem, a country or region will tend to produce and export goods – industrial, agricultural, or otherwise – that require the intensive use of the factor that is most abundant in that particular locale.<sup>56</sup> Over four decades ago, Hopkins suggested a factor-endowment-centered approach to studies of African development, while Tosh pointed out that to understand production choices in Africa, researchers must embrace an “agricultural point of view” and consider those local factors of land and labor “which loomed so large in the peasant’s own calculations” and affected the range of production possibilities.<sup>57</sup>

<sup>56</sup> Krugman, Obstfeld, and Melitz, *Economics*, p. 80. Local factor prices, namely post-Black Death labor costs, figure heavily in Allen’s recent work on the underlying causes of nineteenth-century British primacy in industrial mechanization. Allen, *The British industrial revolution*.

<sup>57</sup> Hopkins, *An economic history of West Africa*; Tosh, ‘Cash-crop revolution’, pp. 82-84 (first quote); Tosh, ‘Lango agriculture’, p. 417 (second quote).

Local *environmental factors* have since received attention but with a caveat against environmental determinism since the impact of the local environment on economic development is influenced by a wide array of factors.<sup>58</sup> Austin suggests that economic historians should “reconsider the significance of resource endowments in African history; not in any mono-causal spirit, but as a fundamental part of any satisfactory explanation of economic structures and changes.”<sup>59</sup> He also points out that in the context of Africa – where the mechanized transportation revolution was slow to penetrate the interior – *geographic location* affected production choices, particularly before the twentieth century, as regions distant from coastal ports remained largely removed from the nineteenth-century global export boom highlighted by Williamson.<sup>60</sup>

The importance of the local *labor force* – in terms of quantity (population size), quality (skills), and composition (gender and age) – in economic development has been emphasized in recent studies on the global periphery.<sup>61</sup> With respect to Africa, Austin has called for a revision of long-held conceptualizations of the region’s factor endowments, pointing out that labor – branded as perpetually scarce – was actually abundant during the agricultural “slack” season, significantly diminishing the cost of industrial labor for much of the year. Austin has, in turn, linked season-specific labor supplies to persistently low industrial labor productivity in the region, arguing that the relative cheapness of labor during the non-agricultural dry season dampened initiative to adopt labor-saving technologies. At the same time, the scarcity of labor during the agricultural season impeded expansion of raw cotton cultivation – thus diminishing potential textile output – since labor was necessarily devoted largely to cultivation of vital food crops during the fairly short wet season.<sup>62</sup> Beyond relative supply, the composition of the local industrial labor force also affected industrial output. In West Africa, weaving was performed by both men and women, resulting in a larger potential industrial labor pool; in central and southern East Africa, by contrast, men dominated textile production, making any significant depletion of local male labor catastrophic for the industry.<sup>63</sup>

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<sup>58</sup> Widgren, 'Towards a historical geography', pp. 1-4; Beinart, 'African history and environmental history'; Vansina, *Paths*; Mandala, *Work*. For the influence of environment on long-term economic development in the Americas, see Sokoloff and Engerman, 'History lessons'.

<sup>59</sup> Austin, 'Resources', p. 588.

<sup>60</sup> Austin, 'Labour-intensity and manufacturing', p. 209. Ralph Austen has argued that interior African textile centers continued to thrive strictly because they were geographically protected from largescale imports. Thornton points out, however, that Austen’s conclusion ignores that many surviving West African textile centers lie along the coast. Austen, *African economic history*, p. 99; Thornton, 'Precolonial African industry', p. 17.

<sup>61</sup> See Austin and Sugihara, eds., *Labour-intensive industrialization in global history*.

<sup>62</sup> Austin, 'Resources', pp. 597-598, 602-604.

<sup>63</sup> In East Africa, men were typically responsible for weaving, although women participated in picking and cleaning cotton and, to a lesser extent, spinning cotton into yarn. In West Africa, weaving was not uniformly dominated by one gender, although men and women used different looms. For East Africa, see Davison and Harries, 'Cotton weaving', p. 182; Mandala, *Work*, p. 41; Burton, 'Lake', p. 382; Boileau and Wallace, 'The Nyasa-

Issues of land and labor have remained ever-present among scholars of Africa, particularly with respect to their interaction with local *institutions*. While Williamson's theoretical connection between global trade and deindustrialization in the periphery does engage local factor prices and geography as underlying explanations for differing development trajectories, he strongly devalues the mediating power of institutions and local agency, arguing that production outcomes were "not a choice at all."<sup>64</sup> In the case of West Africa, however, Kriger and Lovejoy have noted that institutionalized slavery within the Sokoto Caliphate effectively harnessed the region's labor to the benefit of the domestic textile industry, providing "an important source of manpower for producing and processing raw materials for spinning and weaving" and for the simultaneous production of food and cash crops.<sup>65</sup> Thus, local labor institutions could interact with local endowments and alter factor prices and production possibilities, mitigating possible deindustrialization in the face of external forces. However, Hopkins points out that internal slave labor institutions could simultaneously constrain economic expansion by depressing the purchasing power of much of the population, thus diminishing the *local market size*.<sup>66</sup> At the same time, local *cultural institutions*, including religion and sumptuary norms, could influence market size and *consumption preferences* that impacted local industry.

Local factor endowments and domestic labor institutions could also be affected by external processes. For example, Inikori and Mahadi have highlighted low West African population densities and general insecurity, in part consequences of institutionalized global slave exporting, as constraints not only on labor capacity but also on the development of production-stimulating regional exchange networks.<sup>67</sup> And the eventual decline of the trans-Atlantic slave trade, which Hopkins points out was influenced by European abolitionist movements, resulted in the increased application of West African captives to domestic production, including plantation cultivation of cotton and indigo.<sup>68</sup>

The incorporation of local factors provides scope to evaluate another external force that looms large in African economic history: the purportedly central role of *metropolitan agendas* and *colonial institutions* in determining production choices within colonized African regions.

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Tanganyika Plateau', p. 613. For West Africa, see Johnson, 'Technology', p. 260; Kriger, 'Textile production and gender'.

<sup>64</sup> Williamson, *Trade and poverty*, p. 190. Other scholars argue that institutions are central to economic development outcomes. See North, *Institutions*; Acemoglu, Johnson, and Robinson, 'Colonial origins'.

<sup>65</sup> Kriger, 'Robes of the Sokoto Caliphate', p. 54 (quote); Lovejoy, 'Plantations'. During the palm-oil export boom in southern Nigeria, household slave labor freed up female labor for cloth production. Kriger, *Cloth in West African history*, p. 51; Austin, 'Cash crops and freedom', p. 18.

<sup>66</sup> Hopkins, *An economic history of West Africa*, p. 25. See also Mahadi and Inikori, 'Population and capitalist development', p. 71.

<sup>67</sup> Mahadi and Inikori, 'Population and capitalist development', pp. 71-72.

<sup>68</sup> Hopkins, *An economic history of West Africa*, p. 124; Lovejoy, 'Plantations', p. 342; Flint, 'Economic change', p. 386.

Europeans undoubtedly had economic visions in mind when they surveyed the African continent during the nineteenth century. Indeed, one of the major objectives of Livingstone's famous mid-century travels through Africa was to encourage local people to "cultivat[e] their lands, with a view to the production of raw material to be exported to England in return for British manufactures."<sup>69</sup> But the degree to which colonial players and policy directly influenced production outcomes remains open to debate. According to Austin, it was "a combination of European and African agency that strengthened and exploited the region's comparative advantage in land-extensive primary production," as African producers chose to allocate their labor where the most profit could be accrued – based on local conditions and global trading opportunities – sometimes in direct opposition to metropolitan visions.<sup>70</sup> And in the case of French West Africa, Roberts has pointed out that, in spite of French colonial efforts, the region's cotton output could not be effectively diverted from domestic looms to French textile factories. "This outcome," he reflects, "provides important insights into the history of *local processes withstanding pressures of the world economy* [my italics]."<sup>71</sup>

#### 1.4 Analytical approach

Taking a comparative approach, this thesis investigates how various combinations of local conditions and external forces interacted over time to generate diverse industrial outcomes in different locales. I employ both quantitative and qualitative methods, incorporating an array of sources, including trade statistics, commercial reports, private business records, and traveler accounts, to track and analyze long-term developments in global trade and consumption patterns across East Africa and conduct in-depth studies on deindustrialization in the region with a comparative eye toward more robust industries in West Africa and northern East Africa. Intra- and inter-regional comparison highlights the importance of location-specific factors – particularly since the endowment makeup and local institutional structures of central and southern East Africa differed significantly from the more resilient textile centers in West Africa and northern East Africa – and underscores the nonexistence of a broad sub-Saharan African story of deindustrialization in the face of global forces. To date, most studies on sub-Saharan African textile industries exclusively zoom in on single cases or regions.<sup>72</sup> While these studies are illuminating in their own right, only through intra- and inter-regional comparison can we identify the salient external and local forces that influenced industrial outcomes across the continent.

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<sup>69</sup> Livingstone and Livingstone, *Narrative*, p. 9.

<sup>70</sup> Austin, 'Labour-intensity and manufacturing', p. 208.

<sup>71</sup> Roberts, *Two worlds*, p. 9.

<sup>72</sup> For East Africa, see, for example, Davison and Harries, 'Cotton weaving'; Clarence-Smith, 'The textile industry'. For West Africa, see Johnson, 'Technology'; Kriger, *Cloth in West African history*.

### *Geographic and temporal demarcation*

Spatially, East Africa includes the eastern portion of the continent ranging from Mozambique in the south to modern-day Somalia in the north. While each case has a unique periodization based on its specific experience with deindustrialization, the whole of this study spans from roughly 1830 to 1940. This thesis thus includes an important *temporal comparative dimension*. The roughly century-long period under analysis saw profound changes in East Africa as the region's global engagement quickly intensified and regions once largely isolated from global trade became increasingly integrated, providing an ideal case to examine the influence of global and local forces on industrial outcomes. Important developments included a significant uptick in East Africa's export-oriented trade, facilitated during the nineteenth century in large part by the Tanzania-adjacent island of Zanzibar; stimulation of the East African slave trade, partly to sustain the development of the region's coastal/island slave plantations as global demand for tropical products increased; a considerable increase in East African ivory hunting and exporting, which saw cloth-bearing trade caravans increasingly traverse the interior of East Africa in search of ivory sources; and the carving up of East Africa among European colonial powers by the end of the nineteenth century.

To study the process of deindustrialization in East Africa, I have selected three important cotton cloth production centers in the interior of the region, where notable pockets of cotton weaving developed alongside regions that principally consumed alternative fibrous textiles (e.g., bark cloth) and animal skins. In each of the East African cases investigated, deindustrialization would eventually occur, but at different historical moments and as a result of temporally and spatially unique interactions between global and local forces. Thus, the cases do not reveal some broad developmental trend in the region; rather, they illustrate how global processes were met with *diverse reactions* that were influenced by local-level conditions, although some of these conditions, especially labor scarcity, were present in all three cases.

The first study focuses on the deindustrialization of the Lower Shire Valley in southern Malawi, where cloth production declined *before* cloth imports into the region began to rise precipitously. This case study tests Williamson's terms of trade proposition, for the decline of the valley's cloth industry was closely followed by a rise in export-oriented sesame oilseed production and, later, raw cotton cultivation. My analysis of the Lower Shire Valley's industrial decline begins in the early 1860s, when the region's population was drastically reduced by slave raiding, causing cotton cultivation, cloth production, and traditional cloth exporting to the Lower Zambezi region (central Mozambique) to rapidly halt. The case study concludes in the 1930s, when cotton cultivation had returned to the valley but only as an export-oriented cash crop rather than an industrial input.

Two other industrial cases come from Tanzania, which was more intensively engaged with the nineteenth-century global trading system compared with Malawi. In west-central Tanzania's Unyamwezi region, cloth production declined during the second half of the nineteenth century as Wanyamwezi men were increasingly drawn into long-distance caravan activity, working as caravan organizers, professional porters, and ivory hunters. By the early 1890s, cloth production had virtually disappeared in Unyamwezi, although production continued longer among the region's close northern neighbors in Usukuma. At first glance, Unyamwezi's deindustrialization would appear to be fundamentally linked to its close connections with the global trade system, which introduced imported cloth into the area. However, the story becomes less clear cut when we consider Unyamwezi alongside the third case study. Nearby Ufipa, in southwestern Tanzania, was also well integrated into the caravan system, serving as an important mid-way stop for long-distance trading expeditions. Consequently, the region also enjoyed modest access to imported cloth from the mid-nineteenth century onward. Here, however, the cloth industry did *not* decline during the second half of the nineteenth century and was even *invigorated* by the region's mounting participation in long-distance exchange networks. Ufipa's industry would only begin to wane in the first decade of the twentieth century, in conjunction with migration-stimulating colonial policies. However, production would continue on a diminished scale until the inter-war period.

The substantially different degrees of industrial resilience in (much of) East Africa relative to West Africa and northern East Africa, along with the striking theoretical double-standard on the relative impact of imports exhibited in much of the historiography of these regions, raises stirring questions about the ultimate and proximate causes of deindustrialization in Africa. Consequently, the East African case is considered in relation to existing studies on more robust industrial regions of the continent, which helps provide a broader perspective on the variety of mechanisms affecting industrial production in Africa. I engage case studies on Ethiopia and Somalia in northern East Africa, along with much of West Africa, although emphasis is placed on geographically diverse and comparatively densely populated Nigeria, which housed a number of cloth centers in the forest, savanna, and Sahel zones ranging from south to north. Map 1.1 identifies the principal locations examined in this thesis.

**Map 1.1**      **Modern-day sub-Saharan Africa**



Dark grey: locations of in-depth East African studies

Light grey: main locations discussed in comparative analysis

## *Data and sources*

This study engages a wide array of contemporary qualitative accounts and freshly exploited quantitative data to add new perspectives to an old debate. To date, no comprehensive dataset of cotton cloth imports into East Africa has been constructed. To fill this quantitative gap and help address the influence of imported cloth, I have quantified cloth imports into East Africa during the pre-colonial and colonial periods, ranging from the mid-nineteenth to the mid-twentieth century. These data temporally locate changes in the *quantitative scale* of per-capita cloth imports into East Africa, which is crucial for understanding the role of imports in processes of deindustrialization in the region. The data also offer a valuable disaggregated view of the *qualitative composition* of imported cloth – including relative durability, aesthetic details, and origin – which is of vital importance given that different types of textiles were met with variable levels of consumer demand and filled very different use-value niches over time and across space. Prices of cloth imports (at coastal points of entry) have also been collected to gain a sense of the economic *accessibility* of cloth imports – relative to domestic cloth – for average East African consumers. In order to reflect the price of imported cloth in interior regions, coastal prices have been carefully inflated based on contemporary qualitative and quantitative sources that give insight into regional transportation and transaction costs.

The construction of this dataset involved a variety of sources collected from several archives. The pre-colonial data include imports from the three largest exporters of cotton cloth to the interior of East Africa – India, the United States, and the United Kingdom<sup>73</sup> – along with corresponding East African primary product exports. Official annual trade records were consulted to obtain the Indian and British share of nineteenth-century trade. These included various issues of the *Report on the commerce of Bombay*, *Annual statement of the trade and navigation of the Presidency of Bombay*, and *Annual statement of the trade of the United Kingdom with foreign countries and British possessions* held at the British Library in London. Similar nineteenth-century American reports do not provide details on trade with East Africa. However, the Peabody Essex Museum’s Phillips Library (Salem, Massachusetts) houses rich shipping records that report outbound cargoes to East Africa – including quantities, values, and varieties of goods shipped – along with sales records at Zanzibar and subsequent purchases of East African products. These were combined with data derived from nineteenth-century arrival and departure records of US ships at Zanzibar documented by American consuls, available at the United States National Archives and Records Administration (College Park, Maryland), to

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<sup>73</sup> Most of the cloth entering the interior during the nineteenth century was derived from India, the United States, and the United Kingdom. The pre-colonial data does not include comparatively smaller amounts of fancy cloth imported from Muscat and consumed principally by elites or the colorful kanga material exported by Germany beginning in the late nineteenth century, which was consumed primarily by coastal groups. Cloth of all origins are accounted for in the colonial-era datasets.

quantify nineteenth-century American trade with East Africa.<sup>74</sup> The colonial-era portion of the cloth import database (c. 1890s to 1940s) includes imports from all origins. British colonial data for both East and West Africa have been derived from governmental trade reports (*Blue books* and *Statistical abstracts for the several British oversea dominions and protectorates*) housed at the National Archives in Kew Gardens, while German colonial data has been borrowed from Rainier Tetzlaff's study on the social and economic history of German East Africa.<sup>75</sup>

Numerous informative qualitative sources were consulted, including official reports, business records, and traveler accounts. British consular officials stationed in Zanzibar, East Africa's major nineteenth-century trade center, detailed the region's trade activity and local consumer demand patterns in diplomatic and consular reports sent annually to the foreign office (available at the British Library). Similarly, American consular officials residing on Zanzibar sent details about East Africa's commerce to Washington, D.C., which were published annually in *Commercial relations of the United States with foreign countries* (available via Hathi Trust), while American sales agents documented much of the region's trade dynamics in detailed business correspondences housed at the Phillips Library.

From the mid-nineteenth century onward, countless European travelers and (later) colonial officials traversed East Africa, providing accounts of their explorations and impressions of the societies they observed. Notable accounts, among many others, come from David Livingstone, the famed Scottish missionary who explored much of southern and central East Africa, including Malawi and Tanzania, between the 1840s and 1870s; Richard Burton, an English explorer who provided his impressions of life and commerce in Zanzibar and interior Tanzania during the mid-nineteenth century; Henry Morton Stanley, a Welsh-American journalist who traveled through Tanzania in the 1870s; Harry Johnston, the first British colonial commissioner for the British Central Africa Protectorate, later called Nyasaland (Malawi); Adolphe Lechaptois, a French missionary stationed in Karema (western Tanzania) from 1891 to 1917; and Paul Fromm, a German army officer who detailed social and economic life in early twentieth century Ufipa.<sup>76</sup>

These accounts must be taken with a grain of salt given the biased lens through which many nineteenth- and twentieth-century Western travelers viewed the African continent. However, read cautiously with and against the grain – that is, with careful consideration of author bias

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<sup>74</sup> Pawelczak notes that statistics on Zanzibar's commerce reported by the American consuls during the 1880s sometimes represented guesstimates. Pawelczak, *The state*, p. 25. While imperfect, these annual data provide insight into the scale and composition of American trade with Zanzibar.

<sup>75</sup> Tetzlaff, *Koloniale Entwicklung*.

<sup>76</sup> See, for example, Livingstone and Livingstone, *Narrative*; Burton, 'Lake'; Stanley, *How I found Livingstone*; Johnston, *First three years*; Lechaptois, *Aux rives du Tanganika*; Fromm, 'Ufipa'.

and agenda – they provide a view of social and economic life throughout the region and offer insights into the scale and composition of imports into various interior East African locales, along with local production, demand, and consumption patterns, just as the region opened increasingly to external forces. In an effort to mitigate source bias and capture a broad view, each area-specific study engages a wide variety of accounts provided by observers of numerous nationalities – German, American, British, French, etc. – with diverse personal backgrounds and agendas, including, for example, missionaries, abolitionists, military personnel, colonial administrators, explorers, ethnographers, and merchants. Qualitative accounts derived from different periods and locations are carefully considered with respect to their unique perspectives given that global integration accelerated at different moments in time and proceeded differently in each locale across sub-Saharan Africa.

## 1.5 Thesis organization

Each chapter employs quantitative and qualitative methods to examine local-level change and contest the catch-all nature of prevalent global-centric deindustrialization theories. The studies reveal that global forces did influence industrial production choices in East Africa, but also illustrate how the relative timing and extent of external influence – and the ultimate consequences for local production choices – depended highly on interaction with local factors.

My analysis begins with Malawi’s Lower Shire Valley, where the Mang’anja cloth industry declined – and cash-crop production began – in the second half of the nineteenth century. In Chapter 2, I argue that economic change in the valley was principally stimulated by local factor-endowment shifts precipitated by both global and local forces. In the 1860s, the region’s population declined rapidly due to slave raiding and famine. At nearly the same time, supplies of fertile riverside land began to increase due to environmental change.<sup>77</sup> Within this altered context, Mang’anja villagers responded by abandoning labor-intensive cloth production in favor of cash-crop cultivation.

Chapters 3, 4, and 5 turn attention to Tanzania, the center of East Africa’s global trade activity through the nineteenth century. I begin by considering the regional distribution of cloth imports, arguing in Chapters 3 and 4 that the majority of nineteenth-century cloth imports was consumed in coastal and coastal hinterland areas, as well as in relatively near-coast interior regions, like Ugogo, which did not have traditions of cotton cloth production.<sup>78</sup> Chapter 3

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<sup>77</sup> Mandala has highlighted ecological change – particularly river-level fluctuations – as a major factor influencing agricultural production choices in the region. Mandala, *Work*, pp. esp. 7-8, 94-95, 270-272.

<sup>78</sup> Pawelczak identifies a narrow and broader coastal hinterland. In the context of this dissertation, the general “coastal hinterland” includes both and extends up to 200-300 km inland. Additionally, the “near-coast interior” refers to the inland areas lying roughly 300-400 km from the coastline, while the “deep interior,” from which most ivory was derived, refers to everything beyond this point. For Pawelczak’s demarcation of the narrow and broader coastal hinterlands, see Pawelczak, *The state*, pp. 18-19.

details how rising exports of goods produced on and near the coast (e.g., cloves, gum copal, and rubber) stimulated a rise in consumption of imported cloth in these areas from the 1870s. Chapter 4 then argues that far less imported cloth entered the deep interior, where it was exchanged for ivory taken coastward via caravans for global export. While imported cloth was relatively “cheap” near the coast, prices increased dramatically as imported cloth moved into the deep interior, where it was consequently used as a valuable currency. The impact of cloth imports on interior textile industries was thus much more limited than the competition-based deindustrialization historiography has suggested. I argue that industrial decline among the Wanyamwezi people, for example, was principally a result of an increasingly larger-scale withdrawal of male labor from the region for caravan portage work rather than a consequence of the availability of imported cloth.

Chapter 5 closely examines industrial decline in Ufipa, situated in southwestern Tanzania’s Rukwa region, which was also integrated into the nineteenth-century caravan trade system. However, the specific nature of the region’s participation, as a mid-way stop for caravan traders seeking ivory stocks and rations, allowed the Wafipa to engage in global trade activity and consume imported goods without draining the region of male labor. Here, cloth production flourished – and was even stimulated – in conjunction with nineteenth-century global trade integration. The industry would only wane during the first decade of the twentieth century, when the imposition of German colonial taxation policies ultimately forced the region’s men to seek labor on distant coastal plantations, draining Ufipa of industrial labor.

Chapter 6 places these case studies of southern and central East Africa within a broader sub-Saharan African comparative framework and reflects on their implications for existing theories on the drivers of economic development and industrial outcomes. The comparative approach reveals that there is no continent-wide story of (de)industrialization in sub-Saharan Africa, although certain regional similarities come to light. The most resilient industries, generally located in West Africa and northern East Africa, developed relatively early and in areas with fairly dense populations, comparatively large markets, and pre-colonial institutions that favored industrial growth. Industries tended to continue to flourish during the nineteenth and twentieth centuries where local endowments and geography allowed income-enhancing cash-crop cultivation – which stimulated demand for both domestic and imported cloth – and in regions, like much of West Africa, where colonial intervention was comparatively less disruptive. Finally, Chapter 7 concludes by reflecting on how local and external forces interacted in sub-Saharan Africa to influence nineteenth- and twentieth-century industrial outcomes and then considers potential implications for contemporary development.

## CHAPTER 2

### GLOBAL AND LOCAL FORCES IN DEINDUSTRIALIZATION: THE CASE OF COTTON CLOTH IN SOUTHERN MALAWI'S LOWER SHIRE VALLEY<sup>1</sup>

#### 2.1 Introduction

In the late 1850s, David Livingstone entered the Lower Shire Valley in the south of what is today Malawi (colonial-era Nyasaland) and marveled at the prodigious manufacture of *machila* cloth made from local cotton (see Map 2.1).<sup>2</sup> From at least the sixteenth century, the durable unbleached cloth was the valley's primary regional export commodity, used to obtain iron agricultural implements from the nearby Shire Highlands and to trade with the more distant Lower Zambezi region, where hand-woven cloth was the "single most important trade item."<sup>3</sup> During the 1860s, production and export of Mang'anja cloth rapidly halted and subsequently failed to regain footing, while similar labor-intensive cloth industries successfully continued in other parts of Africa and beyond well into the twentieth century.<sup>4</sup> Indeed, cloth production persisted in parts of neighboring Tanzania up to the early twentieth century and continued to thrive in much of northern East Africa and West Africa well into the post-colonial period and, in many cases, to the present day.<sup>5</sup> The deindustrialization theories discussed in Chapter 1 maintain that it was primarily global market forces, particularly increasing demand for primary products and a rise in cloth imports, that precipitated industrial decline in places like the Lower Shire Valley.<sup>6</sup> Why, then, did the valley's handicraft cloth industry deteriorate while others persisted?

I argue that the disappearance of production in the Lower Shire Valley was prompted by local factors that were influenced in part by global forces. This occurred over two broad contiguous periods but was only cemented during the second. Production was initially disrupted in the

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<sup>1</sup> A version of this chapter has been published as Katharine Frederick, 'Global and local forces in deindustrialization: the case of cotton cloth in East Africa's Lower Shire Valley', *Journal of Eastern African Studies*, 11, 2 (2017), pp. 266-289.

<sup>2</sup> Also known as *machira*.

<sup>3</sup> For production, see Livingstone and Livingstone, *Narrative*, pp. 114, 123-124; Foskett, ed., *Zambesi*, vol. 1, pp. 240-241. For trade of *machila* cloth in the Shire and Lower Zambezi regions, see Alpers, *Ivory*, pp. 25, 55; Mandala, *Work*, pp. 48-49; Machado, 'Gujarati Indian merchant networks', pp. 109-110; Davison and Harries, 'Cotton weaving', p. 187.

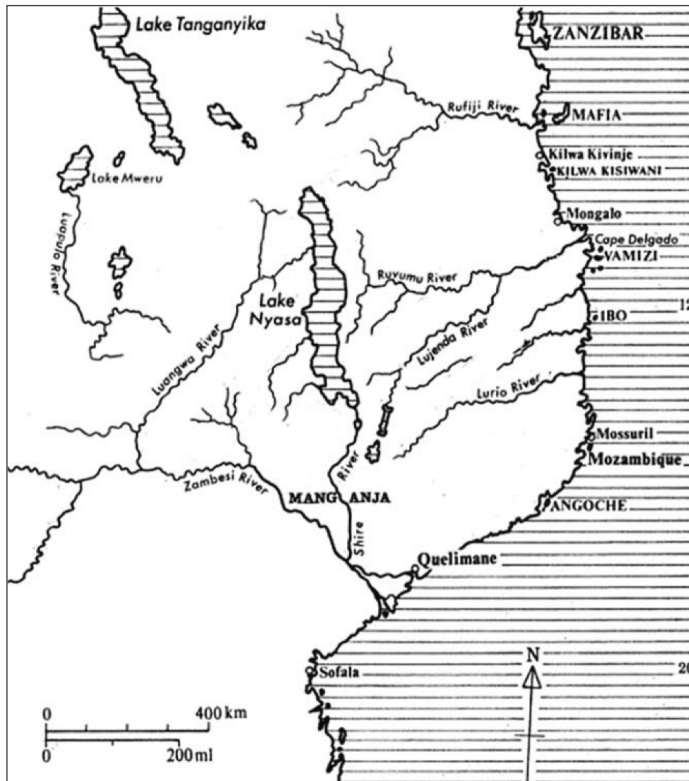
<sup>4</sup> For cases in India and southeast Asia, see footnote 54 in Chapter 1.

<sup>5</sup> For late-nineteenth- and early-twentieth-century cloth production in Tanzania and northern East Africa, see Chapters 4, 5, and 6. See also Clarence-Smith, 'The textile industry'; Alpers, *East Africa and the Indian Ocean*, pp. 79-97. For West Africa, see Chapter 6 and Johnson, 'Technology'; Aronson, 'Patronage and Akwete weaving'.

<sup>6</sup> In the case of the Lower Shire Valley, Mandala points to the deindustrializing impact of international trade. Mandala, *Work*, pp. 43-44, 293n137.

1860s when regional slave raiding, driven by global demand for slave-produced commodities, temporarily threw the valley into chaos and halted cotton cultivation and cloth production. At the same time, local drought conditions led to an unprecedentedly severe famine. The resulting devastation of the Mang'anja population produced lasting effects on the local labor supply, which affected production choices in the decades that followed.

**Map 2.1 Southern East Africa**



*Source:* adapted from the original in Alpers, *Ivory*, p. 9.

The second phase of deindustrialization began in the mid-1870s when raiding subsided in the valley. Village life resumed, but organized cloth production did not. I argue that this sectoral shift was prompted not by global market forces or competition from foreign cloth imports but by an increase in productive land relative to diminished labor. In the mid-1870s, a long-term drop in Shire River dry-season levels exposed large tracts of exceptionally fertile riverbed in the valley. With a contracted population and no extant slave-labor institutions to shore up diminished local labor supplies, villagers responded to the new factor-endowment ratio by

abandoning community-based labor-intensive industry in favor of higher-productivity, household-based cash-crop farming. The labor supply issue was solved, but the valley's economic activity narrowed, creating a dependence on agricultural exports. The situation was markedly different in regions with larger populations and slave-labor institutions, particularly in northern East Africa and West Africa, where cloth production and cash-crop cultivation flourished simultaneously and enjoyed sectoral linkages.

This chapter examines the mechanisms behind the Lower Shire Valley's shift from industry to cash crops. The general claim I make is that a synthesis of global and local forces and a careful unpacking of their respective and interrelated influences is crucial for understanding deindustrialization processes. More specifically, this case study suggests that cloth production was more likely to continue in African regions with relatively large populations and coercive labor institutions, which provided ample labor and local markets for domestic cloth. Areas with more constricted labor sources, like the Lower Shire Valley, were more inclined to abandon cloth production in favor of less labor-intensive alternative production opportunities geared toward expansive global markets.

## 2.2 Global and local forces in deindustrialization

As discussed in Chapter 1, Williamson argues that nineteenth-century global demand prompted an "industrialization-driven great divergence" when "peripheral" regions reallocated labor from industry to primary production as European manufacturing productivity and demand for raw materials increased, creating strong terms of trade for primary products relative to imported manufactures.<sup>7</sup> Dependency theorists have reasoned that large-scale imports of manufactured goods undermined existing local industries through increasing market competition and diversion of labor to non-productive activities, like ivory and slave hunting, to procure sought-after imports. Other theorists seeking external influences have pointed to the role of colonial forces in driving African production choices.<sup>8</sup>

In his work on the Lower Shire Valley, on the other hand, Mandala has brought attention to local factors, highlighting the role of environmental forces in influencing local production choices.<sup>9</sup> However, with respect to textile production, he focuses principally on "the impact of merchant capital on the cloth industry," which, in his view, "was so devastating that some oral historians today deny that the Mang'anja ever made cloth from cotton."<sup>10</sup> The Heckscher–Ohlin

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<sup>7</sup> Williamson, *Trade and poverty*, p. 27.

<sup>8</sup> For extended discussion of the deindustrialization historiography, see section 1.2 in Chapter 1.

<sup>9</sup> Mandala, *Work*, pp. 7-11, 94-95, 270-272.

<sup>10</sup> Mandala ventures that by the mid-nineteenth century, "Only those Mang'anja without easy access to foreign calico combined [...] cotton and food cultivation on the mphala with dimba agriculture" and argues that "few branches [of the non-agricultural sector] survived the onslaught of foreign imports" with the cloth industry on the "verge of a total collapse" by the first years of the 1880s. More generally, he suggests that domestic production of

theorem of international trade points more directly to local conditions as the major determinant of production and trade developments, proposing that resource allocation is governed by specific local factor endowments as a country or region will choose to produce and export goods that intensively utilize the factor that is locally most abundant.<sup>11</sup> Engaging the Heckscher-Ohlin theorem, I argue that an alteration in local factor endowments in the Lower Shire Valley – brought about by local environmental and demographic change – helped precipitate socio-economic reorientation. However, local production choices were made within the context of the local institutional framework and a changing global trading landscape.

In the Lower Shire Valley, production choices were impacted by outside forces but in different ways than global-focused theories have suggested. The presence of imported cloth, for example, did not drive the decline of production. In fact, cloth imports into the region only took off in the last decade of the nineteenth century, well after the virtual disappearance of Mang'anja cloth production by the early 1880s.<sup>12</sup> As Figure 1.3 illustrates, a gradual increase of cloth imports into East Africa occurred during the late pre-colonial period, when foreign cloth was acquired in the East African interior primarily via ivory exports. Ivory, however, was not a traditional Mang'anja export good, nor were the terms of trade for ivory (relative to imported cloth) particularly favorable in the interior.<sup>13</sup> Furthermore, as the next chapter illustrates, much of the growth of cloth imports into East Africa during the last quarter of the nineteenth century was tied to an increase in exports of coastal products (i.e., cloves, gum copal, rubber, etc.), and imports were principally comprised of flimsy British and Indian cloth rather than the durable unbleached American-made cloth (Swahili: *merekani*) that was strongly favored in the interior.<sup>14</sup>

Even if cloth imports had heavily penetrated the valley earlier on, the mere presence of imported cloth did not automatically spell disaster for local industry. As Figure 1.3 shows, imports per capita were comparatively higher in West Africa, where cloth production flourished in many

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pottery, salt, iron and cloth “declined as manufactured products penetrated rural markets.” For the impact of merchant capital and imports on domestic industry, see *ibid.*, 43-44, 56, 92, 293n137; Mandala, 'Capitalism', pp. 147-148; Mandala, 'Peasant cotton', p. 30.

<sup>11</sup> Krugman, Obstfeld, and Melitz, *Economics*, p. 80.

<sup>12</sup> Livingstone, who had reported extensive cloth production in the valley in the late 1850s, noted rapid disruption of industry in the early 1860s as a result of severe regional unrest that would continue to plague the valley through the mid-1870s. Buchanan witnessed some weaving in the Shire Highlands in 1876, but by the early 1880s Morrison noted Mang'anja villagers using bark cloth if they could not obtain imported cotton cloth. By the early 1890s, British colonial officials noted the absence of what was once “universal” cotton cultivation for local cloth production. Livingstone and Livingstone, *Narrative*, p. 381; Buchanan, *Shire Highlands*, pp. 127-128; Morrison cited in Mandala, *Work*, pp. 92, 308n136; Johnston, *First three years*; Duff, *Nyasaland*, p. 306.

<sup>13</sup> For limited Mang'anja involvement in professional ivory hunting, see Mandala, *Work*, p. 40. For a discussion on terms of trade for ivory in the interior, see Chapter 4 of this dissertation.

<sup>14</sup> For preference for American-made cloth among interior consumers throughout East Africa, see Burton, *Zanzibar*, vol. 1, p. 484; Portal, 'Report on the situation', p. 11; Cave, 'Report for the year 1898', p. 14.

places, like Kano in northern Nigeria, into the twentieth century.<sup>15</sup> In northern East Africa, too, weavers in Mogadishu on the Benadir Coast and throughout Ethiopia retained their foothold in regional markets well into the twentieth century, sometimes by adapting products to compete with foreign varieties.<sup>16</sup> In the interior-situated Lower Shire Valley, by contrast, although cloth imports arrived more slowly, production ceased during the last half of the nineteenth century, and the former cloth-producing Mang'anja turned to agricultural production for global export. What accounts for the very different trajectory of the Lower Shire Valley relative to places like Mogadishu, Ethiopia, and Kano? All were traditional cloth-producing areas confronted with similar global forces. However, their local circumstances differed markedly, particularly with respect to their population levels and labor institutions, which dramatically impacted the nature of respective regional responses to global stimuli.

The following section describes the decline in the Mang'anja population as a result of mid-nineteenth-century slave raiding and famine. Contemporary discussion comes from European travelers whose abolitionist agendas no doubt colored their writing. However, the regional population drain from slave raiding must have been great, as an official report from Zanzibar noted that nearly 80 percent of the slaves imported into the slave-trading island entrepôt in 1860 came from the Lake Nyasa area.<sup>17</sup> Further, slave trading was a common feature in Ethiopia, the Benadir Coast, and northern Nigeria, but an associated severe attenuation of local populations and industrial decline was not similarly reported there by European travelers. Taken with a grain of salt, these reports provide insight into the causes of the Lower Shire Valley's population decline and its consequences for production choices.

### 2.3 Slave-raiding and socio-economic disorder

In nineteenth-century Mang'anja villages, individuals from different households worked together to produce handicraft industrial goods, including cloth, with women and children often cleaning cotton and women sometimes spinning it into thread, while men regularly spun and invariably wove.<sup>18</sup> Subsistence agriculture, conversely, was organized on the household (*banja*)

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<sup>15</sup> Imports into West Africa were even higher than depicted in Figure 1.3 as the statistics for West Africa only include British cloth imports.

<sup>16</sup> For Mogadishu, see chapter 5 in Alpers, *East Africa and the Indian Ocean*. For Ethiopia, see Pankhurst, *Economic history of Ethiopia*, p. 261.

<sup>17</sup> An estimated 15,000 of the 19,000 slaves annually brought to Zanzibar in the early 1860s were "from the neighbourhood of the great lake of Nyassa [...] this miserable traffic is [...] depopulating vast tracts of fertile country." Rigby, 'Report', p. 9.

<sup>18</sup> Mandala, *Work*, p. 41. James Stewart alleged that David Livingstone had overstated the valley's cotton culture. Mandala notes that Livingstone had motives to present the valley's cotton cultivation in a positive light but also points out that Stewart visited later, in 1862–63, when productivity-stalling famine and slave raiding had ravaged the region (ibid., 41–43, 293n139, 294n140.). John Kirk, a botanist accompanying the Livingstone expedition, gave a detailed description of regional cotton cultivation from 1858–60 that supports Livingstone's favorable account. He reported that in the Lower Zambezi region, where already "the slave trade and war ha[d] combined to desolate this rich country," only some wild cotton was found growing. But in the Lower Shire Valley, which was

level and involved both *mphala* dryland and *dambo* wetland fields. Village-adjacent dryland fields were cultivated under the rain-fed *munda* system, while fertile wetland fields on the marshy banks of the Shire River required no rain under the drought-resistant *dimba* system. The wetland fields were annually refreshed with alluvial river deposits during the wet season and then exposed for cultivation during the dry season, which typically lasted up to six months (June to December, with the first rains arriving in November) until the mid-1870s. These two ecosystems facilitated two different, sometimes overlapping agricultural seasons.<sup>19</sup>

However, the Lower Shire Valley temporarily became a “disaster economy” in the 1860s and 1870s when villages were regularly attacked by slave raiders seeking labor for Indian Ocean slave-plantation islands.<sup>20</sup> Villagers left behind all “they possessed, except the little they could carry on their heads” and sought refuge on small islands in the Shire River, where cultivation opportunities were limited.<sup>21</sup> Livingstone lamented, “[Villages] were all deserted: one where we [...] two years before [...] saw a number of men peacefully weaving [...] was burnt.”<sup>22</sup> Disorder caused by raiding disrupted the relationship between Mang’anja households and village-communities, undermining work-group industry. Further, when villagers fled, they left behind their cotton plants, which grew exclusively in dryland fields since river wetland fields were, historically, not sufficiently dry for a long enough annual period to allow cotton plants to reach maturity (a full six months). More still, multi-year drought conditions led to a severe famine from 1862 to 1863, intensified by the disruption of cultivation.<sup>23</sup> Visitors reported, “The river-banks, once so populous [were] all silent [...] an oppressive stillness reigning where formerly crowds of eager sellers appeared with the various products of their industry [...] The sight and smell of dead bodies was everywhere.”<sup>24</sup> In this context, any available labor energy was focused entirely on producing what little food could be grown on river-island refuges. Any labor-intensive cotton and cloth production was undoubtedly halted, for cloth – unlike food – was not a survival necessity in the temperate valley.<sup>25</sup>

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at that time not yet besieged by slave raiding, he reported extensive cotton cultivation for the “manufacture of cloths [which] all engage in [...] from the chief to the poor people.” Kirk, ‘Report’, pp. 25, 28.

<sup>19</sup> Mandala, ‘Capitalism’, pp. 139-142.

<sup>20</sup> For the concept of “disaster economies,” in which producers must abandon extra-subsistence activity to focus on survival, see Johnson, ‘Cotton imperialism’, p. 181.

<sup>21</sup> Livingstone and Livingstone, *Narrative*, p. 381; Mandala, *Work*, p. 76. In the north of the valley, villagers sought protection from armed Makololo immigrants, who subsequently established authoritarian control. The present study focuses on the independent south, which retained autonomy.

<sup>22</sup> Livingstone and Livingstone, *Narrative*, p. 381. See also Rowley, *Story*, p. 112.

<sup>23</sup> Mandala, *Work*, pp. 7, 44, 76-78.

<sup>24</sup> Livingstone and Livingstone, *Narrative*, p. 475. On the famine and its effects, see also Rowley, *Story*, pp. 363-386; Foskett, ed., *Zambesi*, vol. 2, p. 595.

<sup>25</sup> Livingstone reported that in many cases, villagers were too exhausted to even attempt to cultivate food crops. Livingstone and Livingstone, *Narrative*, pp. 481-482.

While raiding and drought were only temporary disruptions, they produced lasting consequences. I argue that the resulting population drop profoundly influenced labor-allocation choices in the decades following the decline of slave raiding. In 1860 alone, roughly 15,000 captives were taken from the area and its surroundings to be sold at Zanzibar – which Livingstone points out did not include those slaves taken to Portuguese ports – while the 1862-63 famine caused many deaths.<sup>26</sup> Contemporary estimates of the decline in the valley's population range from 50 percent to an undoubtedly over-stated 90 percent.<sup>27</sup> Livingstone reported, "Labor had been [...] completely swept away from the Great Shire Valley."<sup>28</sup> Furthermore, raiding likely affected the Mang'anja gender balance as raiders often targeted females for use as slave-wives and agricultural laborers.<sup>29</sup> Consequently, even if Mang'anja cloth production had immediately resumed in the post-slave-raid period, a relative decline in females might have created an input supply bottleneck given that women were reportedly involved in labor-intensive cotton cleaning and spinning processes.<sup>30</sup> Perhaps more importantly, a gender imbalance may have placed more of the subsistence-agricultural labor burden on men, diminishing available time for male non-agricultural activities, including weaving, while simultaneously impeding the reproduction of the region's labor force in the long run.

## 2.4 The role of foreign imports revisited

Local disorder, brought on by external demand and local environmental forces accounted for the initial disruption of cloth manufacturing in the valley. But why didn't the industry resume with vigor after slave raiding diminished by the late-1870s? Mandala points to the steady loss of traditional export bases for Mang'anja-produced cloth due to foreign competition.<sup>31</sup> While imported cloth was not flooding the valley, or East Africa more generally, prior to the colonial period, it had more heavily penetrated some parts of southern East Africa, particularly in the Portuguese sphere, where it was used as a form of currency.<sup>32</sup> Eventually, competition with foreign cloth may have affected regional export markets closer to home. For example, Vaughan points out that as the second half of the nineteenth century progressed, long-distance trade

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<sup>26</sup> Rigby, 'Report', p. 9; Livingstone and Livingstone, *Narrative*, p. 412.

<sup>27</sup> See Anderson-Morshead, *History*, p. 39; Rowley, *Story*, p. 384.

<sup>28</sup> Livingstone and Livingstone, *Narrative*, p. 496.

<sup>29</sup> *Ibid.*, 220, 224, 498; Rowley, *Story*, pp. 92-93; McCracken, *A history*, p. 32.

<sup>30</sup> According to Mandala, in the Lower Shire Valley, women spun yarn and men wove cloth. Mandala, 'Capitalism', p. 141. Elsewhere, however, he reports that male labor dominated in all aspects of cloth production with occasional female assistance. Mandala, *Work*, p. 41. See also Livingstone and Livingstone, *Narrative*, pp. 114, 124.

<sup>31</sup> Mandala, *Work*, pp. 47-48.

<sup>32</sup> Portuguese imperial trade policies specifically encouraged imports of Indian cloth as a means to enhance imperial profits. Davison and Harries, 'Cotton weaving', p. 187. For imported cloth as currency in Mozambique and the Lower Zambezi region, see Machado, 'Gujarati Indian merchant networks', pp. 110, 170, 243; Livingstone, *Missionary travels and researches in South Africa*, p. 635.

activity enabled “the acquisition of exotic goods” in the nearby Shire Highlands to which the Mang’anja of the valley had traditionally exported much of their cloth in exchange for iron goods.<sup>33</sup>

At face value, it seems plausible that the presence of foreign cloth in traditional Mang’anja export areas compromised the valley’s industry. But in other parts of sub-Saharan Africa, weavers responded to competition not by closing shop but by adapting and expanding. In his study of the textile industry of Mogadishu during the nineteenth and twentieth centuries, Alpers illustrates that incorporation into “the world capitalist system of production and exchange” helped inspire industrial developments in spite of portents by contemporary “doomsayers” predicting failure in the face of competition.<sup>34</sup> Similar responses have been identified in resilient cloth industries in nineteenth- and twentieth-century Java and India.<sup>35</sup> Furthermore, Alpers has noted that Mang’anja *machila* cloth had long existed alongside and even competed with Indian cloth imports in the Zambezi region because of the domestic cloth’s unique durability.<sup>36</sup> Further, a loss of export markets does not account for the valley’s decline in production for *local* consumption, especially since a substantial increase in the area’s cloth imports did not occur until the end of the century, decades after the cloth industry deteriorated (see Figure 1.3).

Rather, local influences must be considered, particularly changes in the valley’s land-labor ratio. A decline in the local population not only reduced available industrial labor but also diminished the *local market* for Mang’anja-produced cloth. In more densely populated northern East Africa and West Africa, on the other hand, larger local markets demanded more product.<sup>37</sup> Furthermore, just as the Lower Shire Valley’s population declined, local environmental changes substantially altered agricultural production possibilities and helped generate “alternative employment opportunities” in cash-crop production.<sup>38</sup>

## 2.5 Land and labor in the Lower Shire Valley

Just prior to the decline of slave raiding in the late 1870s, ecological changes began in the valley, which affected the Mang’anja dryland–wetland cultivation system once village life resumed. From the mid-1870s to the 1930s, dramatically diminished dry-season Shire River

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<sup>33</sup> Vaughan, ‘Food production’, pp. 355–356. The Mang’anja of the valley eventually began importing foreign-made iron goods using cash-crop profits. ‘Nyasaland, report for 1910–11’, p. 5.

<sup>34</sup> Alpers, *East Africa and the Indian Ocean*, p. 80.

<sup>35</sup> See footnote 54 in Chapter 1.

<sup>36</sup> Alpers, *Ivory*, p. 25.

<sup>37</sup> For relative population densities as of the mid-twentieth century, see Singer, ‘Demographic factors’, pp. 253–254. For population estimates from the mid-nineteenth century onward, see Frankema and Jerven, ‘Writing history backwards and sideways’.

<sup>38</sup> According to Johnson, new income-earning opportunities, particularly during the traditional non-agricultural season, have been the main driver of textile deindustrialization in sub-Saharan Africa. Johnson, ‘Technology’, p. 267.

levels annually exposed increasingly larger tracts of exceptionally fertile wetlands for cultivation. As of 1910, the dry-season depth was little more than one foot (0.3 meters).<sup>39</sup> A colonial official reported, “Formerly the highway into Nyasaland, [the Shire] cannot be regarded as a navigable river.”<sup>40</sup> This stands in stark contrast to Livingstone’s account from the early 1860s, which cites two fathoms (3.7 meters) as the lowest observed depth, corresponding to dry-season depths during the 1930s when the river suddenly returned to its pre-1870s level.<sup>41</sup>

Furthermore, the increasingly larger wetland fields were exposed for progressively *longer* seasonal periods, extending the wetland agricultural season until it ultimately reached ten months – as opposed to a maximum of six – by the early twentieth century.<sup>42</sup> However, this ecological shift was not associated with a decline in the region’s rainfall, which would have impaired dryland cultivation.<sup>43</sup> Villagers boosted agricultural capacity by developing a three-season system, including rainy-season cultivation of mphala dryland fields along with two consecutive dimba wetland cultivation periods during the river’s elongated dry season.<sup>44</sup> Export-oriented and subsistence-agricultural production came to dominate the entire Mang’anja year, leaving little space for non-agricultural activities. Further, economic activity came to be more family oriented rather than village oriented, for agriculture was pursued on the household level, while cloth production had been undertaken in village workgroups.<sup>45</sup>

Local ecological changes clearly influenced production choices. However, taken alone, environmental change cannot adequately explain the abandonment of cloth production. In fact, geological evidence reveals that the Shire River had experienced many decades-long periods of diminished dry-season levels, even as recently as the early nineteenth century.<sup>46</sup> However, earlier ecological shocks had not generated a permanent redistribution of industrial labor hours to agriculture. This response was occasioned by the *simultaneous* decline in the Mang’anja population. A change in the valley’s land-labor ratio significantly altered both industrial and

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<sup>39</sup> Mandala, *Work*, pp. 6-7.

<sup>40</sup> Murray, *A handbook of Nyasaland*, p. 67.

<sup>41</sup> Livingstone and Livingstone, *Narrative*, p. 88; Mandala, 'Capitalism', p. 154.

<sup>42</sup> In the early 1860s, Rowley noted that the marshlands were wet from roughly early November to early May. Twenty years later, however, flood waters only persisted from late December to March. See Rowley, *Story*, p. 62; Mandala, *Work*, p. 7. For reports of steadily declining water levels of Lake Malawi, which feeds the Shire River, from the mid-1870s onward, see Appendix A in Nicholson, 'Fluctuations'; Sieger, 'Schwankungen der innerafrikanischen Seen'.

<sup>43</sup> Lake Malawi (and thus Shire River) water levels are affected by rainfall patterns in southern Tanzania. Nicholson, 'Fluctuations', pp. 218-222.

<sup>44</sup> The once-per-annum labor required to clear freshly exposed wetlands now facilitated two planting cycles. For wetland clearing and planting methods and the development of a three-season system, see Mandala, *Work*, pp. 7, 58-59, 94-95; Mandala, 'Peasant cotton', pp. 27-28.

<sup>45</sup> Mandala, *Work*, p. 93.

<sup>46</sup> Nicholson, 'Fluctuations', pp. 214-216; Nicholson, 'Climatology', pp. 258-259.

agricultural production possibilities and strongly influenced the choice to abandon industry in favor of export-oriented cultivation. And for the Mang'anja, who knew from past experience that periods of river-level decline could last a lifetime, an economic transition centered around wetland exposure must have seemed a rational response to the altered circumstances.

In the period following the famine and slave raiding that had severely depopulated the previously "well-peopled valley," Mang'anja production strategies undoubtedly hinged on the most productive application of remaining labor.<sup>47</sup> In Mang'anja villages, labor scarcity was not shored up with slave labor, as institutions of servitude and slavery were generally weak in the decentralized valley.<sup>48</sup> Sena people began moving into the valley in the 1890s, but Mang'anja villagers did not typically enslave or employ these immigrants, who settled in sparsely inhabited areas previously controlled by slave raiders.<sup>49</sup> Labor in the valley was thus largely confined to diminished village-community members, unlike in Mogadishu, Ethiopia, and Kano, where slavery and other forms of servile labor were common and integrated into the textile industry. Ethiopia, for example, lost an estimated one-third of its population to severe famine and disease epidemics from 1888 to 1892, but this series of events produced no fundamental reorientation of economic activity akin to the deindustrialization of the Lower Shire Valley.<sup>50</sup> In more densely populated Ethiopia, population decline did not generate labor depletion with the same severity experienced in the Lower Shire Valley, partly because Ethiopian areas that did experience significant shortages were sent laborers from newly conquered southern regions.<sup>51</sup>

## 2.6 The logic and impact of cash-crop production

As village life resumed in the Lower Shire Valley following the decline of raiding from the mid-1870s, Mang'anja households began introducing cash crops into their fields, particularly sesame oilseeds demanded in Europe to produce cooking oil.<sup>52</sup> Mang'anja households were taking advantage of increasing agricultural production possibilities on expanding wetlands in an effort to maximize their sharply diminished labor resources by funneling labor previously applied to labor-intensive industry toward agriculture. An observer recalled how villagers "took [oilseeds] down, in their large dug-out canoes, to the Zambesi to sell to the Banian traders."<sup>53</sup>

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<sup>47</sup> Livingstone and Livingstone, *Narrative*, p. 483.

<sup>48</sup> A system of servitude (*ukapolo*) did exist in the valley prior to the slave raids of the 1860s but largely faded in the post-slave-raid period. Furthermore *akapolo* laborers were traditionally not engaged in industrial branches of the economy. Mandala, *Work*, pp. 32-36, 97.

<sup>49</sup> Ibid., 95, 97. On the previously sparse population of the region that would ultimately be inhabited by Sena settlers, see Rowley, *Story*, pp. 62-63.

<sup>50</sup> McCann, *People of the plow*, p. 91.

<sup>51</sup> Pankhurst and Johnson, 'The great drought', pp. 54, 56.

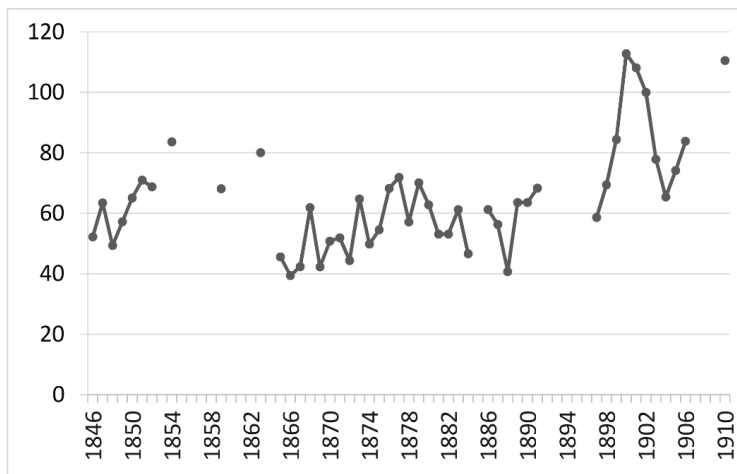
<sup>52</sup> Mandala, *Work*, p. 93; McCracken, *A history*, p. 88.

<sup>53</sup> Murray, *A handbook of Nyasaland*, p. 44.

Later, the opening of the colonial-era railway in the early twentieth century would better connect the Lower Shire Valley to global markets and help ensure more favorable prices “than those obtained in less fortunately situated [...] areas further north.”<sup>54</sup>

Williamson’s theory of deindustrialization would suggest that the valley’s sectoral shift from industry to export-oriented agriculture was motivated by improved terms of trade as global demand for primary products increased. However, oilseed terms of trade (relative to imported merekani cloth) had actually *dropped* in the years preceding the valley’s turn to export-oriented agriculture in the 1870s (see Figure 2.1).

**Figure 2.1** Terms of trade for oilseeds, 1846–1910 (1902 = 100)



Sources: Global oilseed prices: Sauerbeck, ‘Prices’ series, 1886–1917; cloth prices on the East African coast: Sheriff, *Slaves*, pp. 253–256; MH 23, MH 235, MSS 901, and MSS 24 series, PEM; *Statistical abstract for the several British colonies, possessions, and protectorates in each year from 1891 to 1905*, CBS; *Statistical abstracts for the several British overseas dominions and protectorates in each year from 1909 to 1923*, CBS. Note: the base year (1902) reflects a period of global trade stability.

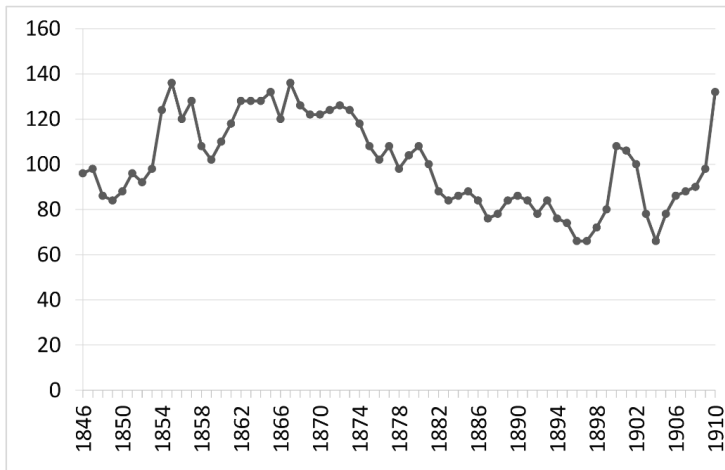
Oilseed prices declined (see Figure 2.2), while global raw cotton and cloth prices increased due to a global “cotton famine” precipitated by the American Civil War.<sup>55</sup> Although a subsequent decrease in cloth prices provided a modest boost for oilseed terms of trade in the second half of the 1870s, this upturn was soon met with a renewed pattern of decline in the 1880s as oilseed prices continued to fall. It was only during the 1890s, well after cloth production had already

<sup>54</sup> McCracken, *A history*, p. 198 (quote). For the opening of the railway, see Murray, *A handbook of Nyasaland*, p. 71.

<sup>55</sup> Farnie, *Cotton*, p. 162.

been abandoned in the valley, that oilseed terms of trade experienced a massive rise. Importantly, the terms of trade for oilseeds in the Lower Shire Valley were likely weaker than reflected in Figure 2.1 given that the calculation relies on prices of imported cloth on the East African coast. During the nineteenth century, prices for imported cloth generally remained much higher in the interior relative to the coast as a result of high transportation and transaction costs and a relative scarcity of imported cloth in interior markets, which kept prices elevated.<sup>56</sup>

**Figure 2.2 Oilseed price index, 1846–1910 (1902 = 100)**



Source: Sauerbeck, 'Prices' series, 1886-1917. Note: the base year (1902) reflects a period of global trade stability.

Why, then, did villagers turn to export-oriented sesame cultivation? Why not instead retool their cloth industry and adapt to compete with foreign imports in regional markets? Or, alternatively, disengage from export markets entirely as village life recommenced following the decline in slave raiding, resuming cloth and agricultural production but only for subsistence? I suggest that in the face of altered factor endowments – particularly diminished labor – the transfer of labor from industry to agriculture was influenced by the relative labor demands of the two products at hand. First, sesame oilseed cultivation is generally less labor intensive than cotton cultivation.<sup>57</sup> In the Lower Shire Valley, dryland-produced cotton demanded considerable weeding labor, particularly since the short native *thonje-kaja* cotton could not be intercropped because it would be overshadowed by taller food crops. Harvest was also time-consuming since

<sup>56</sup> As explored in Chapter 4, this dynamic significantly diminished the nineteenth-century terms of trade for ivory (relative to imported cloth) in the deep interior of Tanzania even as global terms of trade for ivory boomed.

<sup>57</sup> Tosh, 'Lango agriculture', p. 428; Tosh, 'Cash-crop revolution', pp. 85-86.

thonje-kaja cotton adhered tightly to its seeds.<sup>58</sup> Secondly, oilseeds are a single-stage product, while cloth production requires not only cotton cultivation but also highly labor-intensive manufacturing (cleaning, spinning, and weaving). As Livingstone remarked before slave raiding disrupted production:

From the amount of native cotton cloth worn [...] it is evident that a goodly number of busy hands and patient heads must be employed in the cultivation of cotton, and in the various slow processes through which it has to pass, before the web is finished in the native loom.<sup>59</sup>

Clothing the valley's inhabitants required considerable labor. According to contemporary reports, a two-man team worked four four-hour days (32 man-hours) to weave a one-by-two yard cloth, or 16 hours to produce one square yard.<sup>60</sup> Roughly 112,500 yards were likely consumed annually in the valley based on early colonial-era consumption habits (five yards per capita) and the population in 1895 (22,500).<sup>61</sup> Multiplying this by the hours required to weave one yard yields 1,800,000 annual hours. This excludes export-oriented cloth production and labor hours applied to cleaning cotton and the "painfully slow" process of spinning it into yarn.<sup>62</sup> Deindustrialization freed this labor for agricultural activity. Indeed, a colonial-era observer noted, "There is no period of the year when the Lower River native is not occupied with some work in his garden."<sup>63</sup> Further, labor reallocated from industry to agriculture was progressively more productive with the increasing availability of fertile wetlands. Villagers could consume some (imported) cloth – using cash-crop profits – without expending depleted labor on cloth-making, although cloth import levels remained low until the 1890s, when cash-crop profits grew and foreign merchants began to trade increasingly in the region.<sup>64</sup>

However, export-oriented agriculture could only arise if labor-scarce Mang'anja households could simultaneously achieve food security. Sesame was an ideal cash-crop choice, requiring relatively little labor and doubling as an emergency food source.<sup>65</sup> Tosh points out that cash-

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<sup>58</sup> Mandala, *Work*, p. 55. A taller foreign species was also noted by Livingstone, but the native thonje-kaja was preferred "because it makes a stronger cloth." Livingstone and Livingstone, *Narrative*, p. 123.

<sup>59</sup> Livingstone and Livingstone, *Narrative*, p. 397.

<sup>60</sup> Wallis, ed., *Zambesi journal*, p. 155; Mandala, *Work*, p. 41.

<sup>61</sup> For estimated per-capita consumption levels in the valley, see per-capita imports into Nyasaland reflected in Figure 1.3. For the valley's population in 1895, see Mandala, *Work*, pp. 95, 309n151.

<sup>62</sup> Livingstone and Livingstone, *Narrative*, p. 124.

<sup>63</sup> *Port Herald District annual report*, 1932 as quoted in Mandala, *Work*, p. 134.

<sup>64</sup> On increasing cash-crop exports and trade in the region, see McCracken, *A history*, p. 88.

<sup>65</sup> Similarly, the Langi in Uganda initially produced cash-crop oilseeds partly because they could serve as a food source. Tosh, 'Lango agriculture', p. 428. Later, when production of non-edible cash crops took off in the Lower Shire Valley, villagers reportedly often neglected export-oriented crops to focus on food production. 'Nyasaland Protectorate, report for 1907-08', p. 12; 'Nyasaland Protectorate, report for 1908-09', p. 9; 'Nyasaland, report for 1919-20', p. 7.

crop production could threaten food security in areas with short planting seasons by diverting resources from subsistence production.<sup>66</sup> But the extension of the valley's wetland planting season mitigated this problem, while labor-saving inter-cropping techniques allowed villagers to cultivate oilseeds with a variety of subsistence crops in the same drought-resistant wetland fields.<sup>67</sup> The Mang'anja thus fully maximized their diminished labor supplies, producing export goods and ensuring greater food security than would have been possible had labor reverted back to its pre-1860s industry-agriculture division.

This transition affected gender and generational dynamics in Mang'anja households. With the disappearance of village-community industrial workgroups and the rise of household cash-cropping, spouses now shared in export-oriented output, working their wetland fields together. Agricultural tasks even became more gender-neutral as male dryland bush-clearing responsibilities, for example, diminished in importance with the rising dominance of the wetland system. Spousal power relations consequently evened in monogamous households as women claimed equal income control, regularly accompanying their husbands to market their product. However, controls over youth labor were extended, and non-agricultural economic activity was strongly discouraged. While this tack guaranteed agricultural labor, it also restricted the range of possible Mang'anja economic activities and heightened cash-crop dependence.<sup>68</sup>

## 2.7 The return of cotton

Oilseed exports and cloth imports surged in the mid-1890s, partly stimulated by the increasing presence of foreign merchants, who facilitated greater global integration of the region. In the early 1890s, Indian merchants who had focused on trade in the Lower Zambezi area in the preceding decades moved into southern Malawi, encouraged by armed peace in the region with the imposition of British colonial rule in 1891.<sup>69</sup> Of at least equal importance, however, was the implementation of colonial taxes in the newly established British Central Africa Protectorate. In the early 1890s, a hut tax was imposed to raise revenue and generate wage labor for European plantations. The Mang'anja circumvented plantation labor by instead increasing household sesame cultivation to pay taxes and take advantage of increasing trading opportunities.<sup>70</sup> A Nyasaland administrator complained that it was difficult to induce the cash-

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<sup>66</sup> Tosh, 'Cash-crop revolution', pp. 84-86.

<sup>67</sup> Intercropping significantly reduces labour inputs relative to sole cropping (i.e., growing different crops in separate fields) since weeding is performed in a single operation. Intercropped plants are also less vulnerable to disease due to greater ecological diversity, increasing overall yield potential. Richards, *Indigenous agricultural revolution*, pp. 66-69. For intercropped subsistence crops planted in the valley, see Livingstone and Livingstone, *Narrative*, p. 123; Murray, *A handbook of Nyasaland*, p. 70.

<sup>68</sup> Mandala, 'Peasant cotton', pp. 30-31; Davison, 'Tenacious women', p. 410.

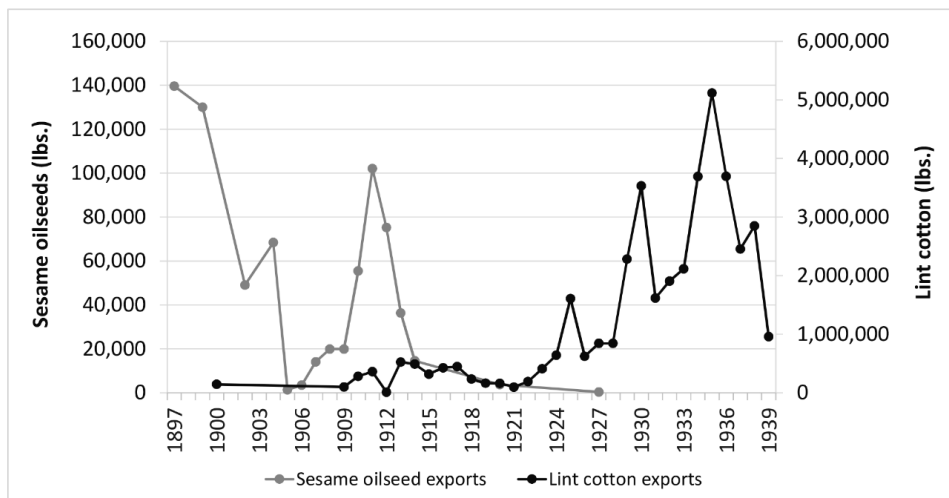
<sup>69</sup> McCracken, *A history*, p. 88.

<sup>70</sup> Mandala, *Work*, pp. 94, 111-132.

crop farmers to provide labor since they “find it so easy to obtain the small sum of money needed to pay hut tax.”<sup>71</sup>

However, oilseed exports soon declined. Early-twentieth-century drought conditions forced villagers to focus on food security, and it was reported in 1906 that oilseeds were no longer “specially cultivated for export,” presumably retained for local consumption.<sup>72</sup> A brief resurgence in oilseed exports was followed by a transition to increasingly more lucrative export-oriented cotton production in the 1920s, as the Mang’anja again reallocated available labor, this time from sesame to cotton cultivation (see Figure 2.3). Compared with stagnant, then falling oilseed prices, cotton prices rose precipitously (see Figure 2.4). Over time, as the valley’s economy became increasingly dependent on cash-crop exports, Mang’anja production choices had become more sensitive to global demand patterns.

**Figure 2.3 Villager-grown sesame oilseed and lint cotton exports, 1897–1939**

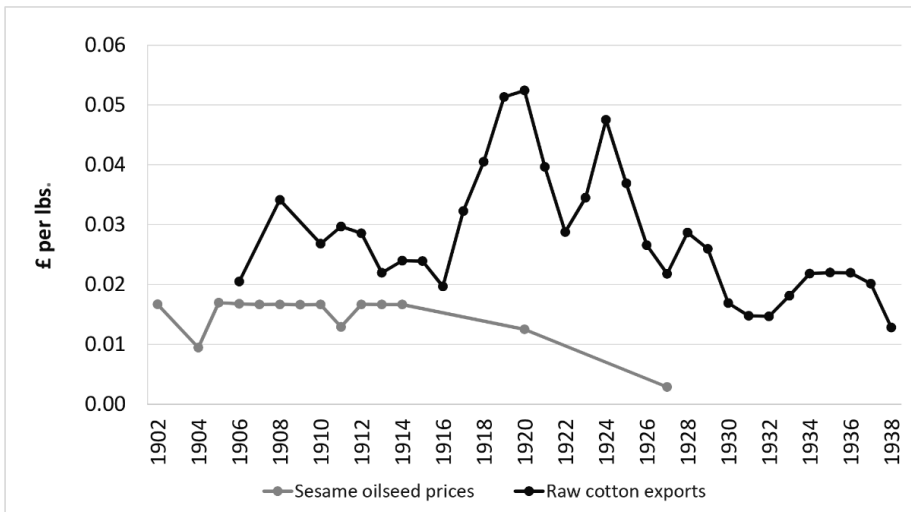


Sources: Sesame oilseed exports: British Central Africa/Nyasaland Blue Books, 1897-1927, TNA; villager-grown cotton exports: Mandala, *Work*, p. 37 (Table 4.1).

<sup>71</sup> Sharpe, 'Report', pp. 13-14.

<sup>72</sup> 'British Central Africa Protectorate, report for 1906-07', p. 5. On recurring drought conditions, see Mandala, *Work*, p. 176.

**Figure 2.4 Unit prices of sesame oilseeds and raw cotton, 1902–1938**



Sources: British Central Africa/Nyasaland Blue Books, 1902-1938, TNA.

The initial disruption of cloth production in the tumultuous 1860s had been linked with the sudden desertion of cotton fields, which, according to Livingstone, “every family of any importance own[ed] [and] carefully cultivated” before the slave raids.<sup>73</sup> Cotton remained neglected for decades before making its dramatic comeback.<sup>74</sup> Whereas European settler-produced cotton failed in the Shire Highlands, abandoned in favor of tobacco, Mang’anja villagers and recent Sena immigrants succeeded in the valley. Cotton exporting dominated the valley economy until the late 1930s.<sup>75</sup> Cotton cultivation was encouraged by the British Cotton Growing Association, which distributed Egyptian and American Upland seeds, while the colonial government, eager to secure cotton for British looms, also made efforts to guarantee prices at which “it pays to cultivate.”<sup>76</sup>

However, the transition to export-oriented cotton cultivation was enabled by local environmental factors. By the early twentieth century, the extended dry season made it possible to cultivate cotton in fertile wetland (as opposed to dryland) fields prior to the annual floods.<sup>77</sup> Although cotton cultivation was more labor-intensive than sesame, yields of wetland-produced

<sup>73</sup> Livingstone and Livingstone, *Narrative*, p. 123.

<sup>74</sup> Johnston, *First three years*.

<sup>75</sup> Green, ‘Land concentration’, pp. 11, 21; McCracken, *A history*, pp. 90-91.

<sup>76</sup> ‘British Central Africa Protectorate, report for 1904-05’, p. 10 (quote); ‘British Central Africa Protectorate, report for 1905-06’, p. 13; Mandala, *Work*, pp. 127-128.

<sup>77</sup> Mandala, *Work*, p. 7.

cotton were extraordinarily high: a one-acre dryland field yielded roughly 70 pounds of cotton, while one acre of wetlands yielded approximately 300 pounds. Furthermore, while the short native thonje-kaja cotton species was traditionally grown in separate fields to avoid over-shading by other crops, Sena immigrants began planting taller foreign cotton species intercropped with food plants by 1909, dramatically diminishing the weeding labor demands and food security limitations of cotton cultivation.<sup>78</sup> After a half-century hiatus, cotton had regained its position in the Mang'anja economy, but as a global export rather than a local industrial input.

## 2.8 A renaissance of local cloth?

In spite of the growing availability of cotton cloth's requisite raw material, Mang'anja villagers continued to focus their labor on agriculture, pursuing no renaissance of the local cloth industry. According to Austin, cotton cloth production traditionally faced an agricultural-season "labor bottleneck" that limited raw cotton supplies, as allocating more labor to cotton cultivation threatened food-crop output.<sup>79</sup> However, ecological changes and cultivation innovations in the valley had enhanced agricultural productivity, and food crops grew alongside unprecedentedly large cotton yields. Why did the reappearance of cotton in the Lower Shire Valley fail to stimulate yet another economic shift, with some labor reallocated back to industry to revive cloth production for home consumption and external trade?

To begin with, export-oriented cotton cultivation did not take off in the valley until nearly half a century after industrial collapse. Consequently, there was no existing cloth industry to benefit from the resurgence of cotton cultivation. In much of West Africa, by contrast, cloth manufacturing had continued *alongside* the rise of cash-crop production, creating sectoral linkages, as cultivators provided raw materials, while global-export earnings stimulated demand for both imported and local cloth among prospering producers and traders.<sup>80</sup> Likewise, as commodity exports generated increased wealth in northern East Africa's Ethiopia, cloth imports were generally used to make trousers, while local weavers continued to supply togas well into the twentieth century.<sup>81</sup> In the already deindustrialized Lower Shire Valley, however, growing demand stimulated by increasing cash-crop profits was met exclusively by foreign cloth. In fact, the initial rise of cash-crop agriculture had essentially required the demise of

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<sup>78</sup> Ibid., 55, 135, 139-140.

<sup>79</sup> Austin, 'Resources', pp. 597-598, 603.

<sup>80</sup> See section 6.6 of Chapter 6.

<sup>81</sup> Ethiopian exports of hides, skins, and coffee and imports of cotton cloth were bolstered by the opening of the Ethio-Djibouti railroad in the early twentieth century, yet domestic cloth production continued to thrive. Pankhurst, *Economic history of Ethiopia*, pp. 261, 336.

industry in the context of scarce labor, thereby depriving the valley of the possibility of agricultural-industrial linkages enjoyed in more labor-rich regions.

The failure to resume cloth production and take advantage of potential sectoral linkages was influenced by increased opportunity costs of cloth production in the valley, particularly after environmental shifts had made possible profitable cotton exporting. An early-twentieth-century resumption of cloth production would have diminished export profits, with cotton diverted from global markets to local producers. As global demand pushed up cotton prices, while regional demand for Mang'anja cloth had long since evaporated, greater profits could be realized by allocating labor to increasingly productive cash-crop cultivation on fertile wetlands than would have been possible had labor been reallocated back to labor-intensive industry.<sup>82</sup> Furthermore, the staggered scheduling and increasing annual length of the valley's dual-ecosystem agricultural system required male and female labor year-round, often in both dryland and wetland fields.<sup>83</sup> There was scarce time for what had once been a lower-opportunity-cost industrial activity during the previously longer agricultural off-season.

Higher agricultural productivity levels relative to industry no doubt impacted early-twentieth-century production choices. Southern East African cloth production had traditionally relied on hand-spinning and narrow ground looms.<sup>84</sup> More sophisticated labor-saving methods had not been adopted before the Mang'anja cloth industry declined for a number of possible reasons. Firstly, time-consuming industrial labor had not impeded other vital activities during the longer agricultural off-season; secondly, cloth output had been limited by non-intercropped dryland cotton output, which competed with food crops; and thirdly, demand-stimulating cash-crop production had not yet developed.<sup>85</sup> The cloth industry had already disappeared before the agricultural off-season shortened, before intercropped wetland-cultivated cotton overcame the old input bottleneck, and before cash-crop profits stimulated increased cloth demand, any of which could have inspired more efficient methods. In other parts of Africa, robust cloth industries served growing demand by achieving economies of scale through labor-saving innovations. These included, for example, large cloth-dyeing vats in northern Nigeria, treadle looms in West Africa and northern East Africa, and spinning wheels on the Benadir Coast.<sup>86</sup>

Further, in these more resilient cloth-producing regions, slave-labor systems helped mitigate labor constraints, allowing industrial-input cultivation and local manufacturing to continue

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<sup>82</sup> As a counter-example, diminished agricultural opportunities in Java – caused by land constraints – encouraged a 1930s resurgence of labor-intensive cloth-making. See van Norderveen Meerkerk, 'Challenging', p. 1238.

<sup>83</sup> Mandala, *Work*, pp. 94-95; Mandala, 'Capitalism', p. 149.

<sup>84</sup> Livingstone and Livingstone, *Narrative*, p. 124; Davison and Harries, 'Cotton weaving', p. 181.

<sup>85</sup> This reasoning is inspired by Austin, 'Resources', p. 603.

<sup>86</sup> Shea, 'Economies of scale'; Kriger, 'Mapping'; Alpers, *East Africa and the Indian Ocean*, pp. 81-82.

alongside food and export-crop production.<sup>87</sup> Internal use of slaves in West Africa had increased during the nineteenth century with the cessation of the trans-Atlantic slave trade.<sup>88</sup> By the mid-nineteenth century, plantation slave labor often supplied raw materials for textile industries in places like the densely populated, centralized Sokoto Caliphate.<sup>89</sup> Similarly, on East Africa's Benadir Coast, cloth production was supported by slave-produced raw material inputs in the nineteenth century – later replaced by imported yarn – while rural plantations supplied food, freeing up labor hours for urban weavers.<sup>90</sup> In the Lower Shire Valley, by contrast, slave-labor institutions were already weak by the first half of the nineteenth century and had virtually disappeared by the time the valley began to recover from the slave-raid era of the 1860s and 1870s.<sup>91</sup> In fact, as the valley's inhabitants continued to apply as much household labor as possible to subsistence and cash-crop cultivation, colonial Nyasaland went through a consumer revolution, with demand for labor-saving finished items on the rise by the 1920s. Unfinished cloth imports into Nyasaland were progressively replaced with ready-made apparel, while in more diversified, labor-abundant economies, like Ethiopia, foreign and local cloth was often finished by professional tailors.<sup>92</sup> Relatively high labor availability thus facilitated multi-sectoral economies in parts of northern East Africa and West Africa, while economic activities progressively narrowed in the labor-scarce Lower Shire Valley.

## 2.9 Evaluating global and local factors

The case of the Lower Shire Valley's defunct cloth industry highlights the relationship between local and global factors in guiding development outcomes and shows that the role played by global forces was different and less decisive in the valley than deindustrialization theories suggest. When considered alongside other sub-Saharan African cases, this study reveals how diverse local contexts within the "periphery" generated very different responses to broad global processes.

Importantly, the case of deindustrialization in the valley illustrates how the purportedly damaging role of foreign imports has been overemphasized in dependency theory arguments. Cloth imports only took off in the Lower Shire Valley decades after the process of deindustrialization was complete. Imported cloth may have circulated somewhat sooner in the Lower Zambezi region, a traditional Mang'anja cloth export base, but this was not a crucial mechanism in the deindustrialization of the valley. After all, cloth industries in both West Africa

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<sup>87</sup> Kriger, 'Robes of the Sokoto Caliphate', p. 54; Alpers, *East Africa and the Indian Ocean*, pp. 81-85.

<sup>88</sup> Lovejoy, 'Plantations', p. 342.

<sup>89</sup> Ibid., esp. 356-357.

<sup>90</sup> Alpers, *East Africa and the Indian Ocean*, pp. 83-85, 88-90; Sheriff, *Slaves*, pp. 71-72.

<sup>91</sup> Mandala, *Work*, p. 97.

<sup>92</sup> 'Nyasaland, report for 1927', pp. 11-12; Pankhurst, *Economic history of Ethiopia*, pp. 261-262.

and northern East Africa faced competition from foreign imports earlier and in greater quantities but competed very effectively with – and were even stimulated by – imported machine-made cloth. What of the suggested role of favorable agricultural terms of trade as a primary motivator for deindustrialization and cash-crop production theorized by Williamson? This is, again, an unconvincing assertion in the case of the Lower Shire Valley. Global terms of trade for oilseeds had actually declined substantially relative to cloth just before the valley abandoned cloth production in favor of export-oriented sesame cultivation in the second half of the nineteenth century. A substantial improvement in oilseed terms of trade occurred only in the late-1890s, decades after the domestic cloth industry had deteriorated.

Rather, the choice of Mang'anja villagers to permanently abandon cloth production can best be explained by shifting local conditions, particularly a sharp decline in labor immediately preceding an increase in fertile land. Within this altered local context, labor-intensive cloth production had simply become less feasible relative to agricultural production for subsistence and export. In the more densely populated regions of West Africa and northern East Africa, larger labor supplies and expansive internal markets allowed cloth production to thrive alongside cash-crop agriculture as rising incomes stimulated further demand for local and foreign cloth. The already comparatively large populations of these regions were further augmented by slaves, whose additional labor simultaneously provided industry-supporting inputs, food sources, and export commodities.

The valley's altered factor-endowment ratio was partly influenced by global forces, especially the growth in global demand for slave-produced commodities. But the ultimate impact was conditioned by the local context. In the valley, destructive and disruptive slave raiding interacted with multi-year drought conditions to produce a deadly famine that resulted in stark attenuation of the Mang'anja population. Northern East Africa also experienced severe famine in the late nineteenth century, but large populations and entrenched servile labor systems helped mitigate labor deficiencies in the period that followed. In fact, the centralized Ethiopian state sourced fresh labor from newly conquered regions. This was not possible in the decentralized, labor-scarce Lower Shire Valley of the mid-nineteenth century, where forced labor institutions were weak. When combined with rapidly intensified labor scarcity, the environmentally contingent emergence of rich, cultivable land tipped the valley's factor-ratio balance in favor of export-oriented cultivation and deindustrialization. This illustrates how, as posited by Mandala, environmental conditions can influence social and economic outcomes within the parameters of the local institutional and historical context.

By the beginning of the colonial period, Mang'anja production choices became increasingly sensitive to global forces as the valley's economy had come to depend entirely on agricultural exporting. The adoption of oilseed production in the 1870s and 1880s had largely been a response to local circumstances, but the early-twentieth-century abandonment of oilseeds in

favor of raw cotton exporting was in large part a response to global market opportunities. Again, however, local environmental developments had made the transition possible. With respect to colonial forces, British institutional policies and agendas did not directly influence deindustrialization. However, certain colonial schemes did provide indirect incentives for villagers to continue focusing labor on household-based agricultural production for subsistence and export crops rather than working on European plantations or pursuing a reinvigoration of the cloth industry as raw cotton supplies increased in the twentieth century.

However, the choice to forgo reindustrialization is also linked to local circumstances. Prior to deindustrialization, historically contingent local factors had likely disincentivized the adoption of more efficient cloth production techniques, which may have made a reverse reallocation of some labor from export-oriented agriculture to cloth production more feasible and profitable. More efficient methods had been developed to supply large populations in places like Nigeria and Ethiopia, where cloth production thrived well into the twentieth century and benefitted from demand-enhancing sectoral linkages.

Household-based cash-crop agriculture remained the keystone of the Mang'anja economy until the valley's factor-endowment ratio – and, thus, production possibilities – again changed. At the end of the 1930s, the cash-crop economy collapsed when the dambo wetlands became once again submerged as the Shire River suddenly returned to its pre-1870s annual dry-season level with the breakup of a large sandbar at the mouth of Lake Malawi. At nearly the same time, the Great Depression caused global cotton prices to plummet. Increased sensitivity of the valley's economy to global market forces strongly intensified the effects of ecological change, and the impact was harsh and far-reaching. The now-undiversified valley economy was unable to absorb the local shock of diminished land and the global shock of falling prices, and many Mang'anja men became migrant laborers almost overnight. Formerly balanced gender power relations became skewed in favor of males as women lost their stake in raw cotton exporting and were often forced to rely on male family members for economic assistance.<sup>93</sup> Food security was regularly compromised as villagers now depended primarily on drought-sensitive drylands.<sup>94</sup> Thus, over the course of less than a century, the interaction of local and global forces had produced numerous substantial social and economic changes in the valley, including the decline of industry, the rise of export-oriented agriculture and global integration, and, eventually, the breakup of Mang'anja households and villages.

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As this case study has illustrated, the deindustrialization of the Lower Shire Valley occurred *before* imports of foreign-made cloth began to increase substantially. In the deep interior of

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<sup>93</sup> Davison, 'Tenacious women', p. 411.

<sup>94</sup> Mandala, *Work*, pp. 7, 189.

neighboring Tanzania, on the other hand, industrial decline would occur later, *in the midst* of increasing cloth imports into East Africa. As a starting point for uncovering how and to what extent rising import levels ultimately affected domestic cotton textile industries in Tanzania, we now take a close look at what influenced the scale and composition of cloth imports into the region during the nineteenth century.

## CHAPTER 3

### RISE OF THE COASTAL CONSUMER: COAST-SIDE DRIVERS OF EAST AFRICA'S COTTON CLOTH IMPORTS, 1830-1900

#### 3.1 Introduction

For much of the second millennium, East Africa engaged in modest trade with the Indian Ocean world, but beginning in the mid-1830s, the region's participation in global trading began to change in unprecedented ways as the island of Zanzibar, adjacent to the central East African Swahili coastline (Map 3.1), rapidly became the “key to trade” in East Africa under the tutelage of the Sultan of Oman.<sup>1</sup> European and American traders began flocking to the island to purchase East African products required for developing industries and increasingly worldly consumers. In exchange, the island entrepôt imported manufactures – especially cotton cloth from the United States, India, and the United Kingdom<sup>2</sup> – which were largely re-exported to the mainland.<sup>3</sup>

I argue that the scale and composition of nineteenth-century foreign cloth imported into East Africa, principally via Zanzibar, depended largely on a series of changes in trade and production on Zanzibar, along the East African coast, and in the coastal hinterland.<sup>4</sup> During the first half of the nineteenth century, import growth was driven in large part by hyper-competitive practices of opposing trading groups on Zanzibar, particularly American merchants who brought high-quality unbleached cotton cloth referred to locally as *merekani*.<sup>5</sup> Prestholdt points to “increasing commodification of produce and people” as a stimulus for “enormous demand” for imported cloth in East Africa already by the 1840s.<sup>6</sup> Export-oriented production and the consumption of imported cloth was certainly increasing by the second quarter of the century, but a massive commodification-driven boom in demand for foreign-produced cloth would await the 1870s (see Figure 3.1), which saw a rapid rise in the export of coastal and coastal hinterland products – especially cloves, gum copal, rubber, and hides and skins – which stimulated consumption on and near the coast. Imports of the durable American-made *merekani* cloth, which had developed

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<sup>1</sup> William S. Speer, ‘Report on Zanzibar’, 1862, RG 59, Consular Correspondence, 1789-1906, Despatches from Consular Officers, Volume 3509 (Book 4), NACP, pp. 30-31.

<sup>2</sup> French and German merchants also traded in nineteenth-century Zanzibar, but the French brought few manufactures, while most German imports were typically not consumed throughout the mainland. Rigby, ‘Report’, p. 24; Glassman, *Feasts and riot*, p. 51.

<sup>3</sup> For the development of Zanzibar's commercial activity, see Sheriff, *Slaves*.

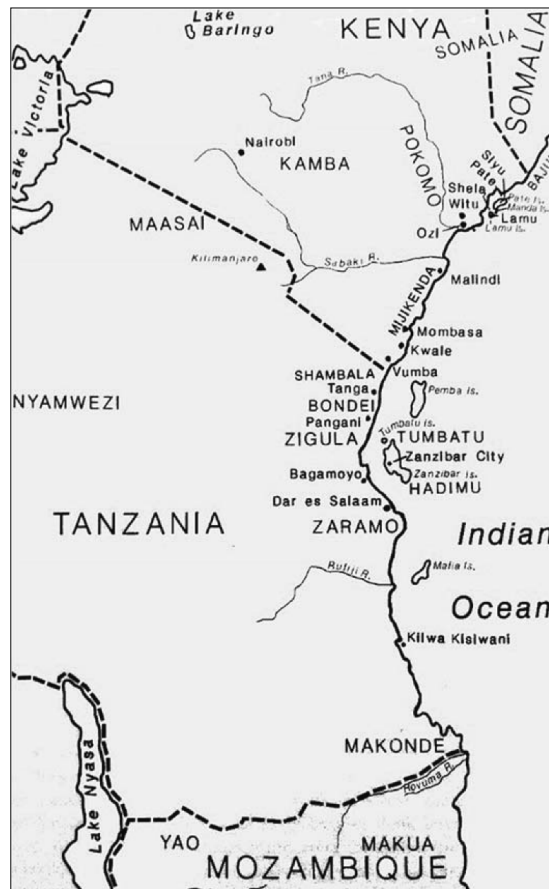
<sup>4</sup> The coastal hinterland spans 200-300 km inland. Pawelczak, *The state*, pp. 18-19.

<sup>5</sup> In this study, “*merekani*” is used only in reference to the original American-made unbleached sheeting.

<sup>6</sup> Prestholdt, *Domesticating the world*, p. 75.

a persistent following in the interior of East Africa, were quickly surpassed by imports of lower-quality, but cheaper Indian-made and – to a lesser degree – British-made cloth, which I argue were principally linked to a consumer revolution among burgeoning coastal and coastal hinterland producers. The aim here is not to revive the “long tyranny of the coast” over East African historiography.<sup>7</sup> Rather, it is to ultimately demonstrate the comparatively limited flow of foreign cloth into the interior of East Africa during the second half of the nineteenth century.

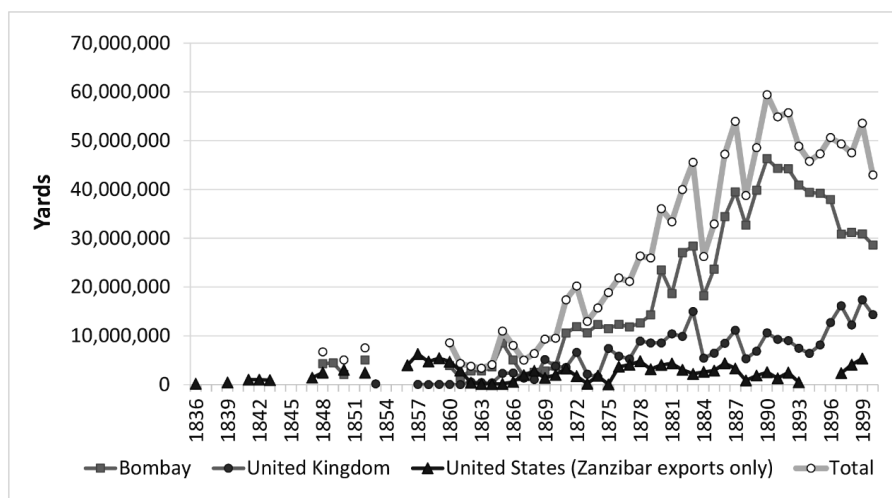
**Map 3.1 The central East African coastline**



Source: Middleton, *The world of the Swahili*, p. 4

<sup>7</sup> Roberts, 'Introduction', p. v.

**Figure 3.1 Cloth imports into East Africa by origin, 1836-1900**



Sources: See Appendix 1. Refer to section (a) for sources for nineteenth-century East African cloth imports. Notes: Indian and British figures include direct exports to Zanzibar and other East African destinations, especially Mozambique. American figures reflect direct exports to Zanzibar, where American trade was concentrated.<sup>8</sup>

### 3.2 American competition and the rise of merekani, 1833-1861

As late as 1834, Zanzibar's trade was "very trifling," amounting to exports of "a little gum and ivory [...] with a few cloves" and imports of "dates, and cloth from Muscat to make turbans."<sup>9</sup> Trade ramped up with the arrival of American merchants, who dominated East Africa's Zanzibar-centered international trade from the mid-1830s up to the start of the American Civil War in 1861.<sup>10</sup> Initially, Americans exported large amounts of specie, and the trade goods they did carry were ill-suited for the East African market.<sup>11</sup> But as the decade progressed, American merchants found their export niche: unbleached cotton cloth.<sup>12</sup> Along with brass wire, muskets,

<sup>8</sup> American trade with Mozambique was limited. American traders were discouraged by "exorbitant" Portuguese tariffs "particularly on the American trade" and "various vexatious" extractive activities that persisted at Mozambique ports through the century. Edmund Roberts, 'Voyage from Muscat to Mozambique', mid-1830s, Box 2, Reel 1, Edmund Roberts Papers, LOC (first quote); *Commercial relations, 1857*, p. 185; *Commercial relations, 1894-95*, p. 271 (second quote). Direct American trade with the Benadir ports on the Somali coast picked up from the 1880s, but figures for this trade are unavailable.

<sup>9</sup> Captain Hart of the H.M.S. *Imogene* (1834) quoted in Burton, *Zanzibar*, vol. 1, p. 469.

<sup>10</sup> Between 1832 and 1835, American vessels trading at Zanzibar shipped 5,497 tons of merchandise, while the English shipped 1,403 tons. French and Spanish merchants brought only 340 and 319 tons, respectively. Edmund Roberts to John Forsyth, Secretary of State, 10 October 1835, Box 3, Reel 2, Edmund Roberts Collection, LOC.

<sup>11</sup> John Waters to David Pingree, 7 December 1833, Box 75, Folder 7, MSS 901, PEM; Sheriff, *Slaves*, p. 92.

<sup>12</sup> For the introduction of merekani cloth and its rapid ascendancy over competitors, see Prestholdt, *Domesticating the world*, pp. 73-75; Sunseri, 'Political ecology', p. 211.

gunpowder, tobacco, and soap, they began shipping increasing quantities of durable merekani cloth, which came to be “the foundation of all [American] Zanzibar business” and quickly dominated the Zanzibar market.<sup>13</sup> The British share in the cloth trade was minimal during this period, although dyed cloth exported by India maintained an important position in the market.<sup>14</sup> Unbleached merekani became particularly instrumental for inland-bound caravans seeking ivory from the interior, where a steadfast preference for the American cloth – often referred to as “domestics” – developed and would persist well into the twentieth century. Alongside other imported goods and traditional interregional trade goods, merekani quickly became an essential commodity currency circulating in the interior of central East Africa, where trade caravans exchanged the cloth for tusks, food, water, and the right to safely pass through territories.<sup>15</sup>

By the close of the 1830s, American merchants had established a system of credit whereby vessels arriving at Zanzibar left bales of merekani cloth and other American goods with resident Indian sales agents before departing for other Indian Ocean destinations, particularly Mocha, Aden, and Muscat, where they exchanged still more merekani for dates, coffee, and hides. Back on Zanzibar, agents bartered the American goods for consignments of East African products, which were later loaded onto American ships making return stops to the island before heading homeward.<sup>16</sup>

#### *The price of competitive trade*

Merekani was well-received on the coast and crucial for the interior ivory trade, but contemporary sources suggest that, more than a rapid ascent of local demand, aggressive trading games had the strongest hand in influencing the mounting supply of cloth imported into Zanzibar during the early period of increasing global integration. Correspondences between American trading firms, Zanzibar sales agents, and ship captains reveal how American trading tactics forced up the supply of cloth during the heyday of American trading at Zanzibar (c. 1830-1861). In spite of the American cloth’s popularity, by the 1840s the Zanzibar cloth market was perpetually depressed, and demand remained stagnant, even during periods when both prices and cloth stocks were low.<sup>17</sup>

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<sup>13</sup> William W. Goodhue to William H. Seward, 28 September 1863 in Bennett and Brooks, eds., *New England*, p. 523.

<sup>14</sup> Bennett, ‘Americans in Zanzibar: 1845-1865’, p. 32; Burton, ‘Lake’, pp. 429-430.

<sup>15</sup> Burton, ‘Lake’, p. 442; Cave, ‘Report for the year 1898’, p. 14; Rockel, *Carriers*, p. 220. Cloth currency in the interior is discussed in detail in the next chapter.

<sup>16</sup> Sheriff, *Slaves*, p. 96. For the Indian Ocean trading destinations and cargoes of American ships, see shipping records from MH 23, MH 235, MSS 901, and MSS 24 series, PEM; ‘Arrival and Departure of American Vessels, Jan 1 1857 to June 29 1894’, RG 84, Consular Posts, Zanzibar, British Africa, Volume 084, NACP.

<sup>17</sup> For example, in 1851, it was reported at Zanzibar that cloth “stocks in the market [are] small, but [there is] no demand for them.” William H. Jelly to George West, 27 January 1851, Box 10, MH 235, PEM.

Fierce competition had quickly erupted among foreign traders at Zanzibar, particularly between members of rival American trading firms headquartered in Salem, Massachusetts.<sup>18</sup> Eighty percent of vessels entering Zanzibar from the United States on trading voyages between 1832 and 1835 came from the small American port town.<sup>19</sup> An enduring pattern developed in which merchants of competing concerns – American or otherwise – purposefully paid higher prices for East African exports in an effort to simulate strong demand and preemptively force up prices (usually in terms of imported manufactures, especially cloth) for competitors known to be en route to Zanzibar.<sup>20</sup> Thus, prior to the American Civil War, steadily increasing prices of Zanzibar’s exports relative to foreign manufactures were significantly affected by the artful and often vindictive dealings of traders.<sup>21</sup>

American competitors were particularly aggressive in the cloth trade. One captain wrote that, although cloth prices at Zanzibar were thoroughly depressed, he sold at still lower prices, for it was “good policy to crowd the Zanzibar market to leave no opening there.”<sup>22</sup> Such tactical maneuvering resulted in an almost permanent overstocking of imported goods, especially unbleached American cotton sheeting, as Salem merchants sent ever-larger quantities of the cloth at progressively lower prices, a dynamic that was amplified by increasing output of New England textile mills and rising competition for East Africa’s exports.<sup>23</sup> By the 1840s, sales agents at Zanzibar were advising American firms to send much smaller quantities, but ships continued to arrive with larger loads (see Figure 3.2).<sup>24</sup> As the decade advanced, sales became progressively more “dull” as American traders held out for an upswing that would not come for several decades.<sup>25</sup>

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<sup>18</sup> Bennett, 'Americans in Zanzibar: 1825-1845', p. 256; Bennett, 'Americans in Zanzibar: 1845-1865', pp. 32, 44-47.

<sup>19</sup> 'List of Foreign Arrivals in the Port of Zanzibar from the 16th Septem. 1832 to 26th May 1835', Box 4, Reel 3, Edmund Roberts Collection, LOC.

<sup>20</sup> William H. Jelly to the owners of *Lucia Maria*, 28 July 1849, MH 235, Box 11.

<sup>21</sup> American merchants also undercut European buyers of goods like gum myrrh simply to “prevent it going to England.” Similarly, in 1870, American merchants complained that ivory prices had been punitively forced up by German buyers angered by American purchases of orchilla weed. Michael Shepard to Francis Webb, 22 October 1849, Box 4, Folder 4, MH 23, PEM; Francis Webb to John Bertram, 22 January 1870, Box 3, Folder 2, MSS 104, PEM; Francis Webb to John Bertram, 18 April 1870, Box 3, Folder 1, MSS 104, PEM.

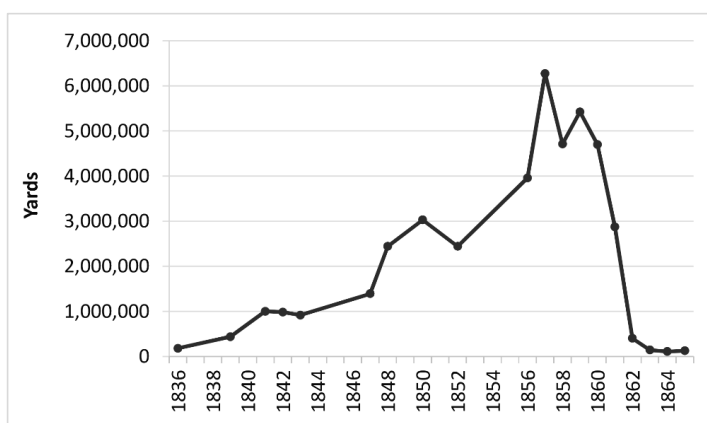
<sup>22</sup> Francis Webb to Michael Shepard, 8 December 1849, Box 4, Folder 4, MH 23, PEM.

<sup>23</sup> For the rapid rise in New England textile output from 1826 to 1860, see Davis and Stettler, 'New England', p. 221.

<sup>24</sup> Richard P. Waters to John G. Waters, 2 September 1843 in Bennett and Brooks, eds., *New England*, p. 246.

<sup>25</sup> Richard P. Waters to Said bin Khalfan, 1 July 1843 in *ibid.*, 245; William H. Jelly to Richard P. Waters, 17 December 1845 in *ibid.*, 348; William H. Jelly to the owners of *Lewis*, 26 September 1849, Box 9, MH 235, PEM.

**Figure 3.2 Exports of merekani from the United States to Zanzibar, 1836-1865**



*Sources:* Shipping records from MH 23, MH 235, MSS 901, and MSS 24 series, PEM; 'Arrival and Departure of American Vessels, Jan 1 1857 to June 29 1894', RG 84, Consular Posts, Zanzibar, British Africa, Volume 084, NACP.

The situation came to a head during the 1850s, which saw the peak of American-controlled trade at Zanzibar. Prices for cloth had increased on the American market at the start of the decade as the price of raw cotton shot up by 75 to 100 per cent.<sup>26</sup> And although it was clear at Zanzibar that “cottons in this trade at present prices in such quantities must prove a ruinous business,” American merchants had locked themselves into a competitive pricing game from which none would disengage.<sup>27</sup> Stocks of imported merekani continued to swell, while East African demand did not expand apace. American sales agents at Zanzibar again beseeched merchants at home to curb their competition and reduce shipments to the saturated East African market.<sup>28</sup> But the advice was largely ignored for fear that “others by our over-caution may obtain advantage over us.”<sup>29</sup> To compound matters, by the early 1850s, Salem merchants were losing their control over American trade with Zanzibar. Ships from Providence, Boston, and New York increasingly arrived with their own loads of merekani.<sup>30</sup>

In 1851, Indian merchants in Zanzibar reportedly refused to buy cloth cargoes for distribution, for they were “obliged to retail them at the same as they give for them, and often times for less” as imported stocks continued to exceed local demand.<sup>31</sup> Salem agents in Zanzibar even began

<sup>26</sup> Michael Shepard to Capt. Wm. B. Bates, 20 January 1850, Box 11 Folder 2, MH 23, PEM.

<sup>27</sup> William B. Bates to Michael Shepard, 24 March 1850, Box 11, Folder 2, MH 23, PEM.

<sup>28</sup> William H. Jelly and Samuel Masury to Ephraim Emmerton, 19 July 1851, Box 23, MH 235, PEM; Bennett, 'Americans in Zanzibar: 1845-1865', pp. 47, 52.

<sup>29</sup> George West to Capt. Stephen Cloutman, Salem, January (no day) 1852, Box 23, MH 235, PEM.

<sup>30</sup> Jelly and Masury to Emmerton, 19 July 1851; Bennett, 'Americans in Zanzibar: 1845-1865', p. 44.

<sup>31</sup> Jelly and Masury to Emmerton, 19 July 1851.

purchasing the cloth of competing American shipping concerns off the Zanzibar market to boost sales opportunities for their affiliates sailing to Zanzibar.<sup>32</sup> But it did little good. As one captain reflected, the Zanzibar market had become “anything but promising.”<sup>33</sup> The problem of oversupply and low demand persisted into the late 1850s, which saw imports from the United States “so excessive that considerable losses have been submitted to [...] there is nothing that can be sent here from the U. States which is likely to pay a profit.”<sup>34</sup>

#### *Northern and southern markets*

Efforts were made to cope with lackluster demand and low cloth prices at Zanzibar by re-exporting large loads of imported cloth beyond East African markets.<sup>35</sup> Although prices for merekani had declined throughout the western Indian Ocean trading world from the 1830s, prices at Arabian Peninsula ports, where demand for merekani remained more buoyant, were consistently higher than in Zanzibar (see Table 3.1).<sup>36</sup> This trend would continue until at least 1870.<sup>37</sup> Madagascar and the Comoros Islands also provided a valve for overflowing Zanzibar stocks, frequently absorbing “a good pack of the stock” and “somewhat relieving the market.”<sup>38</sup>

**Table 3.1** Average price per bale of merekani (\$US<sup>39</sup>)

	Zanzibar	Muscat	Mocha	Aden
1836	99	-	-	-
1839	81	80*	90	-
1841	64	71	71	-
1842	56	75*	71*	-
1843	58	69	72*	-
1847	60	65	70*	-
1848	57	59*	65*	59
1850	53	57	60	58
1852	50	58	-	58

*Sources:* Shipping records, PEM (see Figure 3.2 sources). \*Indicates figures derived from a single shipping record observation.

<sup>32</sup> William Masury to George West, 4 May 1852, Box 23, MH 235, PEM.

<sup>33</sup> Robert H. Waters to George West, 2 February 1852, Box 10, MH 235, PEM.

<sup>34</sup> Daniel H. Mansfield to Lewis Cass, 31 December 1857 in Bennett and Brooks, eds., *New England*, p. 502.

<sup>35</sup> William McMullan to Michael Shepard, 23 June 1848, Box 7, Folder 1, MH 23, PEM.

<sup>36</sup> John F. Webb to Benjamin F. Fabens, 2 February 1844 in Bennett and Brooks, eds., *New England*, p. 247.

<sup>37</sup> Francis Webb to John Bertram, 19 July 1870, Box 3, Folder 3, MSS 104, PEM.

<sup>38</sup> William H. Jelly to the owners of *Lucia Maria*, 22 February 1849, Box 11, MH 235 (first quote); William H. Jelly to George West, 23 March 1850, Box 9, MH 235, PEM (second quote); McMullan to Shepard, 23 June 1848; William H. Jelly to the owners of *Lucia Maria*, 13 February 1850, Box 11, MH 235, PEM.

<sup>39</sup> The value of the US dollar was nearly equal to the Maria Theresa thaler (\$MT) circulating on the coast, at \$MT 1.00 = \$US 0.972 in 1862. Speer, “Report on Zanzibar,” 1862, RG 59, vol. 3509 (Book 4), NACP, 57.

While it may seem to have been ostensibly wiser for American merchants to redirect their trade entirely to ports with higher demand for merekani, demand in the United States was particularly high for exports shipped from Zanzibar, including gum copal used to make varnishes.<sup>40</sup> However, by the 1850s, the situation had become so dire that some American vessels avoided landing cloth at Zanzibar altogether and instead took their cloth cargoes straight to other western Indian Ocean destinations.<sup>41</sup>

Higher prices at Arabian ports may have been partly indicative of stronger demand for American cloth in northern East Africa, which developed an unwavering preference for merekani.<sup>42</sup> A late-nineteenth-century American commercial report noted that merekani imports into Aden “cross to the African coast into Somaliland, Abyssinia, and Eritrea, whence they are carried to the interior by camel caravans to Harrar and other places 300 and 400 miles from the coast.”<sup>43</sup> This flow of goods likely extended back to the mid-nineteenth century, when expensive Ethiopian slaves were in particularly high demand in Muscat, for example, which often shipped its merekani imports to the entrepôt of Aden.<sup>44</sup> Thus, to some degree, lackluster mid-nineteenth-century demand in Zanzibar and the adjacent central East African mainland may have helped stimulate increased consumption of merekani cloth in northern East Africa, where local cloth production evolved alongside foreign imports.<sup>45</sup>

#### *Why didn't demand match supply?*

The re-export of cloth from Zanzibar to northern Arabian ports and Madagascar probably did provide some relief for the glutted Zanzibar market. However, even when supplies decreased in Zanzibar – as in April 1849 when the stock dropped to 100 bales (roughly 7,800 yards) after 600 bales had been shipped to Madagascar – neither demand nor prices rose.<sup>46</sup> Although American merchants had pushed cloth onto the East African market, the proverbial fish was not biting. This was not a question of quality or preference, for the high quality of merekani relative to its rivals was touted time and again up to the close of the century.<sup>47</sup> I argue that this was a

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<sup>40</sup> David Pingree, John G. Waters, and George West to Richard P. Waters, 22 February 1844, Box 1, Folder 4, MH14, PEM; George West to Robert H. Waters, 9 October 1851, Box 10, MH 235, PEM.

<sup>41</sup> Jelly to owners of *Lucia Maria*, 13 February 1850.

<sup>42</sup> Portal, 'Report on the situation', pp. 11, 32; Powell-Cotton, *Sporting*, p. 512.

<sup>43</sup> Cunningham, 'Asia: Aden', p. 957. See also Stace, 'Report for the year 1891-92', p. 5.

<sup>44</sup> Buckingham, 'Muscat', p. 92; Wellsted, *Arabia*, p. 389. For merekani exports, see Captain Bates to Michael Shepard, 8 July 1850, Box 11, Folder 2, MH 23, PEM.

<sup>45</sup> For discussion of domestic cloth production in northern East Africa, see Chapter 6.

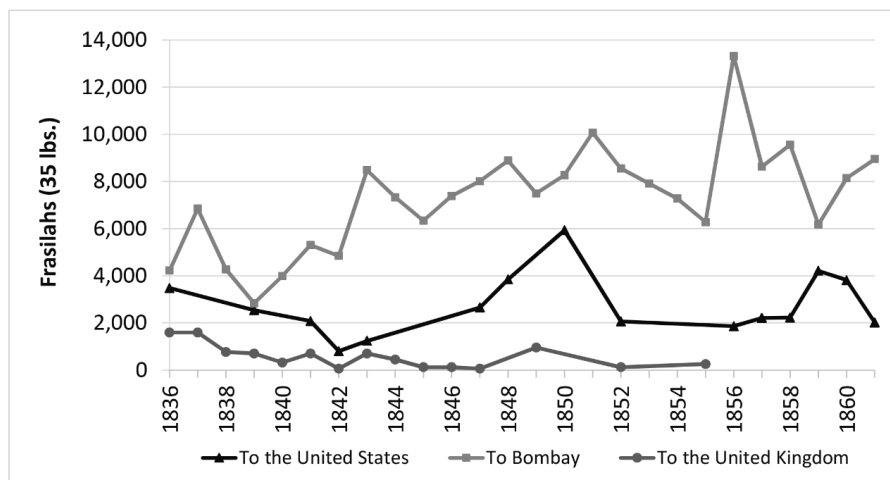
<sup>46</sup> William H. Jelly to the owners of *Lucia Maria*, 22 February 1849; William H. Jelly to the owners of *Lucia Maria*, 16 April 1849, Box 11, MH 235, PEM.

<sup>47</sup> See Prestholdt, *Domesticating the world*, p. 74; Cave, 'Report for the year 1897', pp. 13-14.

problem of economic timing, for demand for imported cloth *would* rise quite dramatically two decades later and at prices roughly equivalent to those of the late-1840s and 1850s.

The American unbleached cloth, which quickly became a staple of inland-bound caravans, did enjoy strong links with the Zanzibar ivory trade from the 1830s onward.<sup>48</sup> However, increasing imports of cloth into Zanzibar seem to have been less determined by demand emerging from the ivory trade and more a consequence of American trade tactics. While ivory exports from Zanzibar to the United States increased at various points between the 1830s and the start of the American Civil War in 1861, it was not with the same sustained upward momentum as American exports of merikani cloth (see Figure 3.3 relative to Figure 3.2). The growth of East African ivory exports to Bombay was more impressive, although before the 1870s roughly half (and often more) of Bombay's reciprocal exports to East Africa was comprised of goods other than cloth, especially beads and brass wire – also used for caravan purchases in the interior – along with grain consumed on the East African coast.<sup>49</sup> Annual American exports to Zanzibar, on the other hand, were regularly made up almost entirely of cloth (86 to 95 percent of total annual export values) prior to the American Civil War.<sup>50</sup>

**Figure 3.3 Ivory exported from East Africa, 1836-1861**



*Sources:* United States: 1836-1852: shipping records, PEM (see Figure 3.2 sources); 1856-1861: 'Arrival and Departure of American Vessels, Jan 1 1857 to June 29 1894', RG 84, Volume 084, NACP. Bombay and UK: Sheriff, *Slaves*, pp. 249-258. *Notes:* (1) Bombay and UK data include ivory exported from Zanzibar and other East African ports, especially Mozambique, where American trade was comparatively limited (see footnote 8). (2) American data up to 1852 is based on records of Salem ships. Thereafter, vessels of all American origin are reflected in the data.

<sup>48</sup> Bennett, 'Americans in Zanzibar: 1865-1915', p. 46; Rigby, 'Report', p. 21.

<sup>49</sup> In 1850, only 35 percent of the value of Bombay's exports and re-exports to East Africa was comprised of cloth. The cloth share rose to 56 percent in 1860 and 72 percent in 1870. Bombay trade reports, 1850-1870, BL.

<sup>50</sup> See sources for Figure 3.2.

Why didn't ivory-seeking caravans simply stock significantly more merekani cloth for ventures to the interior as the Zanzibar cloth market became glutted and cloth prices dropped? This would have helped relieve the entrepôt's market. Crucially, however, as a caravan moved farther into the interior, the relative value of cloth increased enormously, meaning that less yardage was required to purchase ivory.<sup>51</sup> This was a result of both relative scarcity of foreign cloth in the interior and high transportation costs. Naturally, it was in the best interest of caravan financiers to foster this existing system of "buying cheap and selling dear."<sup>52</sup> Thus, even as cloth stores increased in Zanzibar as American merchants drove stocks up, caravan traders and financiers were understandably disinclined to send any more yards of cloth on interior-bound caravan journeys than was necessary. Beyond potentially altering these favorable terms of trade by increasing the cloth supply in the interior, caravan operators also had to pay porters to carry the goods inland. The larger the interior-bound haul, the higher the cost in total porter wages.<sup>53</sup>

What about other potential merekani consumers? Zanzibar elites were primarily wearing finer cloth of Muscat make, so they did not form a ready market for the unbleached American cloth.<sup>54</sup> However, other groups living on and near the coast did consume a portion of the merekani cloth imported into East Africa. By mid-century, the growing slave population of Zanzibar and the adjacent mainland coast consumed American cloth, as well as indigo-dyed *kaniki* imported from India.<sup>55</sup> People living on and near the coastline also consumed imported cloth – often procured by trading modest amounts of gum copal – which included merekani, along with Arab and Indian checked, printed, or dyed cloth.<sup>56</sup> Importantly, however, a pronounced growth in coastal demand for imported cloth would await the more extensive development of East Africa's coastal and coastal hinterland export production, which expanded rapidly in the early 1870s, enhancing the consumption possibilities of ordinary coastal and coastal hinterland consumers.

#### *A note on American munitions, the slave trade, and cloves*

While the Zanzibar market was frequently glutted with American cloth imports between the late 1830s and early 1860s, American muskets and gunpowder generally enjoyed strong

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<sup>51</sup> For details on increasing prices of Zanzibar's imports as they moved inland, see Burton, 'Lake', pp. 57, 423, 429.

<sup>52</sup> Koponen, *People and production*, pp. 55, 67-68.

<sup>53</sup> On porter wages, see Rockel, *Carriers*, pp. 211-228.

<sup>54</sup> Rigby, 'Report', p. 8. However, they may have retained some merekani as a store of wealth.

<sup>55</sup> See Fig. 2 in Fair, 'Dressing up', p. 65; Burton, 'Lake', pp. 429, 431; McMahon, *Slavery*, p. 131.

<sup>56</sup> Sunseri, 'Political ecology', pp. 210-212; Prestholdt, *Domesticating the world*, p. 73; Burton, 'Lake', pp. 54, 429-430.

demand.<sup>57</sup> By at least the early 1840s, American merchants were purchasing portions of their Zanzibar cargoes with munitions, which were subsequently re-exported south to Kilwa in exchange for slaves, thus indirectly supporting the development of Zanzibar's slave plantation system, which would provide one of East Africa's major nineteenth-century exports: cloves.<sup>58</sup>

As global demand for cloves grew and the population of slaves on Zanzibar increased, the production of cloves grew enormously, increasing 1,566 percent between 1839 and 1849.<sup>59</sup> However, sales of American muskets were abruptly disrupted in the early 1850s, revealing the depth of their relationship with the slave trade. In the summer of 1850, Zanzibar's Sultan forbade Banyans and Hindus from engaging in slave trading within his dominion, which effectively "paralised [*sic*] all trade at Kilwa" and consequently arrested demand for American muskets at Zanzibar.<sup>60</sup> Muskets had rapidly become "a bad article for this market," and prices fell by nearly half.<sup>61</sup> Zanzibar's slave trade regained footing by the mid-1850s and so too did American sales of muskets. From an estimated \$2,475 worth of American muskets sold by Salem merchants at Zanzibar in 1852, total American musket sales climbed to \$32,125 in 1858.<sup>62</sup> Zanzibar's slave trade grew rapidly, and the island's slave plantations soon came to produce the majority of the world's cloves, forming a cornerstone of the East African coastal production system.<sup>63</sup>

#### *The decline of American trade domination at Zanzibar*

In 1861, the American Civil War forced a sudden withdrawal of Americans from the East African trade.<sup>64</sup> The price of American cloth had increased immensely at home, temporarily forcing the few remaining Americans trading on Zanzibar to purchase English cloth for barter or rely on specie and goods like codfish and soap.<sup>65</sup> In general, the American departure from

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<sup>57</sup> Jelly to the owners of the *Lucia Maria*, 22 February 1849; Jelly to the owners of *Lucia Maria*, 16 April 1849. Americans remained major suppliers of arms and ammunition until the American Civil War. Bennett, 'Americans in Zanzibar: 1845-1865', p. 54.

<sup>58</sup> See, for example, 'Account of sales of merchandise at Zanzibar for account of owners of Brig Cherokee', 6 June 1840, Box 2, Folder 6, MH 23, PEM. On the systematic exchange of American munitions for Kilwa slaves, see Samuel Masury to the owners of the *Lucia Maria*, 17 July 1850, Box 11, MH 235, PEM.

<sup>59</sup> See Table 2.3 in Sheriff, *Slaves*, p. 62.

<sup>60</sup> Masury to the owners of *Lucia Maria*, 17 July 1850.

<sup>61</sup> William H. Jelly to the owners of *Lucia Maria*, 31 August 1850, Box 11, MH 235, PEM; Prices fell from \$4.25 per musket in 1849 to \$2.62 in 1851. William H. Jelly to the owners of the *Lucia Maria*, 22 February 1849; William H. Jelly to George West, 27 January 1851.

<sup>62</sup> 1852: Salem-Zanzibar shipping records from MH 23 and MH 235 series, PEM. In 1852, nearly three-quarters of American trade vessels visiting Zanzibar came from Salem. 1858: 'Arrival and Departure of American Vessels, Jan 1 1857 to June 29 1894', RG 84, Volume 084, NACP.

<sup>63</sup> William H. Hines to William H. Seward, 25 October 1864 in Bennett and Brooks, eds., *New England*, p. 527.

<sup>64</sup> Speer, 'Muscat. Zanzibar.', p. 553; Bennett, 'Americans in Zanzibar: 1845-1865', pp. 53-56.

<sup>65</sup> Goodhue, 'Muscat. Island of Zanzibar', p. 605; Bennett, 'Americans in Zanzibar: 1845-1865', pp. 55-56.

Zanzibar's trade created a greater space for other foreign merchandise, especially English cloth re-exported from India, particularly by Bombay merchants.<sup>66</sup> However, the price of raw cotton rose during the American Civil War as global access to American raw cotton dwindled.<sup>67</sup> Global cloth prices consequently increased dramatically. Such unattractive wartime prices, passed on to the East African consumer, must have done little to raise demand, and total cloth import levels dipped during the first half of the 1860s (see Figure 3.1).

Just as suddenly as American trade in East Africa had halted, it resumed with vigor after the Civil War came to a close. But merchants returned to find that *merehani's* "almost-monopoly" in the Zanzibar cloth market had vanished.<sup>68</sup> Bennett has argued that local consumers only purchased Indian and European cloth "when there was no alternative."<sup>69</sup> Yet Americans found that in the late 1860s and early 1870s buyers frequently ignored *merehani* in favor of the lower-quality English unbleached cloth that had increasingly entered the market in its wartime absence.<sup>70</sup> Sturdy American cloth retained a loyal market in the East African interior and would consequently continue to play a crucial role in Zanzibar's ivory export trade.<sup>71</sup> But the marked upturn in total cloth imports that would soon begin in the early 1870s would be perpetually dominated by Indian- and English-produced varieties.<sup>72</sup>

### 3.3 The rise of coastal and coastal hinterland producers

Bennett suggests that a rise in Indian-made cloth imports into Zanzibar was influenced by the active maneuvering of powerful Indian merchant Taria Topan.<sup>73</sup> However, this shift undoubtedly had much to do with responses to relative prices among East African consumers whose changing demand patterns would aid in "remaking Bombay" into an industrial center.<sup>74</sup> Cloth prices in the Zanzibar market began to decline across the board after spiking in the mid-

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<sup>66</sup> While Kutch and Surat had historically participated in Zanzibar's trade, Bombay exporters dominated India's trade with the island by the 1860s, taking advantage of the decline of American trade. Bombay merchants first re-exported mostly English cloth but would shift to exporting mostly Bombay-made cloth from the early 1870s. Prestholdt, *Domesticating the world*, pp. 77-80.

<sup>67</sup> Farnie, *Cotton*, p. 162.

<sup>68</sup> Webb, 'Report on the commerce of Zanzibar for the year ending September 30, 1871', p. 704.

<sup>69</sup> Bennett, 'Americans in Zanzibar: 1865-1915', p. 37.

<sup>70</sup> Edward D. Ropes to John Bertram, 9 June 1867, Box 3, Folder 1, Correspondence No. 107, MSS 104, PEM; Francis Webb to John Bertram, 13 April 1870, Box 3, F1, MSS 104, PEM.

<sup>71</sup> Bennett, 'Americans in Zanzibar: 1865-1915', pp. 46-48, 60.

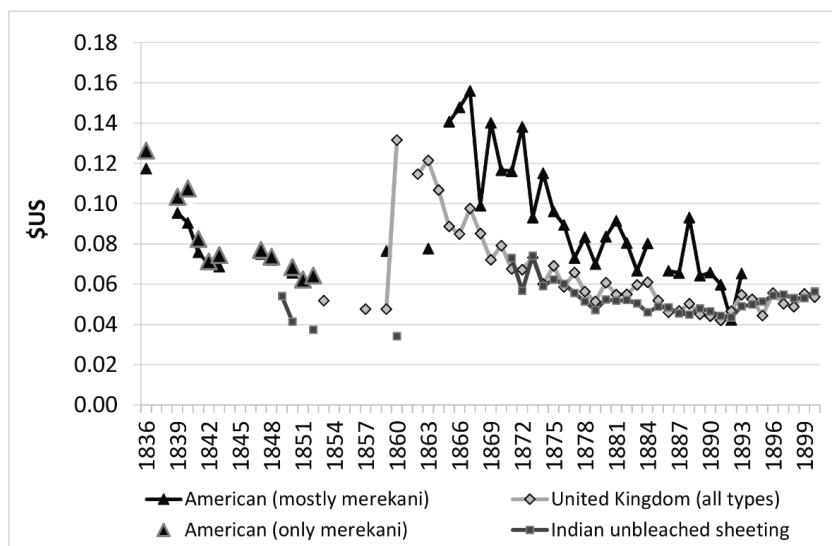
<sup>72</sup> European and Indian trade with East Africa was further boosted with the opening of the Suez Canal in 1869 and the expansion of Bombay-Zanzibar steam service in the 1870s. Ibid., 44; Prestholdt, *Domesticating the world*, pp. 81-82.

<sup>73</sup> Bennett, 'Americans in Zanzibar: 1865-1915', p. 48.

<sup>74</sup> Prestholdt illustrates how enhanced East African demand for lower-cost Bombay-made cloth underpinned factory expansion in Bombay during the second half of the nineteenth century. Prestholdt, *Domesticating the world*, pp. 77-83.

1860s, but American cloth prices – kept high by post-war labor costs – would generally hover far above English and Indian varieties until at least the final decade of the nineteenth century (see Figure 3.4).<sup>75</sup>

**Figure 3.4 Unit price per yard of unbleached sheeting at Zanzibar, 1836-1900**



*Sources:* See Appendix 2. *Notes:* (1) Most annual data points for American cloth prices are averaged from aggregated inward-bound cargo and sales records at Zanzibar. However, select years rely on single observations from correspondences. (2) Indian price data before 1878 include sales throughout East Africa due to aggregation in the original source.

To some degree, the decline in prices from the 1830s to the 1850s had likely conditioned consumers to demand low prices. Accordingly, cloth imports only began to rise considerably when, in the early 1870s, English and Indian cloth prices declined to the low levels of the 1850s (see Figure 3.1). However, the lower prices of “inferior” English and Indian cloth were undoubtedly partly offset by the faster rate of replacement required relative to “stouter” American cloth.<sup>76</sup>

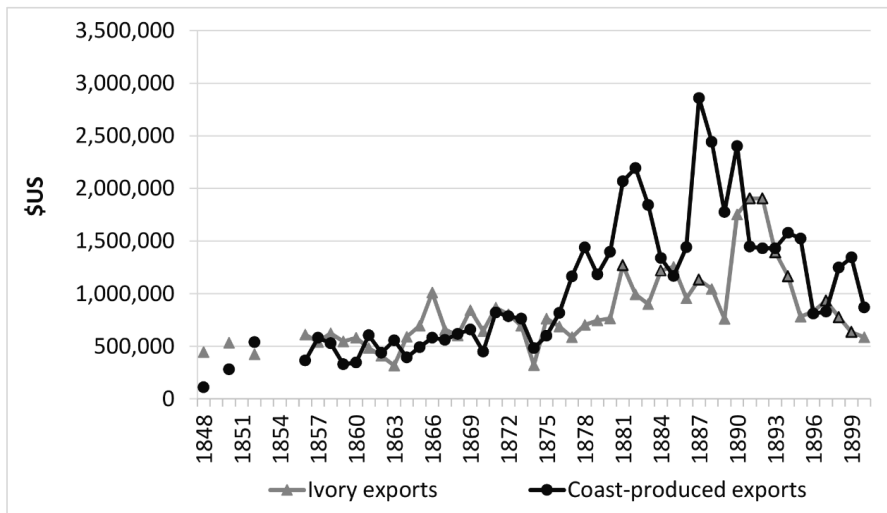
To understand both the timing of the upturn in nineteenth-century cloth imports and the corresponding quantity-quality tradeoff choices made by consumers, we must consider who, primarily, those consumers were and what use values they attached to imported cloth. Gone were the days in which the supply of cloth at Zanzibar was conditioned in large part by foreign

<sup>75</sup> Ibid., 77.

<sup>76</sup> On the superior quality of American cloth, see Cave, 'Report for the year 1897', pp. 12-14.

traders. Rather, supply was increasingly contingent upon local demand, especially among coastal and near-coast groups. By the early 1870s, coastal and coastal hinterland export sectors began expanding rapidly, enhancing the buying power of associated groups. Annual ivory export values were still increasing, but the value of export goods produced at and near the coast shipped to the United States, Bombay, and the United Kingdom soon surpassed export values of interior-derived ivory (see Figure 3.5).<sup>77</sup>

**Figure 3.5 Coast-produced exports and ivory exports from East Africa, 1848-1900**



*Sources:* Aggregated United States, Bombay, and United Kingdom trade data. See Appendix 3. *Notes:* (1) Annual American ivory import figures become scarce after 1873. From 1874 onward, years including American ivory data are indicated with an outlined marker. (2) Bombay and UK data include trade with Mozambique, where American trade was limited. (3) “Coast-produced exports” include goods produced on East Africa’s coast-adjacent islands (especially Zanzibar and Pemba), the East African coast, and in the coastal hinterland. These were principally gum copal, cloves, rubber, hides, and skins, along with smaller amounts of coir yarn, ebony, tortoise shell, chilies, gum myrrh, orchilla weed, aloe, copra, sesame, cowries, and beeswax.

The timing of the dramatic rise in cloth imports into East Africa illustrated in Figure 3.1 corresponds strikingly with this expansion in production of coastal and coastal hinterland exports. This sudden surge in demand compares starkly with the years just before the rapid rise in coast-oriented export production, when demand for imported cloth continued to languish.<sup>78</sup>

<sup>77</sup> Ivory was historically available relatively near to the coast, but by mid-century overhunting had pushed the ivory frontier deep into the interior, reaching the modern-day Democratic Republic of the Congo by the 1870s. Sheriff, *Slaves*, pp. 78, 103-104.

<sup>78</sup> Edward D. Ropes to John Bertram, 8 February 1867, Box 2, Folder 6, MSS 104, PEM; Edward D. Ropes to John Bertram, 21 April 1867, Box 2, Folder 6, MSS 104, PEM.

We now take a close look at the rapid development of East Africa's primary nineteenth-century coastal and coastal hinterland exports and connect them to the rise in consumption possibilities of groups living on and near the coast.

### *The coastal export boom of the 1870s*

Production of a variety of export goods expanded rapidly in the final quarter of the nineteenth century as global demand stimulated entrepreneurship along the coast and coastal hinterland of East Africa. This era witnessed the expansion of large-scale, slave-based plantations, along with the development of much smaller-scale, market-oriented kin-based production.<sup>79</sup> On Zanzibar and the adjacent mainland coast and its hinterland, major exports included cloves, gum copal, and wild rubber, along with grain cultivated to supply inland-bound caravans, Indian Ocean trade ships, and emerging export-oriented producer groups.<sup>80</sup> Further north, the Benadir Coast supplied increasing amounts of hides and skins.<sup>81</sup> Alongside these principal commodities, East Africa also exported coast-produced copra (coconut kernels), cowries, chilies, coir, gum myrrh, orchilla weed, aloe, and sesame.<sup>82</sup>

By mid-century, increasing foreign demand for East African goods had led producers on Zanzibar to begin experimenting with new products, including clove stems (the once-discarded base of the valuable bud) and bird peppers.<sup>83</sup> Cloves, however, were the island's most important homegrown export. Clove production had been carried out on Zanzibar since the 1830s, stimulated by global "clove mania," and expanded partly in response to the gradual British strangulation of Zanzibar's slave export trade, which encouraged the retention of slaves for export-oriented cultivation.<sup>84</sup> The industry experienced significant profit-reducing global overproduction between the 1840s and 1860s, but prices rebounded during the 1870s.<sup>85</sup> The intensity of clove production expanded considerably after slave exporting – but not holding<sup>86</sup> – became officially forbidden on Zanzibar in the early 1870s.<sup>87</sup>

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<sup>79</sup> Pawelczak, *The state*, p. 142.

<sup>80</sup> On grain production, see *ibid.*, 78-97; Kjekshus, *Ecology control*, pp. 30-34.

<sup>81</sup> Burton, 'Lake', p. 446; Portal, 'Report on the situation', p. 10.

<sup>82</sup> See sources for Figure 3.5.

<sup>83</sup> William H. Jelly to George West, 29 April 1851, Box 10, MH235, PEM.

<sup>84</sup> For the early development of clove slave plantations on Zanzibar, see Sheriff, *Slaves*, pp. 48-65.

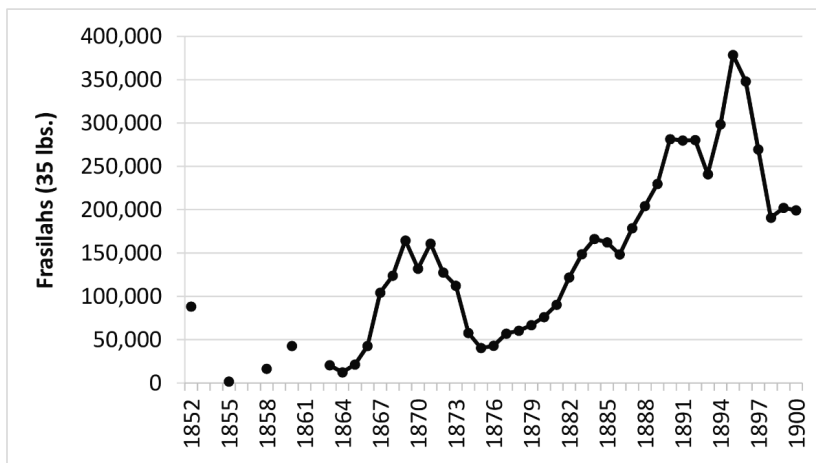
<sup>85</sup> *Ibid.*, 61-63.

<sup>86</sup> Public slave trading and exporting were prohibited, but the ownership of slaves by non-British subjects was not abolished until 1897. 'Treaty between Her Majesty and the Sultan of Zanzibar for the Suppression of the Slave Trade, signed at Zanzibar, 5 June 1873'; 'Abolition of the Legal Status of Slavery in Zanzibar and Pemba'.

<sup>87</sup> A similar process had occurred in early-nineteenth-century western Africa with the demise of the trans-Atlantic slave trade, which saw slaves increasingly applied to domestic cultivation. Lovejoy, 'Plantations', p. 342.

At the start of the decade, the momentum of Zanzibar's clove exports – and other coastal goods – was temporarily slowed as a result of two blows: first, a cholera epidemic raged through East Africa, and then a hurricane ravaged Zanzibar's plantations in 1872.<sup>88</sup> Thereafter, however, clove exports rebounded with verve, bolstered by the establishment of more plantations on neighboring Pemba Island.<sup>89</sup> The volume of cloves exported from Zanzibar to Bombay and the United Kingdom, the largest importers of East African cloves, expanded rapidly, reflecting increasing total output (see Figure 3.6). As of the early 1890s, cloves produced on Zanzibar and Pemba reportedly provided four-fifths of the world's supply, and “almost every available acre of ground ha[d] been devoted to cloves.”<sup>90</sup>

**Figure 3.6 Zanzibar's clove exports to Bombay and the United Kingdom, 1852-1900**



Sources: Bombay trade reports and UK trade reports, 1852-1900, BL. Note: the data are reflected in three-year moving averages.

While Zanzibar and Pemba cultivated cloves, the most important mainland coast and coastal hinterland exports were gum copal and hides and skins, favorite articles of American traders, and rubber, exported primarily to the United Kingdom (see Figure 3.7).<sup>91</sup> Gum copal was extracted from fossilized trees, lying a few feet underground, by “coast clans” living along what Burton referred to as the “copal coast,” which roughly spanned from Mombasa in southern

<sup>88</sup> Webb, 'Report on the commerce of Zanzibar for the year ending September 30, 1871', p. 704.; Francis Webb to John Bertram, 22 January 1870, Box 3, Folder 2, MSS 104, PEM; Sheriff, *Slaves*, pp. 234-235.

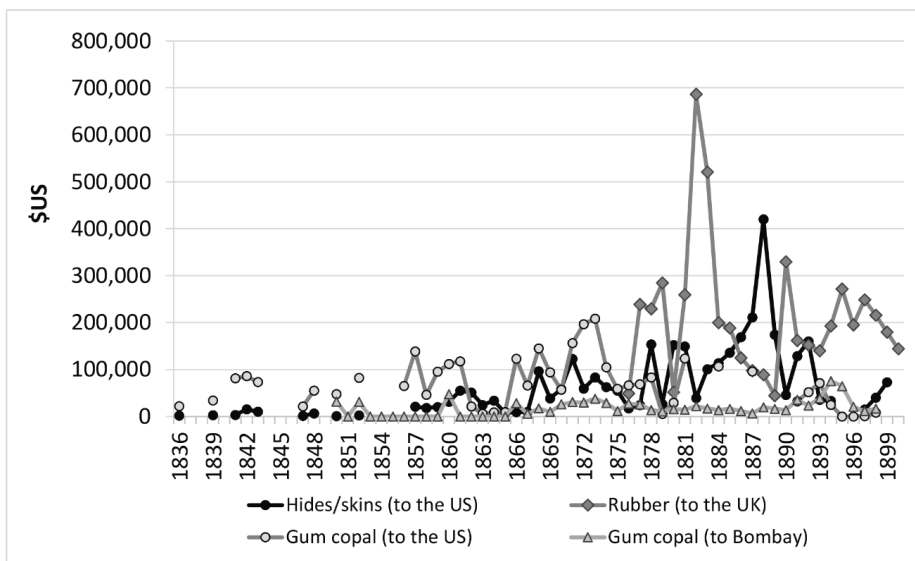
<sup>89</sup> Sheriff, *Slaves*, p. 57.

<sup>90</sup> Portal, 'Report on the situation', p. 9.

<sup>91</sup> *Ibid.*, 10.

Kenya to Ibo in northern Mozambique<sup>92</sup> and ranged from “a few miles” to 60 kilometers inland.<sup>93</sup> Gum diggers or community leader middlemen sold the extracted gum copal – primarily exchanged for foreign imports, especially cloth – to mostly Indian merchants residing on the mainland coast, who then sent the gum onward to Zanzibar for sale to global buyers.<sup>94</sup>

**Figure 3.7 Zanzibar’s exports of hides/skins, rubber, and gum copal, 1836-1900**



Sources: see Appendix 3.

Already in the 1830s, American merchants had competed fiercely for gum copal, which was used for varnish in the American furniture industry and in the mid-1840s “pa[id] better than anything else.”<sup>95</sup> By 1859, Americans claimed 68 percent of the gum, while Germany and Bombay took 24 and 8 percent, respectively.<sup>96</sup> American imports of gum copal dropped off during the American Civil War but immediately rebounded and increased in 1866. However, East Africa’s gum copal exports had continued to increase during the war, and when Americans

<sup>92</sup> Burton, ‘Lake’, p. 436 (quote); Hines to Seward, 25 October 1864 in Bennett and Brooks, eds., *New England*, p. 530.

<sup>93</sup> Rigby, ‘Report’, p. 21 (quote); Pawelczak, *The state*, p. 98.

<sup>94</sup> On the copal trade, see Sunseri, ‘Political ecology’; Pawelczak, *The state*, pp. 97-99. For contemporary accounts of copal extraction and trading, see Burton, ‘Lake’, pp. 435-440; Elton, *Travels and researches*, pp. 78-79.

<sup>95</sup> David Pingree to John G. Waters, 27 July 1833, Box 75, Folder 7, MSS 901, PEM; David Pingree, John G. Waters, and George West to Richard P. Waters, 22 February 1844 (quote); Sunseri, ‘Political ecology’, p. 207.

<sup>96</sup> Ibid.

re-entered the trade, their share only comprised about 20 percent of total gum copal exports, with Germany and France taking larger shares (45 and 35 percent, respectively), particularly after the opening of the Suez Canal in 1869. Hong Kong also became a major importer of East African gum copal by at least the 1880s.<sup>97</sup> Thus, total gum copal export figures would have been significantly higher than illustrated in Figure 3.7.

In the 1870s gum copal harvesting and trading played a key role in the coast-side economy as “the most lucrative commerce” for Indian traders situated along the mainland coast.<sup>98</sup> However, by the early 1880s, exports of gum copal declined as natural deposits began to dwindle, while global demand for rubber boomed. Rubber vines frequently grew directly on trees in copal fields, enabling diggers to easily combine gum digging with rubber tapping and take away substantial profits. Rubber tapping quickly expanded farther inland than the more concentrated copal forests had allowed and by the 1880s reached the Donde area roughly 180 km from the coastline, which consequently expanded consumption possibilities and demand for imported goods in what Pawelczak terms the “broader” hinterland of the coast.<sup>99</sup> Rubber tapping proved even more lucrative than copal digging, bringing \$19.50 per frasilah by the 1890s, while copal declined to \$7 per frasilah.<sup>100</sup> Rubber profits were so high that a few days’ labor could reportedly yield income sufficient to purchase a year’s worth of food for one adult.<sup>101</sup>

Many export-oriented coastal and coastal hinterland producer groups came to increasingly rely on food provided by market-oriented grain cultivators.<sup>102</sup> In the early 1860s, Rigby had reported with an air of condescension that exports of gum copal were restrained by the “indolence of the Negroes, who will only dig enough to supply their daily wants.”<sup>103</sup> But he seems to have misunderstood the dynamics at hand. Instead of idleness, it was most likely seasonal food production constraints that limited the extraction of gum copal. Initially, gum diggers must have been unwilling to spare the increasing amounts of labor required to meet growing global demand, for the best time to harvest gum copal coincided directly with the agricultural season, when the rains aided gum extraction.<sup>104</sup> However, gum diggers (and, later, rubber collectors) in southern coastal Tanzania began increasingly purchasing grain.<sup>105</sup> For example, gum diggers

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<sup>97</sup> Ibid.

<sup>98</sup> Elton, ‘On the coast country’, p. 227.

<sup>99</sup> For a discussion on the transition from copal to rubber production, see Sunseri, ‘Political ecology’, pp. 215-17. For Pawelczak’s distinction between the “narrow” and “broader” hinterland, see Pawelczak, *The state*, pp. 18-19.

<sup>100</sup> Sunseri, ‘Political ecology’, p. 217.

<sup>101</sup> Pawelczak, *The state*, p. 101.

<sup>102</sup> These producers also provisioned interior-bound caravans and ships traveling to Arabia and India. Ibid., 79.

<sup>103</sup> Rigby, ‘Report’, p. 21.

<sup>104</sup> William H. Jelly to George West, 27 January 1851; Elton, ‘On the coast country’, p. 228; Burton, ‘Lake’, p. 93.

<sup>105</sup> Kjekshus, *Ecology control*, p. 30; Behr, ‘Die Völker zwischen Rufiyi und Rovuma’, p. 78.

regularly traded portions of gum copal for rice in the Rufiji River area, which came to be known as Calcutta *Mdogo* (“Little Calcutta”) because of its large output of rice.<sup>106</sup>

The export supply problem cited by Rigby eased, and by the 1870s a seemingly endless stream of diggers could be seen year-round carrying loads of gum to Indian traders to exchange for cloth.<sup>107</sup> However, in 1884 and 1885 drought caused “famine all along the coast.”<sup>108</sup> Rubber exports, which had reached exceptional heights in 1882 and 1883 fell precipitously during the famine and did not begin to recover until 1890 (see Figure 3.7). Clove exports, too, dipped during the famine years but recovered fairly quickly thereafter since Zanzibar could rely on rice imports from India, which increased in value from 186,494 rupees in 1883 to 1,105,286 rupees the following year.<sup>109</sup> As a result of these disruptions in coastal production, cloth imports fell sharply in 1884 and 1885 but recovered by 1886 (see Figure 3.1).

Much of East Africa’s coastal exports came from Zanzibar and the adjacent coast and coastal hinterland spanning from southern Kenya to northern Mozambique, but Madagascar to the south and the Benadir Coast (of modern-day Somalia) to the north also participated in Zanzibar’s trading network, shipping goods to the island for global export. Goods from Madagascar included modest amounts of ebony, tortoise shell, and beeswax.<sup>110</sup> More important, however, were the cow hides and goat skins sent to Zanzibar from Brava, Mogadishu, Marka, and other parts of the Benadir region in exchange for imported manufactures, especially American cloth.<sup>111</sup> It was prophesized in the late 1860s that hide exporters would benefit immensely from “the great competition” among American merchants, in particular, searching for inputs for the American leather industry.<sup>112</sup> Indeed, as Figure 3.7 shows, even as American imports of gum copal declined in the late 1870s and 1880s, American demand for hides and skins only continued to increase.

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<sup>106</sup> Beardall, ‘Rufiji River’, p. 647; Kjekshus, *Ecology control*, p. 32.

<sup>107</sup> Elton, ‘On the coast country’, p. 228.

<sup>108</sup> Cheney, ‘Zanzibar’, p. 521; Pawelczak, *The state*, pp. 173-174.

<sup>109</sup> Bombay trade report for 1885-1886, BL. Zanzibar also shipped relief supplies of imported grain to Lamu, Mombasa, and Lindi. Pawelczak, *The state*, pp. 180-181.

<sup>110</sup> ‘Arrival and Departure of American Vessels, Jan 1 1857 to June 29 1894’, RG 84, Volume 084, NACP.

<sup>111</sup> Burton, ‘Lake’, p. 446; Portal, ‘Report on the situation’, p. 10. Orchilla weed was also imported from the Benadir Coast in smaller quantities and was purchased by European traders for use in silk dyeing. Hines to Seward, 25 October 1864 in Bennett and Brooks, eds., *New England*, p. 531.

<sup>112</sup> Francis Webb to John Bertram, 24 October 1869, Box 3, Folder 2, MSS 104, PEM.

### 3.4 The growth of coastal consumption possibilities

#### *Merekani on the Benadir Coast*

From the 1870s onward, the pronounced increase in global exports of goods produced along the East African coast and coastal hinterland helped dramatically increase the amount of cloth annually imported. On northern East Africa's Benadir Coast, increasing profits were primarily spent on American-made cloth, and as a visiting Englishman noted, "the Americans practically monopolize the two chief branches of trade [...] the importation of grey [i.e., unbleached] shirting and the export of skins and hides."<sup>113</sup> A British consul had reported with much chagrin that in the Benadir region "natives seem to prefer to give the higher price for the American goods."<sup>114</sup> The durable unbleached merekani reportedly suited the "exact requirements of the country."<sup>115</sup>

It is difficult to gauge how much cloth was imported into northern East Africa's Benadir region based on the available Zanzibar trade figures, for much of the Zanzibar-imported merekani was destined for markets in the Tanzanian interior. Furthermore, as American interest in hides and skins grew in the 1880s, American merchants increased direct trade with Benadir ports, which reportedly comprised roughly half of America's total trade with East Africa by 1887, although figures for this trade are unavailable.<sup>116</sup> Given strong American demand for Benadir hides and skins, imports of American-made cloth into the region must have been substantial.

Indeed, as merekani imports into the Benadir Coast increased, the American cloth began to compete with locally produced unbleached cloth. However, local production did not collapse under the pressure. Rather, local textile producers effectively adapted and remained resilient in the face of mounting competition. While some producers continued to weave plain unbleached cloth, others took advantage of emerging demand for colored garments and began specializing in multi-colored striped cloth.<sup>117</sup> Even on Zanzibar, through which most of East Africa's cloth imports passed, weavers reportedly produced modest amounts of fashionable turban cloth for local elites and indigo-dyed cloth well into the second half of the nineteenth century, while other artisans regularly re-worked imported cloth to suit local tastes.<sup>118</sup>

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<sup>113</sup> Powell-Cotton, *Sporting*, p. 512.

<sup>114</sup> Portal, 'Report on the situation', pp. 11, 32.

<sup>115</sup> Powell-Cotton, *Sporting*, p. 512 citing a British consul in Somaliland.

<sup>116</sup> Bennett, 'Americans in Zanzibar: 1865-1915', pp. 57-58. Consequently, the share of American cloth reflected in Figure 3.1 (based on American cloth landed at Zanzibar) does not include part of the merekani consumed farther north. In fact, the decline of merekani imports into Zanzibar during the late 1880s and early 1890s may partly reflect the increase in direct American-Benadir trade.

<sup>117</sup> Alpers, *East Africa and the Indian Ocean*, pp. 89-91.

<sup>118</sup> Prestholdt, *Domesticating the world*, pp. 70-71.

### *Slave consumption on the clove islands*

As on the Benadir Coast, consumption of imported cloth increased on Zanzibar and the adjacent Swahili Coast, although consumer demand patterns differed. Here, interest in expensive American cloth had waned when prices rose precipitously during and after the American Civil War.<sup>119</sup> Consequently, along and near the coast of modern-day Tanzania, much of the cloth consumed by burgeoning producers was British and Indian in origin. Taking the case of cloves, for example, growth in exports strongly mirrors the pattern of increasing imports of cloth from India (see Figures 3.1 and 3.6). This is unsurprising given that Bombay typically claimed the majority of Zanzibar's clove exports.<sup>120</sup> More broadly, a British consul noted an association between the relative success of the annual clove crop and the respective rise or fall of cloth import levels.<sup>121</sup>

The expanding clove plantation system enhanced incomes for planters on Zanzibar and Pemba while also generating a large population of cloth-consuming slaves. Although slave fashions were limited compared with the lavish styles of Zanzibar elites, slaves (particularly female slaves) increased their range of consumption as the nineteenth century progressed.<sup>122</sup> A British resident commented in 1874, "With a taste for dress, the Zanzibar slaves [...] always [have] a strong desire for the possession of such articles."<sup>123</sup> Along with unbleached cloth, a substantial portion of imported indigo-dyed cloth was likely consumed by slaves, given its general association with poorer and servile classes on Zanzibar and the adjacent Swahili Coast.<sup>124</sup>

The reported per-annum cost for slave owners to clothe a Zanzibar slave suggests that island slaves consumed a considerable chunk of the comparatively cheap Indian and English cloth imported from the 1870s onward – based on my calculation, between roughly 1,282,000 and 2,051,000 yards per year, or 6.4 to 10.3 yards per slave.<sup>125</sup> This is far above the very low per-capita annual consumption figures for the whole of East Africa (see Figure 1.3 in the Chapter 1), indicating the marked concentration of imported cloth consumption at and near the coast through the second half of the nineteenth century, even among slaves. Based on this estimate,

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<sup>119</sup> Edward D. Ropes to John Bertram, 9 June 1867; Francis Webb to John Bertram, 13 April 1870.

<sup>120</sup> Based on sources used to construct Figure 3.5.

<sup>121</sup> Cave, 'Report for the year 1900', p. 12.

<sup>122</sup> Fair, 'Dressing up', pp. 67-68.

<sup>123</sup> Christie, *Cholera*, pp. 309-10.

<sup>124</sup> McMahon, *Slavery*, p. 131; Fair, 'Dressing up', p. 78; Burton, 'Lake', p. 431.

<sup>125</sup> In 1862, American consul Speer reported that an owner's cost of clothing each Zanzibar slave per annum was between \$0.50 and \$0.80 (Speer, 'Report on Zanzibar', 1862, RG 59, Volume 3509 (Book 4), NACP, p. 47.). Dividing Speer's upper- and lower-bound estimates by the nearest available unit price per yard of unbleached imported cloth – \$0.078 in 1863 (Sheriff, *Slaves*, p. 255.) – yields 6.4 to 10.3 yards per slave per annum. According to Cooper, the slave population of Zanzibar alone was around 200,000 in 1857. Other estimates range up to 266,000 for Zanzibar and Pemba Islands by 1858. Cooper, *Plantation slavery*, p. 56; Croucher, *Capitalism and cloves*, p. 87.

consumption of island slaves alone would have accounted for an average of between 14 and 22 percent of all Indian, English, and American cloth imported into East Africa via Zanzibar by the first half of the 1870s.<sup>126</sup> The substantial expansion of plantations on Pemba Island from the mid-1870s onward must have further increased cloth-consuming slave populations on the islands as the century progressed.

According to the American consul at Zanzibar, already in 1862 the daily outfit of a plantation slave usually consisted of at least two yards of cloth at a given time.<sup>127</sup> The adoption of Islam likely further augmented cloth demands following conversion, which was, in theory, “the first imperative” of slave owners.<sup>128</sup> Some slaves could consume more cloth than others, particularly those with greater commercial freedom seeking to integrate into society via production, exchange, and consumption.<sup>129</sup> Beyond plantation production, slaves were also employed in transportation, construction, and artisanal capacities.<sup>130</sup> Already in 1856, slaves could earn wages of \$2.50-3.00 per month for manual labor, while “higher order Servants” could earn \$7.50-\$10.00 per month for preparing and shipping cargoes, a portion of which was likely expended on extra clothing.<sup>131</sup> Some slaves borrowed from Indian money lenders to invest in commercial activities and thus obtain imported textiles signifying “distinction and respectability.”<sup>132</sup> Consumption would further increase with abolition in 1897, as once-servile groups sought to redefine their social position by consuming more cloth and more elaborate styles.<sup>133</sup>

#### *Estimating consumption on the mainland coast and coastal hinterland*

On the adjacent mainland coast and its hinterland, increasing exports of gum copal and rubber, along with locally traded and exported grain, provided ordinary free laborers with increasing incomes by the mid-1870s.<sup>134</sup> Although Indian merchants took a substantial cut from global sales, as did Zanzibar’s customs house, gum copal diggers netted goods equivalent to roughly half of the \$9 per frasilah eventually paid for the gum by foreign buyers at Zanzibar.<sup>135</sup> Diggers

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<sup>126</sup> Or 8 to 12 percent of cloth imported into the whole of East Africa, including via Mozambique ports.

<sup>127</sup> Speer, ‘Report on Zanzibar’, 1862, RG 59, Volume 3509 (Book 4), NACP, p. 47.

<sup>128</sup> Cooper, *Plantation slavery*, p. 215. Roughly 95 percent of the total population of Zanzibar was Muslim, although Fair notes that the wearing of caps (for male slaves) and head veiling (for females) was discouraged by owners as means to identify who was and was not a slave. Fair, ‘Dressing up’, p. 68.

<sup>129</sup> For opportunities for slaves to engage in commercial life, see Glassman, *Feasts and riot*, pp. 86-89.

<sup>130</sup> Clarence-Smith, ‘Economics’, p. 4.

<sup>131</sup> Daniel H. Mansfield to William L. Marcy, 31 January 1856 in Bennett and Brooks, eds., *New England*, p. 500.

<sup>132</sup> Bishara, *A sea of debt*, pp. 49-50.

<sup>133</sup> Fair, ‘Dressing up’, pp. 74-77.

<sup>134</sup> Pawelczak, *The state*, p. 360.

<sup>135</sup> Sunseri, ‘Political ecology’, p. 210.

exercised a degree of power over prices, negotiating with merchants for hours and even days for larger hauls comprised primarily of cloth.<sup>136</sup> Already in the early 1850s, before gum copal exports had jumped, a relationship was noted between gum collection seasons and an increase in demand for American cloth, although copal diggers also commonly traded their gum for a cheaper dyed Indian cloth, known as *kitambi*.<sup>137</sup> Consumption among coastal diggers no doubt increased as exports grew, particularly since, like Zanzibar residents, people residing on and near the coast tended to demand relatively large amounts of cloth due to Islamic influence.<sup>138</sup>

Using export profits as a proxy for cloth consumption possibilities, we can obtain rough estimates of the shares of cloth that were likely consumed by coastal and coastal hinterland producer groups as incomes increased. From the second half of the 1860s to the first half of the 1870s, gum copal diggers, for example, could have claimed an average of 8 percent (reaching 16 percent in 1873) of the total yards of Indian, English, and American cloth annually imported into East Africa via Zanzibar.<sup>139</sup> This average annual figure climbs to around 16 percent (or 32 percent in 1873) if we include the half of the final sale price retained by merchant middlemen and the Zanzibar customs house. Importantly, this estimate is based on profits from gum copal exported to the United States and Bombay *alone*.<sup>140</sup> It does not include the large shares of gum copal reportedly purchased by merchants from Germany, France, and (by the 1880s) Hong Kong, which further drove up cloth consumption possibilities for copal diggers.<sup>141</sup>

Rubber tapping profits also significantly enhanced consumption possibilities by the first half of the 1880s, with the British share of rubber exports alone providing sufficient income for tappers to consume roughly 10 percent of cloth imported via Zanzibar (although this figure climbed to 17 percent in 1882),<sup>142</sup> again a figure that doubles to 20 percent if we include the takeaway of middlemen traders and the customs house.<sup>143</sup> By the middle of the decade, however, Germany laid colonial claim to the Tanzanian mainland, and by the close of the century, the colonizers set a market price for rubber and gum copal – \$17 and \$7 per frasilah, respectively – dampening

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<sup>136</sup> Elton, *Travels and researches*, pp. 78-79; Sunseri, 'Political ecology', pp. 209-13.

<sup>137</sup> William H. Jelly to George West and the owners of *Lucia Maria*, 16 April 1851, Box 11, MH 235, PEM; Burton, 'Lake', p. 429.

<sup>138</sup> Pawelczak, *The state*, pp. 56-57, 332.

<sup>139</sup> Or 5 percent of cloth imported into the whole of East Africa, including via Mozambique ports.

<sup>140</sup> This figure is based on the export profits of copal diggers, which was estimated by halving the total value of gum copal exported to the United States and Bombay. This was then divided by the price of unbleached cloth imported from Bombay, which by this time was beginning to corner the market. The cloth price paid by gum copal diggers takes into account the 79-percent increase in price incurred once cloth crossed from Zanzibar to the coast noted by Burton. Burton, 'Lake', p. 57.

<sup>141</sup> Sunseri, 'Political ecology', p. 207.

<sup>142</sup> Or 7 percent of cloth imported into the whole of East Africa, including via Mozambique ports.

<sup>143</sup> Calculated using the same method employed to estimate consumption possibilities afforded by gum copal exports.

the bargaining power of diggers and tappers.<sup>144</sup> Still, rubber tappers prospered, and as a late-nineteenth-century traveler noted, tappers in the coastal hinterland were exceptionally well clothed.<sup>145</sup> Grain suppliers – which included small-scale household surplus operations alongside sizeable slave-based plantations – must have similarly enjoyed increasing consumption possibilities as commercial activity boomed during the last three decades of the nineteenth century.<sup>146</sup> It is impossible to estimate cloth consumption levels since output figures are unavailable, but as Glassman points out, even “ordinary peasants” along the coast and coastal hinterland were marketing their agricultural surpluses of both grains and export-oriented cash crops to obtain imported cloth.<sup>147</sup>

As this section has illustrated, emerging producer groups residing on and near the East African coast were afforded access to a large share of rapidly growing imports of cloth, which strikingly mirrored the simultaneous expansion of exports derived from the coast and coastal hinterland from the 1870s onward. Alongside export producer groups, coastal merchants also took a share of export profits in the form of manufactured imports. These included not only wealthy Indian traders but also a “lower class” of coastal merchants who had become more active during the rubber boom.<sup>148</sup> While most better-off merchants would have clothed themselves in finer garments, they undoubtedly claimed large portions of simpler imports as stores of wealth and investment capital. Indeed, plain imported cloth came to serve as the primary form of collateral in complex credit and debt systems on the Swahili Coast well into the colonial period when residents of coastal cities continued to deposit their “savings” in the form of imported cloth at local shops.<sup>149</sup>

### 3.5 Indian cloth and the coastal consumer revolution

#### *The quality-quantity tradeoff*

In general, cloth consumption levels on the coast and coastal hinterland ramped up in the final quarter of the nineteenth century. A conspicuous example comes from the final years of the century when imported *kangas* hit the market.<sup>150</sup> Women, particularly on Zanzibar, voraciously consumed these colorful, block-printed cotton wrappers, which were stamped in the Netherlands, then exported to East Africa by German merchants. A British official wrote,

<sup>144</sup> Sunseri, 'Political ecology', p. 217.

<sup>145</sup> Iliffe, *A modern history of Tanganyika*, pp. 129-30 citing Adams, *Im Dienste des Kreuzes: Erinnerungen aus meinem Missionsleben in Deutsch-Ostafrika*, p. 132.

<sup>146</sup> On grain producers on the coast and coastal hinterland, see Pawelczak, *The state*, pp. 78-97, 142.

<sup>147</sup> Glassman, *Feasts and riot*, pp. 37, 45-46. See also Pawelczak, *The state*, p. 90.

<sup>148</sup> Pawelczak, *The state*, p. 100.

<sup>149</sup> Brühwiler, 'Interweaving'.

<sup>150</sup> Fair, 'Dressing up', pp. 76-77.

“Zanzibar is the Paris of East Africa [...] to keep up their reputation for smart dressing involves the frequent purchase of new kangas, of which, I understand a Zanzibar girl will possess as many as two to three dozen sets at one time,” equal to approximately 48 to 72 yards.<sup>151</sup> These sets were quickly discarded and replaced with new prints as fashions changed rapidly, for “it must not be supposed that a woman with any proper respect for herself or for her family will be seen in these patterns in three months’ time.”<sup>152</sup> Further, imported kangas must have worn out fairly quickly given that, although they were stamped in the Netherlands, they were produced using non-durable Manchester cloth, which disintegrated upon washing.<sup>153</sup>

However, the design concept for Dutch-printed kangas reportedly arose from innovations that were developed locally in the preceding decades. Imports of unbleached cloth were increasingly transformed into fashionable wrappers for coastal women by dyeing, tie-dyeing, and/or stamping the cloth with woodblocks or cutout stamps made from starchy vegetables.<sup>154</sup> This locally processed cloth was produced using imports of first English-made and, increasingly, Bombay-made unbleached cloth, which comprised the bulk of Bombay’s cloth exports to East Africa by the 1880s (see Figure 3.8).

Both English- and Indian-made cloth were consistently reported to be inferior to the more expensive American sheeting – “stouter and more durable cloth” – that remained in constant demand throughout the interior.<sup>155</sup> English-produced cloth immediately lost weight and texture when the “gruel” infused into the fabric to bulk it up washed away. Initially “beautifully white calico” was reduced to what “looked more like dish-cloths,” and even a dry piece of new English cloth would, upon “vigorous rubbing,” produce a white powder and threadbare spots.<sup>156</sup> While Bombay-made cloth did not suffer as extensively from washing problems, it was significantly thinner and flimsier than American cloth, weighing only 6.5 lbs. per 30-yard piece compared with 9.5 lbs. per sturdy American piece.<sup>157</sup>

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<sup>151</sup> O’Sullivan-Beare, ‘Report on the Island of Pemba’, p. 15.

<sup>152</sup> Cave, ‘Report for the year 1897’, p. 14.

<sup>153</sup> Ibid.

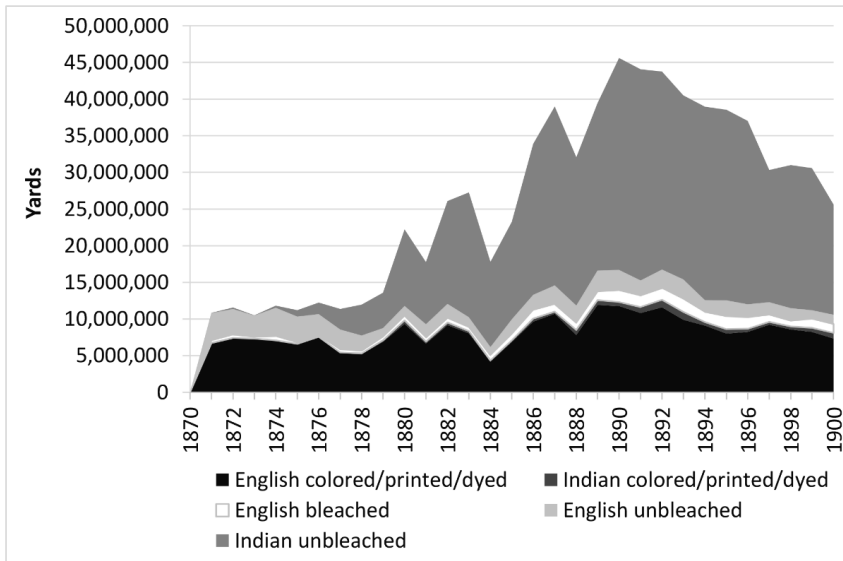
<sup>154</sup> Ryan, ‘Global reach’, pp. 85, 91, 94-99; Vander biesen, ‘Social and intercultural relations’, pp. 320, 329. For re-processing of imported cloth in coastal cities, see also Prestholdt, *Domesticating the world*, pp. 70-71.

<sup>155</sup> Cave, ‘Report for the year 1897’, pp. 13-14 (quote); Cave, ‘Report for the year 1898’, p. 14.

<sup>156</sup> Jackson, *Early days in East Africa*, p. 178.

<sup>157</sup> Cave, ‘Report for the year 1897’, pp. 13-14.

**Figure 3.8 Composition of Bombay exports of cloth to East Africa, 1870-1900**



Source: Bombay trade reports, 1870-1900, BL. Note: Statistical tables identify exports as either “Indian Produce” or “Foreign Merchandise,” but the overwhelming majority of Bombay’s cloth imports (and thus re-exports) were from the United Kingdom. Textual reports also indicate that Bombay’s re-exports to East Africa were comprised of mostly English-made cloth. See *Annual statement of the trade and navigation of the Presidency of Bombay for the year 1895-96* (Bombay, 1896), p. 19.

Why would consumers – who were by all accounts highly discerning<sup>158</sup> – increasingly purchase significantly lower-quality cloth? I argue that this dynamic depended on the comparatively large quantities and low prices (at the coast) of merekani substitutes. The “only merit” of these textiles may have been “their extreme cheapness,” as an American consul reported in reference to unbleached Bombay-made cloth.<sup>159</sup> However, price figured heavily in the calculations of coastal and coastal hinterland people eager to consume more cloth as the century progressed.<sup>160</sup> For a wide array of coastal and near-coast people – including gum copal and rubber collectors, hide and skin suppliers, and grain and clove cultivators – the prospect of purchasing imported cloth was now well within reach. Even relatively poor consumers, including slaves, could afford to regularly replace less durable, but lower-cost English and Indian cloth with fresh supplies

<sup>158</sup> On the complexity and refinement of nineteenth-century East African demand, see Prestholdt, *Domesticating the world*, pp. 62-71.

<sup>159</sup> Pratt, ‘Zanzibar. Report’, p. 840.

<sup>160</sup> Prestholdt points to the importance of low relative prices of Bombay-made cloth, which could “appeal to an even wider market.” Prestholdt, *Domesticating the world*, pp. 77, 82.

from the “immense quantities” of these cheap goods sent to East Africa by the 1880s.<sup>161</sup> Similarly, during the “calico craze” in seventeenth- and eighteenth-century England, increasing imports of comparatively low-cost Indian cotton cloth had brought fashionable imported textiles within reach of average consumers, kicking off conspicuous consumption among lower-income people.<sup>162</sup>

John Styles has argued that the appealing appearance of handmade Indian cloth imports had attracted eighteenth-century English consumers more than their purportedly affordable price.<sup>163</sup> The majority of imports into late-nineteenth-century East Africa, on the other hand, were comprised of much lower-quality – but also lower-cost – machine-produced Indian and English cloth. Among East African coastal consumers, cost and quantity, rather than quality, was the principal deciding factor. This is illustrated by the evolution of printing and dyeing of imported unbleached cloth on the coast. Ryan surmises that the embellishment of imports was partly a response to dissatisfaction with the appearance of “inferior” unbleached substitutes that emerged with the absence of genuine merekani during the American Civil War.<sup>164</sup> American-made cloth returned to the market following the war, yet demand for the cheaper unbleached varieties persisted among coastal consumers.<sup>165</sup> The notable price differential undoubtedly drew East Africa’s coastal and near-coast consumers to the less durable unbleached alternatives, which could be readily replaced with freshly stamped patterns as coastal trends rapidly changed.

Indeed, an observer reflected on consumer preferences on the Swahili Coast: “If he has to choose between a cheap article which may last him a month and one a little more expensive, which will wear for half a year, he will have no hesitation in buying the one that costs him the least.”<sup>166</sup> He noted that even when garments were of “undoubtedly inferior” quality, “that is a detail which, so long as she can be dressed in the latest fashion, the native lady is quite prepared to overlook.”<sup>167</sup> The willingness of coastal and coastal hinterland consumers to regularly

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<sup>161</sup> Pratt, ‘Zanzibar. Report’, p. 840.

<sup>162</sup> In the case of England, fashionable imports had previously been enjoyed principally by wealthy consumers, with textile imports primarily composed of more modest amounts of expensive silks, woolens, and linens. Economic historians have argued that the English calico craze ultimately helped stimulate rapid development of domestic cotton textile production and calico printing, particularly with the imposition of import prohibitions in the early eighteenth century. See Lemire and Riello, ‘East & West’, pp. 894-895; Parthasarathi, ‘Review article: the great divergence’, p. 288; Wadsworth and Mann, *Cotton*, pp. 132-41; Berg, ‘Quality’, pp. 401-414. In fact, many of the technological innovations generated by English competition with India would later be adopted by Indian industrialists, facilitating the output of the machine-produced cloth that would be shipped from Bombay to East Africa in the nineteenth century.

<sup>163</sup> Styles, *Dress*.

<sup>164</sup> Ryan, ‘Global reach’, pp. 85, 96. According to Prestholdt, who notes cloth stamping on Zanzibar as of the 1850s, merchants often embellished imports to raise their value. Prestholdt, *Domesticating the world*, pp. 70-71.

<sup>165</sup> Francis Webb to John Bertram, 13 April 1870.

<sup>166</sup> Cave, ‘Report for the year 1900’, p. 15.

<sup>167</sup> Cave, ‘Report for the year 1897’, p. 14.

replace relatively cheap and flimsy, but fashionable, garments helps account for much of the large quantities of Indian- and English-made cloth imported into late-nineteenth-century East Africa.

By the end of the nineteenth century, consumption of Dutch-produced kangas was spreading on the coast and saw an “enormous increase” in the last year of the century.<sup>168</sup> But local stamping of low-cost imported unbleached cloth continued along the Swahili Coast through the nineteenth century and reportedly even into the mid-twentieth century.<sup>169</sup> Alongside its use for stamping, cheap unbleached cloth also remained an important staple on the coast for use as loin cloths and for making kanzus (long shirts) worn by men.<sup>170</sup> Indeed, when plague in India caused a decline in exports of Bombay-produced unbleached cloth in 1897, colonial officials saw a notable increase in demand for the less popular, but equally low-priced English version.<sup>171</sup>

### *The limits of imperial influence*

While I have argued that consumer choices drove cloth imports during the last quarter of the nineteenth century, the possible role of British intervention in affecting the scale and composition of imports must be considered given that the British gained increasing political influence in Zanzibar from the 1840s onward and also exerted control in colonial Bombay. French and American traders widely viewed the ongoing British project to subdue slave trading on the East African coast as “odious intermeddling” designed to assert “hegemonic British influence” over the lucrative trading entrepôt.<sup>172</sup> British anti-slavery interventions probably did affect the island’s economy, for example, by indirectly encouraging the development of plantations. But was the associated rise of cloth imports from colonial Bombay influenced by British intervention?

Britain undoubtedly benefitted from the growth of British-ruled Bombay’s exports to East Africa, especially when specifically British-produced re-exports from Bombay rose during the American Civil War. The tide turned, however, with the sudden growth of Bombay-produced cloth exports by the late 1870s, as Indian unbleached cloth began replacing the British product in East African markets (see Figure 3.8).<sup>173</sup> This was by no means an entirely welcome phenomenon. In 1885, the British consul at Zanzibar complained that the “comparatively flimsy

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<sup>168</sup> Kestell-Cornish, 'Report for the year 1901', p. 5.

<sup>169</sup> Ryan, 'Global reach', p. 98.

<sup>170</sup> Cave, 'Report for the year 1900', p. 13; Sinclair, 'Report for the year 1903', p. 4.

<sup>171</sup> Cave, 'Report for the year 1897', p. 12.

<sup>172</sup> Speer, 'Report on Zanzibar', 1862, RG 59, Volume 3509 (Book 4), NACP, p. 43; Sheriff, *Slaves*, p. 237.

<sup>173</sup> Although imported in smaller quantities, British-produced dyed cloth did, on the other hand, continue to maintain footing (see “English colored/printed/dyed exports” in Figure 3.8). Given the British anti-slavery project, there is an irony attached to the fact that British-produced cloth was the principal symbolic garment associated with slavery on Zanzibar and the East African coast (see footnote 124).

material which the rising manufacturing industry of India is now producing [has] seriously interfered with our [British-made] goods.”<sup>174</sup> In any case, even if an increase in exports of Indian-made cloth had been in the best interest of the colonial metropole, the British generally had great difficulty influencing consumption habits in East African regions, even in British protectorates.<sup>175</sup>

The success of Indian cloth was supported by extensive Indian information networks, strengthened with the establishment of telegraph service on Zanzibar in the 1870s, which kept Bombay firms attuned to changing local needs and demand patterns.<sup>176</sup> Networks of information were extraordinarily important in Zanzibar, called by American Consul Speer “the city of secrets” since “life and fortune” depended on guarding trade secrets. Indian residents, he concluded, were the “shrewdest” masters of Zanzibar’s trade.<sup>177</sup> They far outweighed all other foreign merchants, with between 5,000 and 6,000 residing on Zanzibar alone in the 1860s and “in considerable numbers at all the towns and villages on the opposite coast of the mainland.”<sup>178</sup> Comparatively, no more than twenty European and American merchants resided on the island at any given time.<sup>179</sup>

Indian merchants were simply well set up to respond to East African demand in ways that other merchants could not. The Indian networking system thus supported the agency of East African consumers while simultaneously enhancing the economic power of Indian merchants and investors. While many of the Indians residing in East Africa were British subjects, the integration of large Indian commercial networks at the local, regional, and international level provided Indian – and not British – producers with a special advantage in East Africa that would ultimately help Bombay industrialize on its own terms.<sup>180</sup> In fact, as Prestholdt points out, investment in the industrial textile machinery that produced cloth destined for East African markets was made with Indian rather than British capital.<sup>181</sup>

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<sup>174</sup> Frederic Holmwood cited in Metcalf, *Imperial connections*, p. 168.

<sup>175</sup> American cloth was in high demand in British colonial Uganda, for example, where English cloth had difficulty gaining traction among consumers in spite of metropolitan efforts to push English-made cloth. Cave, ‘Report for the year 1898’, p. 14; *Commercial relations*, 1907, p. 724.

<sup>176</sup> Prestholdt, *Domesticating the world*, p. 81. For Indian networks in East Africa, see also Machado, ‘Cloths of a New Fashion’, p. 57.

<sup>177</sup> Speer, ‘Report on Zanzibar’, 1862, RG 59, Volume 3509 (Book 4), NACP, pp. 10-11, 58.

<sup>178</sup> Rigby, ‘Report’, pp. 4-5.

<sup>179</sup> Speer, ‘Report on Zanzibar’, 1862, RG 59, Volume 3509 (Book 4), NACP, p. 27.

<sup>180</sup> For East African links to Bombay’s industrial development, see Prestholdt, *Domesticating the world*, pp. 78-85.

<sup>181</sup> *Ibid.*, 81. Profits accrued via Indian raw cotton trading during the global “cotton famine” of the 1860s were reinvested in Bombay’s textile industry in the 1870s. Beckert, *Empire*, p. 172.

### 3.6 Conclusion

Over the course of the nineteenth century, the scale and composition of foreign cloth imports into East Africa and the nature of demand changed significantly. In the early American-dominated period (c. 1830-1861), unbleached American cloth cornered the market, and while it was well received, it was imported in quantities that perpetually outpaced local demand, a consequence of aggressive competition among American merchant firms and still-low local buying power. From the 1870s, however, consumption of cloth on and near the coast began to grow rapidly as exports of coastal and coastal hinterland products increased, exceeding exports of ivory from the East African interior. Rising incomes of producer groups living near the coast stimulated demand for foreign imports, especially cloth. I have argued that the demand patterns of these producers and consumers strongly influenced the scale and composition of East Africa's cloth imports by the 1870s. Coastal people, particularly non-elites, consumed large amounts of low-cost cloth that could be readily replaced as coastal fashions swiftly changed. Accordingly, imports into East Africa from the 1870s onward were comprised primarily of comparatively cheap Indian- and English-produced cloth.

Demand preferences were conditioned very differently in the interior, where more expensive, but higher-quality American *merekani* cloth retained its demand advantage through the century. On the coast, cloth was primarily a cheap consumption good, thus durability was less paramount; in the interior, however, it was a valuable currency that was expected to survive both the long journey inland and exchanges through many hands. While a portion of the Indian and English cloth imported into East Africa was taken into the interior, *quality* was paramount among interior buyers, which helps explain the persistent preference for durable American cloth. If we first consider the very large amounts of Indian and English cloth imported into East Africa – compared with American sheeting – from the 1870s onward and then take into account the marked differences in consumer preferences near the coast relative to the interior, we begin to see the primacy of coastal consumers in affecting the scale and composition of cloth imports into East Africa as the region became increasingly integrated into global exchange networks. The next chapter investigates the flow of foreign-made cloth into the interior during the second half of the nineteenth century and further elucidates the substantial differences between consumption levels and use values of cloth in the deep interior of East Africa relative to near-coast regions.

## CHAPTER 4

### THE LIMITS OF THE CARAVAN TRADE: CLOTH IMPORTS INTO INTERIOR CENTRAL EAST AFRICA, C. 1850-1900

#### 4.1 Introduction

By the nineteenth century, cotton cloth industries had developed in a number of locales in the interior of central East Africa. Deindustrialization theories suggest, however, that rising globalization and declining global transportation costs generated an inflow of foreign-made cloth into the global “periphery” during the nineteenth century, thus dis-incentivizing local textile production, particularly as terms of trade improved for primary products relative to manufactures from industrializing countries.<sup>1</sup> With respect to Zanzibar-adjacent mainland Tanzania,<sup>2</sup> the heart of East Africa’s ivory caravan system, numerous historians suggest that competitive nineteenth-century cloth imports devastated domestic textile production as the region was confronted with “aggressively expanding world trading networks.”<sup>3</sup>

To what degree did mounting cloth imports inundate the interior via expanding caravan routes and undermine domestic textile production? Based on traveler accounts, Prestholdt suggests that already by the mid-nineteenth century imported “cloth was readily available as far as eastern Congo” and points to the use of American-made unbleached cloth (*merikani*) as a form of currency in the deep interior as “a testament to [its] interpenetration.”<sup>4</sup> Foreign cloth was certainly present in the deep interior and observed by Western visitors, who generally traveled on “well-worn” caravan routes along which imported cloth was systematically doled out in exchange for safe passage, food, and ivory.<sup>5</sup> But even in the final years of the nineteenth century, German traveler Friedrich Fülleborn noted a *near absence* of foreign-made cloth when he ventured off the beaten track just east of the northern tip of Lake Nyasa, not far from major interior trade arteries.<sup>6</sup>

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<sup>1</sup> Williamson, *Trade and poverty*. For declining transportation costs, see O'Rourke and Williamson, *Globalization*.

<sup>2</sup> This chapter primarily uses the modern name for mainland Tanzania, which was called German East Africa and Tanganyika during the German and British colonial periods, respectively.

<sup>3</sup> Kjekshus, *Ecology control*, p. 110 (quote); Koponen, *People and production*, p. 374. See also section 1.2 of this dissertation.

<sup>4</sup> Likewise, Gordon suggests that by the late 1860s, imported cloth was “ubiquitous” throughout central Africa. Prestholdt, 'Africa and the global lives of things', p. 92; Gordon, 'Wearing cloth, wielding guns', p. 27.

<sup>5</sup> Fee, 'Hostage', p. 3.

<sup>6</sup> Fülleborn noted, “zwischen Lupembe und Idunda [...] man sehr wenig europäische Stoffe zu haben schien.” Fülleborn, *Das deutsche Njassa- und Ruwuma-Gebiet*, p. 247.

I challenge the notion that cloth imports led to deindustrialization in the interior of nineteenth-century Tanzania, arguing that nineteenth-century imports actually remained remarkably limited in much of the interior prior to the twentieth century. Although imported cloth became more plentiful along caravan trade routes, particularly closer to the Zanzibar-adjacent coast, imports were not evenly distributed throughout the interior. Textile import levels varied substantially across geographic space, contingent upon differing local demand patterns, global export activity, and proximity to nodes of global trade. Furthermore, in much of the interior, imported cloth came to occupy a special position as high-value currency, leaving ample space for local cloth-makers to continue to produce for consumption purposes.

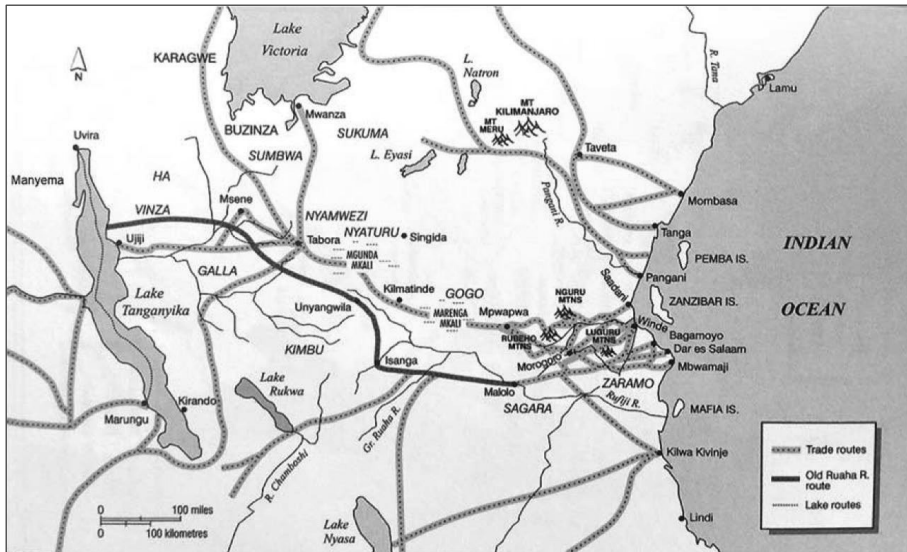
East African import data reveal that imports of the cloth most heavily demanded in the interior – high-quality American-made *merekani* – remained low and steady through the century, while imports of lower-quality Indian unbleached cloth grew precipitously (see Figure 3.1 and 3.8). Outbound figures from coastal ports to ultimate mainland and interior destinations do not exist, but contemporary reports from consular officials and travelers, along with existing scholarship on interior regions, provide clues for mapping the regional redistribution of East Africa’s cloth imports. I begin by analyzing the specific use value of imported cloth as a high-value currency in the deep interior, which helps explain why *merekani* imports remained so low. I then gauge the geographic distribution of imports by exploring the constricted pathways through which cloth entered the interior via the caravan system, focusing on the principal nineteenth-century central ivory route, which extended from the Zanzibar-adjacent mainland coast through Ugogo in the *near-coast interior*<sup>7</sup> to the major ivory markets of Tabora and Ujiji in the *deep interior*, then into the *deeper interior* beyond Lake Tanganyika (see Map 4.1).<sup>8</sup>

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<sup>7</sup> For clarity, “near-coast interior” refers to regions lying roughly 300-400 km from the coast; “deep interior” refers to western Tanzania; and “deeper interior” refers to areas west of Tanzania.

<sup>8</sup> For comparison with southern and northern trade routes, see Pawełczak, *The state*, pp. 109-124.

**Map 4.1**      **Nineteenth-century central East African caravan routes**



Source: Rockel, *Carriers*, p. xvii.

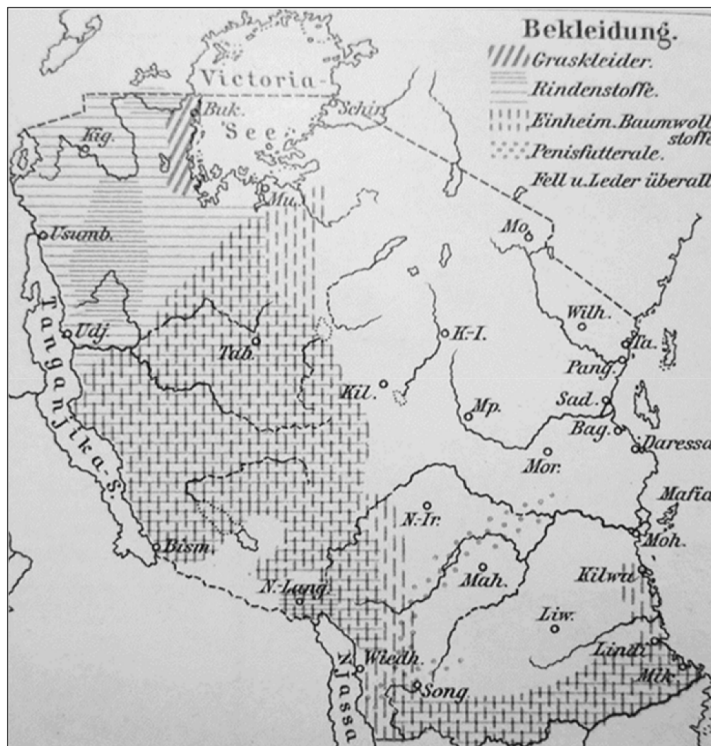
The value of imports increased dramatically as they moved inland, allowing caravans arriving in the interior from the coast to comparatively cheaply trade imported cloth (and other imported manufactures) for tusks<sup>9</sup> that were then transported to Zanzibar and sold at increasingly higher prices. The previous chapter has shown that a high share of East Africa's mounting cloth imports from the 1870s onward was obtained via exports of goods supplied by coastal and coastal hinterland people, who consequently consumed increasing amounts of cloth. Due to their favorable location, these groups enjoyed far superior bargaining power for their exports relative to most ivory providers, who were primarily situated deep in the interior, far from global trading nodes. In this chapter, I argue that certain coastal groups on Zanzibar and the mainland coast, particularly merchants and caravan financiers, captured a large portion of the profits – largely in the form of imported commodities – derived from increasingly favorable global terms of trade for ivory from the deep interior.<sup>10</sup> I also consider how the East African slave trade affected the amount of imported cloth taken into interior Tanzania during the second half of the nineteenth century, concluding that the impact on interior cloth levels was limited.

<sup>9</sup> Slaves purchased in the interior were also often subsequently exchanged elsewhere in the interior for tusks. Roberts, 'Nyamwezi trade', p. 59.

<sup>10</sup> Zanzibar merchants and caravan entrepreneurs were engaged in complex familial and economic relations with Oman. Consequently, a portion of the wealth accrued on the island via regional and international trade was transferred to the Arabian Peninsula. See McDow, 'Arabs and Africans'; Bishara, *A sea of debt*.

Thus, contrary to competition-based deindustrialization theories, the nineteenth-century expansion of global trading only moderately increased cloth stocks in the deep interior of Tanzania and did not undermine domestic production. Rather, cloth production continued in much of interior Tanzania well into the late nineteenth and early twentieth centuries according to numerous contemporary accounts.<sup>11</sup> In 1909, Meyer published a map (Map 4.2) illustrating where the use of domestic cloth had been reported up to at least the late nineteenth century, indicating consumption across large swaths of western and southern Tanzania, where traditions of cloth production had developed in the preceding centuries.<sup>12</sup>

**Map 4.2** Cloth production in Tanzania in the late nineteenth century



Source: Meyer, *Das deutsche Kolonialreich*. Vertical dashes indicate the presence of domestic cotton cloth.

<sup>11</sup> Even at the turn of the twentieth century, the art of weaving was still spreading in the interior. Richter, 'Notitzen', p. 126.

<sup>12</sup> The map was formulated by Karl Weule and based on the findings of ethnologist Heinrich Schurtz, derived from numerous ethnographic reports. Meyer, *Das deutsche Kolonialreich*; Schurtz, 'Die geographische Verbreitung der Negertrachten'.

## 4.2 Cloth as currency

Through the nineteenth century, coastal caravans entered the interior loaded with imported manufactures used to fund the voyage inland – that is, to pay porter wages, purchase food, and pay for safe passage through territories – and to purchase ivory. These imported goods, consisting primarily of cloth, beads, and metal wire, progressively increased in value as they moved into the interior, where they were transformed into valuable currencies in lieu of coins circulating on the coast.<sup>13</sup> Chief among these commodity currencies was imported cloth. Cloth had been instrumental as a medium of barter exchange in sub-Saharan Africa for centuries. In 1609, explorer João dos Santos noted that cloth was commonly used to settle debts and retained as a store of wealth in southern East Africa.<sup>14</sup> There, domestic cloth was reportedly the original medium of exchange, but between the sixteenth and eighteenth centuries, imported cloth increasingly entered circulation and had become the “only currency” used in some areas by the 1850s.<sup>15</sup> Indeed, by the mid-nineteenth century, imported cloth had become the principal commodity currency throughout much of interior East Africa, including Tanzania, particularly as East African ivory exports – largely exchanged for imported cloth – increased during the second quarter of the century. American-made *merekani*, in particular, came to serve as “a complete money” in much of interior Tanzania, circulating alongside other imported commodity currencies and traditional interregional trade goods (e.g., iron hoes, salt, and tobacco) that helped lubricate the long-distance trade system.<sup>16</sup>

Prior to the 1830s, cloth imports into Zanzibar were largely comprised of indigo-dyed *kaniki* – the “worst and flimsiest” of cloths – imported from India.<sup>17</sup> Thereafter, however, sturdier unbleached American cloth was introduced and rapidly dominated East African markets.<sup>18</sup> *Merekani* became essential for upcountry caravans, and Burton recalled making “the mistake of ignorance by not laying in an ample store of American domestics” when collecting supplies and commodity currencies for a voyage to the interior in the mid-1850s.<sup>19</sup> By mid-century, ivory was largely being purchased from interior sellers using the American cloth, along with imported beads and brass wire. Payments in central Tanzania’s Unyamwezi, for example, which

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<sup>13</sup> Rigby, ‘Report’, p. 26; Burton, ‘Lake’, p. 57.

<sup>14</sup> Dos Santos, ‘Eastern Ethiopia’, pp. 270, 275.

<sup>15</sup> Davison and Harries, ‘Cotton weaving’, p. 187. On imported cloth as currency in southern East Africa, see Machado, ‘Gujarati Indian merchant networks’, pp. 90-95, 102, 110, 150, 170, 243; Livingstone, *Missionary travels and researches in South Africa*, p. 635.

<sup>16</sup> Rockel, *Carriers*, p. 299n97 citing Sissons, ‘Economic prosperity,’ pp. 42-52. On the circulation of traditional interregional trade goods, see, Pallaver, ‘A recognized currency’, p. 22.

<sup>17</sup> Burton, ‘Lake’, p. 421.

<sup>18</sup> George J. Abbot to Daniel Webster, US Secretary of State, 12 March 1851, RG 59, Consular Correspondence, 1789-1906, Despatches from Consular Officers, Volume 3508 (Book 3), NACP, 5.

<sup>19</sup> Burton, *Zanzibar*, vol. 1, p. 484.

housed the central ivory market of Tabora, were regularly made using forearm-length “cubits” of merekani.<sup>20</sup> By the late 1850s, dyed kaniki cloth also functioned as currency, but it was “wholly rejected” by some interior groups, and American cloth remained the “standard.”<sup>21</sup> In fact, the American unbleached cloth would reportedly continue to “form in some parts of the country the only currency” through the century.<sup>22</sup>

As discussed in Chapter 3, when American merchants temporarily withdrew from Zanzibar during the American Civil War (1861-65), exports of merekani temporarily dwindled, providing greater space for lower-quality British and Indian products in East African markets. Exports from India, in particular, increased markedly, and as the previous chapter has argued, the cheaper but less durable cloth was adopted by some coastal and coastal hinterland consumers with a rise in conspicuous consumption precipitated by increasing buying power, even among lower-income groups, and rapidly changing coastal styles. However, while more expensive American cloth may have lost its advantage among coastal consumers, the superior American product quickly regained and held its footing in interior markets once American trade with East Africa resumed following the Civil War.

In the early 1870s, over half of the cloth cargo brought on Stanley’s voyage to the interior consisted of American unbleached cloth, along with half that amount of dyed kaniki and still less of fancier colored cloths.<sup>23</sup> The high share of merekani is telling and probably would have been higher still by the second half of the 1870s when America’s merekani exports returned to pre-Civil War levels (see Figure 3.1). A cheaper merekani imitation made in Bombay was introduced by the mid-1870s, although it was reportedly a “much poorer article,” and the “genuine American fabric” was easily distinguished from the “East Indian imitation” with its “looser weave,” allowing the American cloth to retain its edge in the interior.<sup>24</sup> Indeed, at the end of the 1870s, Thomson reported packing a few hundred yards of “worthless English cotton” relative to “thousands of yards of merekani, the strong and durable cotton of America, which is fast hustling England out of the African market.”<sup>25</sup>

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<sup>20</sup> Rigby, ‘Report’, p. 26.

<sup>21</sup> Burton, ‘Lake’, pp. 86, 423; Rockel, *Carriers*, p. 220.

<sup>22</sup> Cave, ‘Report for the year 1898’, p. 14.

<sup>23</sup> Fancy colored cloths – known as “cloths with names” – were characterized as only “minor” items in interior-bound caravans, included in comparatively small quantities primarily to give to chiefs, sell to wealthy consumers, and offer as special rewards. Analysis of the diverse varieties of fancy cloths imported into East Africa falls beyond the scope of this study, which focuses on the plainer cloth goods that were shipped to East Africa on a much larger scale and thus presented more of a (potential) competitive threat to domestic textile industries. For Stanley’s cargo, see Stanley, *How I found Livingstone*, p. 23. On colored “cloths with names,” see Burton, *Lake regions*, pp. 114-115, 531-533; Stanley, *Dark continent*, vol. 1, p. 50.

<sup>24</sup> *Commercial relations, 1907*, p. 777.

<sup>25</sup> Thomson, *Central African Lakes*, vol. 1, p. 36.

British consuls bemoaned the consistent demand for the American product in interior East Africa, as interior groups continued to “refuse to look at anything that does not come from America” well into the final years of the century, making it difficult for other producers to “compet[e] successfully with the United States,” sentiments also voiced by early-twentieth-century German observers as mainland Tanzania came increasingly under colonial control.<sup>26</sup> As Figure 3.1 illustrates, East Africa imported markedly low and steady amounts of American cloth relative to much larger and increasing quantities of Indian and, to a lesser degree, English exports as cloth imports into East Africa began a rapid ascent from the early 1870s. Given the pronounced and persistent preference for American cloth among interior buyers and the high share of American cloth in interior-bound caravan cargoes, this striking divergence in import levels by origin speaks volumes about the relative scale of East Africa’s cloth imports ultimately flowing into the interior.

### *The exchange virtues of merekani*

The popularity of American cloth in interior East Africa was attached to its use as a commodity currency, which favored uniformity and durability. Successful currencies must be “generally acceptable” across large distances and ideally backed by a form of authentication.<sup>27</sup> Merekani fit the bill: with “uniform thickness [...] it can be always depended upon to be of the same weight [and] purchased without misgiving [...] whereas samples from other countries have frequently been known to vary.”<sup>28</sup> American merchants were conscious of the premium placed on uniformity and were quick to identify irregularities. One agent wrote to his US supplier, “*Hellespont*’s sheetings were of very inferior quality, being much lighter weight [...] Any inferiority in quality of American standard sheetings will cause the natives to be suspicious, and cause a great deal of trouble hereafter.” The offending sheeting was a mere one pound lighter per 40-yard piece than usual.<sup>29</sup> Merekani was also authenticated by smell – or lack thereof – for it was free from the strong “gruel” odor present in other machine-produced cloth.<sup>30</sup> A British consul hoped in vain that “if some odourless substance were to be used [...] British goods would command as ready a sale as the American.”<sup>31</sup>

Merekani mitigated several common disadvantages of cloth currency, which helps explain its popularity as a medium of exchange among interior people. Cloth decays over time, particularly with moisture, and tends to require stock replenishing due to eventual withdrawal from

<sup>26</sup> Hardinge, ‘Report for the year 1896’, p. 9; Cave, ‘Report for the year 1897’, p. 13 (first quote); Cave, ‘Report for the year 1898’, p. 14 (second quote); Obst and Kloster, ‘Der Handel’, p. 482.

<sup>27</sup> Johnson, ‘Cloth as money’, p. 193.

<sup>28</sup> Cave, ‘Report for the year 1897’, p. 13.

<sup>29</sup> Edward D. Ropes to John Bertram, 11 August 1867, Box 3, Folder 1, Correspondence No. 112, MSS 104, PEM.

<sup>30</sup> Gruel is a chalky thickening agent used to bulk up cloth and improve appearance.

<sup>31</sup> Portal, ‘Report on the situation’, p. 32.

circulation in spite of the “expectation that the recipient will probably use the money for further payments, rather than consuming it himself.”<sup>32</sup> Johnson points out that West Africa’s cloth imports – almost exclusively English and Indian – deteriorated rapidly, and “only local cloth would stand up,” which helped local varieties maintain a place as currency alongside imports.<sup>33</sup> In East Africa, conversely, imported merekani did not easily spoil upon contact with water since American producers did not use water-soluble thickening agents.<sup>34</sup> Thus the currency life-span of a given piece of merekani was consequently longer. Furthermore, although it is unclear at what point down the exchange line a recipient would choose to wear rather than further exchange cloth currency, merekani’s durability – attributed to its strong weave, “stouter cotton,” and favorable manufacturing “climatic conditions”<sup>35</sup> – facilitated numerous exchanges. Enduring circulation of durable and valuable merekani partly explains the low, steady rate of imports through the nineteenth century.

While the arrival of merekani in the interior may have diminished the potential for domestic cloth to serve currency functions, it left ample space for local cloth to serve *consumption* functions.<sup>36</sup> For one, imported cloth rose substantially in price as it entered the interior, reaching high values that must have decreased the economic logic of pulling it out of circulation for personal consumption.<sup>37</sup> Indeed, imported cloth currency was generally used to make big-item investments in the interior, including cattle purchases and payment of bridewealth, which could markedly improve socio-economic standing.<sup>38</sup> Furthermore, commodity currencies are generally selected for their *relative scarcity* in the regions of exchange, crucial for preventing heavy inflation and maintaining sufficient exchange value.<sup>39</sup> Thus the very use of imported cloth (merekani or otherwise) as currency through the whole of the nineteenth century belies the flood of imports into the East African interior purported by deindustrialization theories.

In fact, relative scarcity only enhanced merekani’s position as the premier inland currency by bolstering its unit value, which was accentuated by lowered supplies and price hikes during and after the American Civil War. Indeed, in the years immediately following the Civil War, American cloth exports remained low, and American merchants relied heavily on specie to

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<sup>32</sup> Johnson, 'Cloth as money', pp. 193-194, 196-197.

<sup>33</sup> Ibid., 200.

<sup>34</sup> Cave, 'Report for the year 1897', p. 13.

<sup>35</sup> Ibid. See also *Commercial relations, 1907*, p. 777.

<sup>36</sup> Domestic cloth continued to be used for barter exchange. The Wafipa, for example, situated along a main caravan route in southwestern Tanzania, continued to trade their domestic cotton cloth for salt and iron implements until at least the late 1890s. Boileau and Wallace, 'The Nyasa-Tanganyika Plateau', pp. 601, 613.

<sup>37</sup> For the rise in prices of imported cloth as it moved inland, see Burton, 'Lake', p. 57.

<sup>38</sup> Wanyamwezi porters, for example, often invested their cloth-based wages in livestock purchases. Rockel, *Carriers*, p. 68.

<sup>39</sup> Pankhurst, 'Primitive money', pp. 213-214.

purchase African ivory.<sup>40</sup> Thereafter, American cloth production and exports to Zanzibar returned to pre-war levels, but temporarily declined again in the 1880s and 1890s due to American industrial turmoil and rising demand for American cloth in China.<sup>41</sup> In periods when genuine *merekani* was scarcer, Indian- and British-made cloth was undoubtedly taken to the interior in larger quantities. In the 1870s, when *merekani* supplies still remained constricted on the tail of the American Civil War, Stanley and Hore noted white English cloth (*satini*) and dyed Indian-exported *kaniki* circulating at the interior market of Ujiji. Alongside *merekani*, *satini* and *kaniki* remained important currencies in the interior as of the early 1880s.<sup>42</sup> Tellingly, these particular cloth varieties were, like the American cloth currency, imported into East Africa in comparatively low, steady amounts through the century (see bleached cloth and colored/printed/dyed cloth in Figure 3.8).<sup>43</sup>

In the 1890s, when American cloth exports were again impeded, an American consul reported that Indian unbleached cloth was also being taken into the interior of German East Africa “as a medium of exchange for ivory.”<sup>44</sup> However, preference for American-made cloth remained strong through the century.<sup>45</sup> In fact, consumers even demanded specific brands of the American *merekani* – particularly “LMC,” “TMW,” “MMA,” and “MMC” – all from suppliers in Boston and New York rather than Salem’s own Naumkeag Cotton Steam Company,

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<sup>40</sup> Annual exports of specie from America to Zanzibar rose sharply from \$34,000 in 1860 to \$308,340 in 1870 but declined thereafter. ‘Arrival and Departure of American Vessels, Jan 1 1857 to June 29 1894’, RG 84, Volume 084, NACP.

<sup>41</sup> Increasing manufacturing costs led to the closure of numerous mills, constraining supplies during the 1880s and into the 1890s. Ropes Emmerton & Co. to Tharia Topan, 9 February 1886, Box 42, Folder 5, MSS 103, PEM; Ropes Emmerton & Co. to Tharia Topan, 20 October 1886, Box 42, Folder 5, MSS 103, PEM; Ropes Emmerton & Co. to Tharia Topan, 8 March 1887, Box 42, Folder 5, MSS 103; Ropes Emmerton & Co. to Tharia Topan, 14 October 1887, Box 42, Folder 5, MSS 103, PEM; Ropes Emmerton & Co. to R.M. Whitney, 28 October 1892, Box 43, Folder 1, MSS 103, PEM.

<sup>42</sup> Burdo, *Les Belges*, p. 170.

<sup>43</sup> Stanley, *Dark continent*, vol. 2, p. 3; Hore, ‘On the twelve tribes’, p. 9; Hore, *Tanganyika*, p. 71.

<sup>44</sup> Stephen, ‘German East Africa’, p. 305.

<sup>45</sup> See footnote 26.

suggesting highly specified brand loyalties.<sup>46</sup> Accordingly, interior consumers coveted lengths of cloth bearing specific trademarks.<sup>47</sup>

In general, the use of imported manufactures as interior currency was tied to their high exchange values, which increased in times of scarcity. But even before the 1860s, when a global cotton shortage drove up cloth prices, explorers replenishing their commodity currencies at interior markets were stunned by prices.<sup>48</sup> In the late 1850s, Burton had reported that a measure of *merekani* worth approximately \$0.14 at Zanzibar increased to \$0.25 upon reaching the mainland coast, then rose to \$0.75 at Tabora and \$1.00 at Ujiji – respectively, a 436-percent and 614-percent increase from the price at Zanzibar – and would continue to increase the farther inland the cloth traveled and the more distant it was from the major interior ivory markets.<sup>49</sup> Over time, cloth prices in the interior would gradually decline, although they would remain remarkably high relative to coastal prices through the nineteenth century. This immense coast-interior cloth price differential may have galled European travelers seeking fresh cloth stores, but it generated sizeable profits for coastal financiers and seasoned traders venturing between the coast and the interior.

#### *Complementary commodity currencies*

Alongside imported cloth, other imported commodities became popular exchange goods in the interior during the nineteenth century, especially glass beads, brass and copper wire, and, in some areas, imported iron.<sup>50</sup> And like cloth, they rose in value immensely between the coast

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<sup>46</sup> Arabindan-Kesson (2014), Prestholdt (2008, 2012), Sheriff (1987), and Northway (1954) have suggested that wealthy Salem merchants established Salem's Naumkeag mill in the mid-nineteenth century largely to ensure a steady supply of cloth for the East African market, which thus facilitated Salem's industrial development. This assumption is understandable given the town's strong cloth-based East African trade connections. However, original purchase receipts and maker's marks listed on outward shipping manifests, spanning from the founding period of the Naumkeag mill in the 1840s to the last decade of the nineteenth century, reveal that Salem shipping firms invariably purchased Africa-bound cloth from storehouses in New York and Boston well into the late nineteenth century. This suggests strong East African brand loyalties, although this may also be indicative of Salem merchants seeking to separate their diversified foreign and domestic investments. See outward shipping manifests in MH 23, MH 235, MSS 901, MSS 103, MSS 104, and MSS 24 series, PEM; Ropes Emmerton & Co. Salem Office Records: Ships' Account, 1873-1886, Box 17, Folder 8, MSS 103, PEM; Cotton Sheeting Purchases, 1883-1890, Boxes 17 and 18, MSS 103, PEM.

<sup>47</sup> Edward D. Ropes to John Bertram, 2 December 1866, Box 2, Folder 6, MSS 104, PEM; Grant, *Walk across Africa*, p. 87.

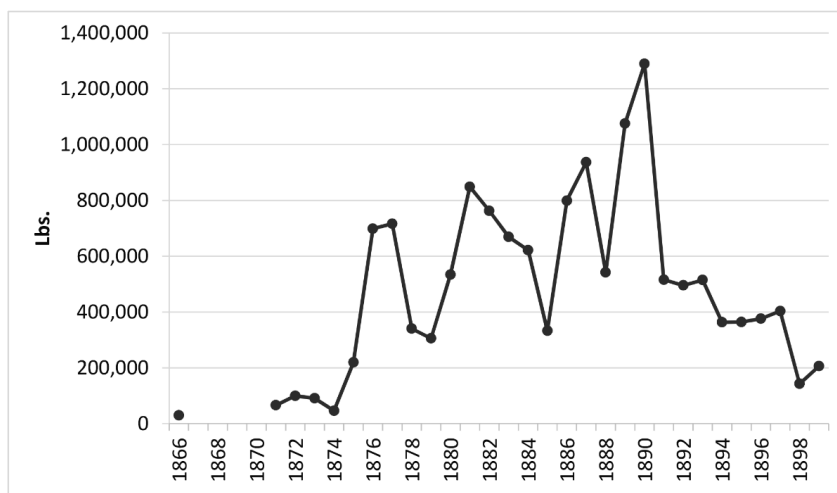
<sup>48</sup> Fee, 'Hostage', p. 4.

<sup>49</sup> Burton, 'Lake', pp. 57, 357. Burton provides prices in both "dollars" and sterling. It is unclear if he is referring to the US dollar or the Maria Theresa thaler, although these were very close equivalents at Zanzibar. According to the American consul, one Maria Theresa thaler was worth \$US 0.972 in 1862. Both Speer and Mansfield noted that the English sovereign was worth \$4.75, while historian Abdul Sheriff gives the same conversion rate for pounds sterling to Maria Theresa thalers. William S. Speer, 'Report on Zanzibar', 1862, RG 59, Consular Correspondence, 1789-1906, Despatches from Consular Officers, Volume 3509 (Book 4), NACP, 57; Daniel H. Mansfield to William L. Marcy, Zanzibar, 31 January 1856 in Bennett and Brooks, eds., *New England*, p. 499; Sheriff, *Slaves*, p. 256.

<sup>50</sup> Rigby, 'Report', p. 26; Burton, 'Lake', pp. 421, 428.

and the deep interior.<sup>51</sup> While Indian cloth may have struggled to compete with American-made cloth among selective interior consumers, other Indian exports were in higher demand in the interior. Bombay's non-cloth commodity exports rose rapidly during the post-Civil War period – precisely when American cloth exports rose back up to pre-war levels – then peaked during the ivory boom of the 1890s (see Figure 4.1). Indeed, Sheriff points out that with the sudden absence of American cloth and the unwillingness of interior consumers to readily accept lower-quality alternatives, demand for beads and wire “greatly increased” along the caravan routes.<sup>52</sup>

**Figure 4.1** Beads and metals exported from Bombay to Zanzibar, 1866-1899



Source: Bombay trade reports, 1866-1900, BL.

In West Africa, non-cloth commodity imports generally served a low-denomination function alongside higher-valued cloth.<sup>53</sup> Likewise, in much of the East African interior, beads and wire were considered “small change” while imported cloth represented “the higher specie.”<sup>54</sup> In some areas, however, non-cloth commodity imports formed the *principal* currency, outvaluing cloth.<sup>55</sup> In Karagwe (northwestern Tanzania), for example, mid-century ivory purchases were

<sup>51</sup> In 1858, for example, a length of wire purchased for \$1.00 in Zanzibar rose to \$5.00 at Ujiji. Burton, 'Lake', p. 428.

<sup>52</sup> Sheriff, *Slaves*, p. 135.

<sup>53</sup> Johnson, 'Cloth as money', p. 197.

<sup>54</sup> Burton and Speke, 'Coasting', p. 215 (quote); Pallaver, 'A recognized currency', p. 22.

<sup>55</sup> Stanley, *How I found Livingstone*, p. 25.

generally made using imported beads and brass wire.<sup>56</sup> In other cases, caravan traders had to first exchange imported manufactures for local goods, like livestock, demanded by ivory sellers.<sup>57</sup>

However, currency conventions changed over time. In the late 1850s Burton had noted, “The traveller in the Lake Regions loses by cloth [...] beads are a necessary evil to those engaged in buying ivory and slaves,” while twenty years later, imported cloth circulated as an important currency along Lake Tanganyika’s coastline.<sup>58</sup> The adoption of cloth currency along the lakeshore was probably stimulated by the region’s increasing integration into the coast-interior caravan system as trade networks extended eastward toward the Congo basin. The extension of trade led to the development of a regularized bead currency in the market town of Ujiji, which by the mid-1870s was based on a cloth standard,<sup>59</sup> a system that was encouraged by Arab and Swahili merchants who settled in the region.<sup>60</sup>

Even when and where imported cloth circulated in the interior, its use as high-value currency diminished the deleterious effects of competition purported by deindustrialization theories. Rather, differentiated use values allowed domestic production to continue alongside foreign cloth entering interior East Africa. In Ujiji, where comparatively sizeable amounts of cloth were circulating, Hore reported that, as of the start of the 1880s, the “common garment” was traditional cotton cloth and bark cloth, although “European cloth” was also worn, particularly by local women living near the “Arab” settlements.<sup>61</sup> For most average consumers, imported cloth was presumably far too valuable to regularly expend as a garment. In Ufipa, lying 150 miles south of Ujiji, imported cloth was increasingly integrated into the local economy from mid-century as the region became an important mid-way stop for long-distance caravans traveling beyond Lake Tanganyika. Yet cloth production continued to flourish, and travelers regularly noted cotton cloth production in Ufipa and surrounding areas well into the early twentieth century.<sup>62</sup>

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<sup>56</sup> Burton, 'Lake', p. 442.

<sup>57</sup> Pawelczak, *The state*, pp. 57-58.

<sup>58</sup> Burton, 'Lake', p. 227 (quote); Stanley, *Dark continent*, vol. 2, p. 3.

<sup>59</sup> The amount of cloth in town determined the daily exchange rate of beads relative to the two-yard *shukka* and the four-yard *doti*. Hore, 'On the twelve tribes', p. 9; Hore, *Tanganyika*, pp. 71-72. For bead currency see, Pallaver, 'A recognized currency'.

<sup>60</sup> For expansion of trade and the evolution of Ujiji's exchange system during the second half of the nineteenth century, see Brown, 'Muslim influence', pp. 619-623.

<sup>61</sup> Hore, 'On the twelve tribes', p. 10.

<sup>62</sup> Waller, *Last journals*, pp. 461, 463; Thomson, *Central African Lakes*, vol. 2, pp. 220-21; Cameron, *Across Africa*, pp. 195-7; Boileau and Wallace, 'The Nyasa-Tanganyika Plateau', pp. 601, 613; Melland and Cholmeley, *Through the heart of Africa*, pp. 29-30.

### 4.3 Interior ivory as a coastal boon

In West Africa, cloth currency was most valuable in northern desert regions, where aridity prohibited cotton growing. As itinerant merchants traveled northward, they lucratively exchanged domestic cloth strips for salt demanded in the south.<sup>63</sup> In East Africa, the value of imported cloth currency progressively increased as it moved inland, where it was profitably exchanged for ivory. However, unlike West Africa's northern-procured salt, which was ultimately sold to southern consumers, East Africa's coastal merchants sold interior-procured ivory to *global* buyers willing to pay steep prices, pushed up substantially by global demand between the 1820s and the early 1870s, while interior ivory prices remained comparatively very low.<sup>64</sup> Consequently, a disproportionate share of the wealth obtained via East African ivory exports was accrued at coastal trading centers – especially Zanzibar and the adjacent Mrima coast towns, particularly Bagamoyo<sup>65</sup> – compared with the interior from which the ivory came. Zanzibar's resident traders, particularly merchants of Indian descent, amassed considerable profits that were reinvested into trade ventures, moneylending, and clove plantations,<sup>66</sup> while a portion of the coastal wealth was transferred beyond East Africa to other Indian Ocean locales via business and family networks linking Zanzibar with Oman and India.<sup>67</sup>

#### *Interior players in the long-distance caravan system*

This is not to suggest that interior people could not profit from the expansion of East Africa's global trade integration. To the contrary, many chiefs situated along the caravan routes enjoyed substantial gains, levying tolls (*hongo*) on passing caravans and often claiming one tusk of each elephant killed in their territories.<sup>68</sup> Furthermore, in some parts of the interior, a prospering merchant class developed, forming “a kind of agricultural and commercial élite.”<sup>69</sup> Subsistence farmers living along the major routes could also obtain imported goods by bartering food,

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<sup>63</sup> Johnson, 'Cloth as money', p. 196.

<sup>64</sup> Zanzibar's ivory export prices steadily climbed from 22.00 Maria Theresa thalers in 1823 to 89.65 in 1873. According to Beachey, prices stabilized thereafter. Sheriff, *Slaves*, pp. 253-256 (Appendix B); Beachey, 'East African ivory trade', p. 278.

<sup>65</sup> Bagamoyo served as the principal central caravan route terminus during the second half of the nineteenth century. Around mid-century, Kilwa and Pangani also handled sizeable amounts of coastal exports to Zanzibar, but by the 1870s exports of ivory from the mainland to Zanzibar had become increasingly concentrated at Bagamoyo. Sheriff, *Slaves*, pp. 122-123. On mainland Mrima ports, see Pawelczak, *The state*, pp. 124-133.

<sup>66</sup> Sheriff argues that in the long run, however, Zanzibar's “assimilation into the world system of trade” and the encroaching political subordination by the British during the second half of the nineteenth century would ultimately curtail the economic power of Zanzibar's Indian merchant class, diminish the commercial economy of Zanzibar, and undermine the Omani state. Sheriff, *Slaves*, pp. 101-110, 202-208, 245.

<sup>67</sup> For the Arabian Peninsula, see McDow, 'Arabs and Africans'; Bishara, *A sea of debt*. For India, see Beachey, 'East African ivory trade', p. 227.

<sup>68</sup> These proceeds helped enable chiefs to secure followers and create standing armies. Deutsch, 'Notes', p. 86.

<sup>69</sup> Unomah and Webster, 'East Africa', p. 305. See also Sheriff, *Slaves*, pp. 180-181.

although, as discussed below, the gains to be made on provisioning were largest closer to the coast.

Both coastal and interior people participated in the long-distance caravan trade during the nineteenth century, and existing interior exchange systems increased in tandem.<sup>70</sup> Wanyamwezi people from the area surrounding Tabora were particularly important players. They had long engaged in regional interior trading and began venturing to the coast by 1800, dominating coast-interior trading before coastal merchants began to increasingly organize interior-bound caravans during the second half of the century.<sup>71</sup> However, Wanyamwezi caravans often paid significantly higher hongo fees along caravan routes compared with their Arab counterparts, indicative of a “caravan infrastructure” that increasingly favored “coast men.”<sup>72</sup> Furthermore, as they approached the coast, Wanyamwezi caravans often failed to receive imported commodity currencies commensurate with their haul. Burton reported in the 1850s that caravans were often “plunder[ed] systematically” by self-governing coastal hinterland settlements whose “income [was] chiefly derived from the down-caravans of Wanyamwezi”:

“Though rigorously forbidden by the Prince of Zanzibar, [these settlements] send large armed parties [...] as far as 150 and 200 miles into the country, where they act less like touters than highwaymen. By every petty art of mercantile diplomacy, sometimes by force, at other times by fraud [they] secure these caravans, bring them to the village, and then begin the work of plunder. Out of each frasilah from 8 dols. to 14 dols. are claimed as the Government due; the Diwans [settlement rulers] then demand 6 dols. as their fee [...] plus 1 dol. for ugali or porridge [...] and 1 dol. for the use of water [...] The owner of the tusk is afterwards allowed to deal with a Banyan, from whom the Diwan has received a bribe, [who] buys for 18 to 21 dols. the article which at Zanzibar is worth 50 dols.”<sup>73</sup>

Wanyamwezi caravans that made it to the coast faced discriminatory duties charged by the Zanzibar customs house – particularly at Bagamoyo, the main coastal ivory depot<sup>74</sup> – which

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<sup>70</sup> Unomah and Webster, 'East Africa', pp. 284-289.

<sup>71</sup> For early coast-interior trading by the Wanyamwezi, see Roberts, 'Nyamwezi trade', p. 49. Wanyamwezi contact with the coast may even be dated farther back to the eighteenth century. Rockel, *Carriers*, p. 43.

<sup>72</sup> Pawelczak, *The state*, p. 221.

<sup>73</sup> Burton, 'Lake', pp. 56-57. According to Beachey, "a great army of touters preyed on down-going and up-coming caravans" at Zungomero. Beachey, 'East African ivory trade', p. 272n10.

<sup>74</sup> Pawelczak points out that while more equitable trade was possible at Dar es Salaam and Saadani, interior-organized caravans were likely drawn to Bagamoyo by higher purchase prices and greater subsequent employment opportunities in inland-bound caravans. Pawelczak, *The state*, p. 314. See also Glassman, *Feasts and riot*, pp. 64-65.

exceeded those levied on coastal caravans by over 65 percent in the 1860s.<sup>75</sup> Indeed, Sheriff argues that a concerted effort was initiated at Zanzibar to “favor coastal Arab penetration of the interior, and to exploit the ivory brought by the Wanyamwezi traders to the maximum.”<sup>76</sup> In addition, coastal community leaders levied brokerage fees on every non-Arab caravan entering Bagamoyo and Kilwa up to at least the 1870s.<sup>77</sup> Such practices diminished the earnings – in the form of imported manufactures – that interior-organized caravans could ultimately take back to the interior. It seemed to Burton that, “Everywhere the principle is one – the loss is to the barbarian, and the profits to the people of the coast.”<sup>78</sup>

Deutsch suggests that Wanyamwezi traders were increasingly discouraged from organizing coast-bound caravans between the 1850s and 1870s as the ivory frontier moved westward, “out of the ambit of local Nyamwezi hunters and traders.”<sup>79</sup> He argues that while some followed the ivory frontier, they struggled with limited access to credit and strong competition from coastal traders, particularly once coastally connected merchants from Zanzibar began settling in the deep interior by mid-century.<sup>80</sup> During the second half of the century, some Wanyamwezi became waged porters for coastal caravans, but others would continue to travel to the coast independently.<sup>81</sup> As a result of their strong coastal connections, the Wanyamwezi were renowned consumers of imported cloth by the 1860s.<sup>82</sup> However, it is important to bear in mind that while some interior commercial entrepreneurs could increase their material wealth by engaging in the coast-interior trade system, most *average consumers* in the East African interior did not enjoy substantial gains. Furthermore, they faced steep prices for imported commodities, particularly high-valued cloth imports, making the *consumption* of imported cloth an expensive luxury for the majority.

### *The coastal advantage*

While enterprising interior traders and hunters acquired gains, the largest profits from the long-distance trade system were accrued by merchants and financiers at Zanzibar, who had mastered

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<sup>75</sup> William E. Hines to William H. Seward, Zanzibar, 25 October 1864, in Bennett and Brooks, eds., *New England*, pp. 531-532. For discussion of discriminatory duties, see Glassman, *Feasts and riot*, p. 59; Sheriff, *Slaves*, pp. 123, 125; Alpers, *Ivory*, p. 247; Deutsch, 'Notes', p. 81.

<sup>76</sup> Sheriff, *Slaves*, p. 125. By the 1830s, the Omani Sultan residing on Zanzibar began sending caravans of about one hundred men into the interior to search for ivory sources. Unomah and Webster, 'East Africa', p. 276.

<sup>77</sup> Pawelczak, *The state*, pp. 292-294.

<sup>78</sup> Burton, 'Lake', p. 57.

<sup>79</sup> Deutsch, 'Notes', p. 81.

<sup>80</sup> Ibid.

<sup>81</sup> Rockel suggests that caravans originating in the interior may have outnumbered those from the coast up to about 1880. Rockel, 'A nation', p. 188.

<sup>82</sup> Speke, 'On the commerce of Central Africa', p. 144; Hore, 'On the twelve tribes', p. 7.

“the art of buying cheap and selling dear.”<sup>83</sup> In 1890, the British consul-general at Zanzibar claimed, “The profits made by the Indian merchants, on the whole, have been enormous [...] unsatisfied with the modest returns of ordinary commerce.”<sup>84</sup> Beachey points out that in the interior, on the other hand, “large fortunes from the ivory trade were not common,” even among traders with close ties to coastal financiers, partly due to high rates of interest on borrowed capital.<sup>85</sup> Indian merchants at Zanzibar, who advanced imported commodities to Arab and Swahili caravan traders on credit, often priced these imported goods fifty percent above their original purchase value, thus already doubling the value of commodity currencies even before they crossed to the mainland; and upon returning from the interior, caravans were subsequently offered purchase prices for their ivory far below the prices ultimately charged to global buyers.<sup>86</sup>

Price differentials between the interior and Zanzibar were incredibly steep, owing in part to high markups of ivory prices at Zanzibar and comparatively limited amounts of imported commodity currencies circulating in the interior, but also due to heavy transportation and transaction costs faced by caravans (see discussion below). In the late 1850s, one frasilah (35 lbs.) of ivory could be bought at Tabora for as much as 44 yards of imported merekani (worth approximately \$3.20 at Zanzibar), then sold to global buyers at Zanzibar for \$52.50 (equivalent to about 722 yards at Zanzibar prices), a price increase of 1,540 percent.<sup>87</sup> Given an upper-bound interior market rate of 44 yards per frasilah and a total of roughly 13,960 frasilahs exported from Zanzibar in 1859, an estimated 614,240 yards of cloth could have been funneled into the interior in exchange for ivory exported from Zanzibar.<sup>88</sup> This compares starkly with the roughly 8,587,000 yards imported into East Africa the following year, which is particularly striking given that interior-derived ivory accounted for over half of the value of East Africa’s commodity exports until the early 1870s (see Figures 3.1 and 3.5). My figures overestimate yards traded in the interior in exchange for ivory since tusks were generally much cheaper in areas distant from the central trading depots and could also be obtained using non-cloth commodity currencies.

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<sup>83</sup> Koponen, *People and production*, pp. 55, 67-68.

<sup>84</sup> Euan-Smith to Salisbury, 24 February 1890, as cited by Beachey, 'East African ivory trade', p. 277.

<sup>85</sup> *Ibid.*, 276.

<sup>86</sup> Many caravan traders consequently became heavily indebted to Indian financiers, whose presence on Zanzibar had increased substantially by mid-century. Sheriff, *Slaves*, p. 108; Unomah and Webster, 'East Africa', pp. 275-277.

<sup>87</sup> The price at Tabora is an upper-bound estimate since one frasilah was worth three *gorahs* of merekani, which ranged from 7 to 11 four-yard *doti*, or 28 to 44 yards. Burton, 'Lake', pp. 422, 442. For the Zanzibar merekani price (\$0.073 in 1859), see Appendix 2. For the Zanzibar ivory price, see Sheriff, *Slaves*, p. 255.

<sup>88</sup> For frasilahs of ivory exported in 1859, see Rigby, 'Report', p. 21.

Interior prices did rise over time, but they remained far below Zanzibar prices (see Table 4.1). By 1876, one frasilah of ivory could be purchased at the major interior market of Ujiji on the northeastern shore of Lake Tanganyika for 140 yards of cloth (worth \$12.46 at Zanzibar), but already in 1873 Zanzibar's ivory price had reached \$89.65, a 620-percent advantage on the 1876 Ujiji market price.<sup>89</sup> Inflation of prices at Ujiji was undoubtedly influenced by supply and demand, but may have also been manipulated by local Wajiji traders who artificially drove up ivory market prices to dampen the profits of competing Wangwana middlemen.<sup>90</sup> Indeed, outside of the principal interior trading centers, ivory prices continued to remain substantially lower.<sup>91</sup> From the mid-1870s, prices for ivory in both the interior and on the global market reportedly levelled off and remained relatively stable through the century.<sup>92</sup>

**Table 4.1 Ivory prices per frasilah**

	Interior market	Zanzibar	% increase
<b>1859</b>	\$3.20	\$52.50	1540%
<b>1873/6</b>	\$12.46	\$89.65	620%

Sources: see footnotes 87 and 89.

#### 4.4 Transportation and transaction costs

In Burton's view, the relatively limited flow of cloth into the interior resulted from coastal machinations, which posed "serious obstacles" by "monopolizing the import traffic" from at least mid-century.<sup>93</sup> However, low quantities of cloth in the deep interior were also influenced by persistently high transportation and transaction costs associated with ivory-seeking upcountry caravans. These included tributary payments, food expenditures, and porter wages. Global transportation costs were declining during the nineteenth century with the construction of the Suez Canal and the development of steamships and railways. However, East Africa lagged far behind, with the first rail line to the central interior of Tanzania completed only in

<sup>89</sup> In 1876, one pound of ivory equaled four yards of cloth at Ujiji (see Stanley, *Dark continent*, vol. 2, p. 4.). In the same year, merekani cost \$0.089 per yard at Zanzibar (see Appendix 2). For Zanzibar's ivory price in 1873, see Sheriff, *Slaves*, p. 256.

<sup>90</sup> Brown, 'Muslim influence', p. 622. However, market prices were generally higher at Tabora due to its closer proximity to the coast. Ibid., 625.

<sup>91</sup> At Katupi, for example, located at the southern end of Lake Tanganyika, one frasilah of ivory was worth 40 yards of cloth (worth \$4.60 at Zanzibar) in 1874. Cameron, *Across Africa*, p. 209.

<sup>92</sup> Beachey, 'East African ivory trade', p. 278. Although Brown notes a "general inflationary trend" for market goods at Ujiji up to 1890, partly due to manipulation by local traders. Brown, 'Muslim influence', pp. 621-622.

<sup>93</sup> Burton, 'Lake', p. 421.

1914.<sup>94</sup> Compared with mechanized transport, the voyage to the deep interior was lengthy and expensive – roughly £124 per ton to reach Tabora in the 1870s – which, Sheriff points out, “imposed severe limitations on the quality and quantity of commodities that could enter the channels of trade” and diminished the price-reducing impact of technology-driven decreases in global transportation costs.<sup>95</sup>

The high expense of transporting cloth drove up prices, which helps explain why merekani was favored in the interior. For the interior consumer, to whom these costs were ultimately transferred, it made scarce economic sense to purchase less durable but still expensive varieties. Transportation and transaction costs also provide clues to the geographically differentiated distribution of imported cloth in the interior. The majority of cloth payments was dispensed along the central caravan route, particularly in the near-coast interior (300-400 km inland), where bargaining power was comparatively strong and imported commodities held less currency value relative to the deep interior beyond. Off the well-traveled routes, on the other hand, foreign-made cloth was still scarce by the end of the century.<sup>96</sup>

### *Tribute and provisioning*

Caravans were obliged to pay tributary hongo to numerous chiefdoms along the main trade arteries in exchange for unfettered passage.<sup>97</sup> Upcountry hongo payouts – usually merekani, beads, and some fancier cloth – made up a significant portion of the cloth outfitted for any given voyage to the interior.<sup>98</sup> By the 1880s a small caravan might dole out 4,000 yards of merekani en route to the deep interior.<sup>99</sup> On downcountry voyages, on the other hand, caravans typically paid hongo using domestic goods, especially iron hoes, tobacco, salt, and hemp, often obtained at interior market towns using imported beads.<sup>100</sup>

The most expensive leg was through the near-coast interior region of Ugogo, which enjoyed “economic prosperity” during the nineteenth-century due to its favorable position along the

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<sup>94</sup> Calvert, *German East Africa*, p. 27.

<sup>95</sup> Sheriff, *Slaves*, pp. 192, 113n50. With the construction of rail lines in Tanzania during the early twentieth century, the cost of transporting one ton of goods to connected regions reportedly fell to roughly 6 percent of the caravan-based transportation cost. Biermann, *Tanganyika railways*, p. 23.

<sup>96</sup> Fülleborn, *Das deutsche Njassa- und Ruwuma-Gebiet*, p. 247.

<sup>97</sup> Burton, 'Lake', pp. 148-152.

<sup>98</sup> For examples of upcountry hongo paid at Ugogo in the 1860s, 1870s and 1880s, see Speke, *Journal of the discovery*, pp. 61-63, 69-71; Cameron, *Across Africa*, p. 98; Becker, *La vie*, vol. 1, p. 138.

<sup>99</sup> Becker, *La vie*, vol. 1, p. 470; Fee, 'Hostage', p. 6.

<sup>100</sup> Deutsch, 'Notes', p. 80; Roberts, 'Nyamwezi trade', pp. 52-53; Pallaver, 'A recognized currency', pp. 22, 24, 27n43; Sigl, 'Bericht des Stationschefs', pp. 164-166; Becker, *La vie*, vol. 1, p. 136.

central caravan route.<sup>101</sup> Situated relatively close to the coast, the value of cloth and other imported commodity currencies remained comparatively low here – roughly double coastal prices – making hongo demands quantitatively high relative to the deep interior.<sup>102</sup> Consequently, it was here that much of the cloth entering the interior ended up.<sup>103</sup> Caravans passed through numerous small Ugogo territories, each requiring separate payments, with demanded amounts fluctuating based on the size and nature of caravans and increasing over time.<sup>104</sup> Some Western explorers, unaccustomed to the tributary arrangements, described “that irritating system of robbery [which could] amount in the course of a few days’ journey to from twenty to twenty-five percent of the total property of a caravan.”<sup>105</sup> Experienced caravan leaders could bypass particularly rapacious chiefs, albeit at the expense of time and convenience.<sup>106</sup> They could also negotiate hongo fees, although power relations generally “favored local communities” up to the peak of the nineteenth-century caravan trade in the late 1880s.<sup>107</sup> However, caravans often received a number of benefits in exchange for paying hongo: access to guarded water wells, unfettered passage, and protection against theft.<sup>108</sup>

Rockel notes that “the route through Ugogo could hardly be avoided” by caravans traveling between the Zanzibar-adjacent coast and the central Tanzanian interior during the second half of the nineteenth century.<sup>109</sup> Although caravans venturing upcountry regularly departed from different points on the coast, they typically converged in the Mpwapwa area of Ugogo – “the last place with good food and water supplies” – before diverging again as they moved farther inland into an arid, uninhabited tract.<sup>110</sup> By mid-century, the route through Ugogo had become the principal path to interior ivory markets, with over 100,000 people passing through the area

<sup>101</sup> Rockel, 'Caravan porters', pp. 27-28 citing Sissons, "Economic prosperity" However, in the long run, the expansion of agricultural production to provision passing caravans ultimately eroded Ugogo's soil. Christiansson, *Soil erosion*, pp. 149-153.

<sup>102</sup> In the early 1870s, Cameron noted that commodity currencies, in general, were worth double their Zanzibar value at Ugogo. In 1881 the White Fathers missionaries similarly reported that the coastal value of imported merikani more than doubled in Ugogo. Cameron, *Across Africa*, p. 98; Pallaver, 'A recognized currency', p. 22.

<sup>103</sup> Rockel, 'Caravan porters', p. 32.

<sup>104</sup> Burton, 'Lake', pp. 149-152; Wilson and Felkin, *Uganda*, vol. 1, p. 58.

<sup>105</sup> Wilson and Felkin, *Uganda*, vol. 1, p. 58. Burton, on the other hand, considered hongo “not unjust [...] custom-dues of the government.” Burton, 'Lake', p. 149. On contrasting perspectives of hongo, see Pawelczak, *The state*, p. 219.

<sup>106</sup> Pawelczak, *The state*, pp. 219-220.

<sup>107</sup> A reversal in the balance of power eventually occurred by the last decade of the century, which dampened the economic viability of once-thriving communities lining the central caravan route. European observers often believed that commercial caravans had impoverished roadside towns through plunder, but Rockel argues that the principal cause was the increasing presence of German colonists along the caravan routes. Their superior firepower and military backing allowed them to disregard traditional hongo procedures, and some permitted their porters to plunder villages for provisions. Rockel, 'Forgotten caravan towns', pp. 18-20.

<sup>108</sup> Rockel, 'Caravan porters', p. 32.

<sup>109</sup> Ibid., 33.

<sup>110</sup> Ibid., 18-19.

each year, in part due to the region's capacity to produce surplus food to provision caravans.<sup>111</sup> Chiefs in Ugogo thus gained considerable power to levy hongo on passing caravans. Noncompliance could mean "complete destruction [and] massacre," even for armed caravans.<sup>112</sup> Porters often fled rather than face violence should a caravan leader refuse to pay hongo.<sup>113</sup> Thirst was also an important consideration. In Ugogo, water was accessible only from carefully guarded wells. Pruen recounted how an Arab caravan leader chose to "refuse hongo and force his way," but in retaliation, "the wells along the route were closed, and new ones unknown to him opened for the local needs. Only two or three of his party [survived]."<sup>114</sup>

Hongo was typically partly retained by the headman as accumulated wealth and doled out to his retinue to ensure loyalty.<sup>115</sup> However, commoners living near the caravan routes could also acquire commodities by trading provisions to caravans.<sup>116</sup> Imported beads were commonly used to purchase provisions, serving a "small change" function, although cloth was also regularly used.<sup>117</sup> Indeed, European explorers frequently reference the cost of provisions for porters in cloth terms.<sup>118</sup> Dodgshun, for example, offered one *shukka* (two yards) per day per seven men in 1877.<sup>119</sup> Purchasing provisions in groups may have obviated the need for the small-change functionality offered by beads and wire – particularly when purchasing more expensive provisions, like fowl, eggs, and milk – since men could exchange a higher-value piece of cloth for provisions to divide among themselves.

In the 1870s, Stanley was advised that he would need, on average, less than one-half yard to provision each porter per day.<sup>120</sup> However, more was required close to the coast and less in the deep interior due to geographically variable exchange values. Passing through Ugogo, Cameron bemoaned, "stores of cloth were melting away, owing to the high price of provisions and the

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<sup>111</sup> A southern route was regularly used up to the 1840s, but martial disruption and, perhaps more importantly, provisioning difficulties led to a general northward shift through Ugogo. Maasailand to the north of Ugogo was avoided by many caravans due to threats posed by Maasai warriors. Sheriff, *Slaves*, p. 177; Rockel, 'Forgotten caravan towns', p. 12; Rockel, 'Caravan porters', pp. 25-33; Pawelczak, *The state*, p. 198.

<sup>112</sup> Rockel, *Carriers*, pp. 154-155.

<sup>113</sup> Wilson and Felkin, *Uganda*, vol. 1, p. 58.

<sup>114</sup> Pruen, *The Arab and the African*, p. 184.

<sup>115</sup> Burton, 'Lake', pp. 149, 428; Prestholdt, 'Africa and the global lives of things', p. 87.

<sup>116</sup> On caravan provisioning, see Rockel, *Carriers*, p. 152; Burton, 'Lake', p. 97; Unomah and Webster, 'East Africa', p. 297; Kjekshus, *Ecology control*, p. 32; Maddox, 'Environment and population growth', pp. 47-48.

<sup>117</sup> Pallaver, 'A recognized currency', pp. 22-23.

<sup>118</sup> In the mid-1880s, for example, Giraud offered roughly two yards per man per week for provisions. Pruen noted in the 1880s that porters used cloth, along with wire, tobacco, and gunpowder, to purchase fowl and grain in Mpwapwa. Giraud, *Les lacs*, p. 58; Pruen, *The Arab and the African*, p. 117.

<sup>119</sup> Bennett, ed., *From Zanzibar to Ujiji*, pp. 51-52.

<sup>120</sup> Forty yards fed 100 porters per day. Stanley, *How I found Livingstone*, p. 22.

large tribute we had so constantly been compelled to pay.”<sup>121</sup> An estimated 80,000 *doti* (320,000 yards) of cloth were annually exchanged for surplus grain alone in Ugogo during the second half of the nineteenth century.<sup>122</sup> Here, strong demand for provisions and a relative regional abundance of imported commodities kept food prices high. And times of elevated scarcity, like the drought-induced famine of 1884-85 and the rinderpest epidemic of the 1890s, must have augmented food prices, providing even more peasant bargaining power in Ugogo for those willing to part with a portion of their scarce food supplies.<sup>123</sup>

But to what degree did comparatively large amounts of cloth entering Ugogo affect local clothing preferences? The aridity that helped allot considerable local bargaining power over caravans passing through the region would have presumably enhanced regional demand for imported cloth, for local cotton cultivation was practically impossible, while exposure to caravans would have presumably enhanced interest in coastal consumption habits.<sup>124</sup> Further, larger supplies and lower values of imported cloth, relative to the deep interior, likely comparatively increased the economic logic of consuming – rather than exchanging – imported cloth among inhabitants of Ugogo. Thus, perhaps more than anywhere else in the interior, we could expect to see local clothing replaced with imported cloth in Ugogo. Even here, however, traditional garments remained in vogue. Hore reported in the 1880s, well into the boom years of the caravan trade, that the clothing of Wagogo men generally consisted not of imported cloth, or any cotton cloth for that matter, but of a traditional “short mantle of well softened goatskin, often fringed or embroidered with white beads, and covered with bands and spots of bark dye.”<sup>125</sup> This is not to suggest that imported cloth was not worn by Wagogo people. Wealthier women, for example, did gravitate toward imported clothing, “according to their means.”<sup>126</sup> The material point, however, is that local clothing customs persisted with ease alongside imported cloth even in relatively cloth-abundant Ugogo.

Once in the deep interior, explorers purchasing provisions were generally relieved to find “cheaper prices, such as were not known in Ugogo,” which consequently kept imported cloth stocks comparatively low, further diminishing the likelihood of local people replacing

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<sup>121</sup> Cameron, *Across Africa*, p. 96.

<sup>122</sup> During the second half of the nineteenth century, an estimated 1,090,909 kilograms of grain were produced each year in Ugogo to provision caravans, indicating substantial demand in the region. This expansion in surplus production was enabled by the application of slave and immigrant labor facilitated by the caravan trade, which increased the population from 200,000 in 1860 to 360,000 by 1890. Håkansson, 'Human ecology', p. 585 citing Sissons, "Economic Prosperity," 189, 229-230.

<sup>123</sup> For the impact of the 1884-85 famine on the caravan trade, see Rockel, *Carriers*, pp. 156-159.

<sup>124</sup> For the challenges of cotton cultivation in Ugogo, see Burton, 'Lake', p. 404.

<sup>125</sup> Hore, 'On the twelve tribes', p. 6.

<sup>126</sup> *Ibid.*, 6

traditional garments with expensive imported cloth.<sup>127</sup> Furthermore, common subsistence farmers in parts of the deep interior may have had decreasing opportunities to sell surplus food to passing caravans by the 1880s. Settlers from the coast and local residents who had accrued wealth through trade began investing in slave-based cultivation near interior markets like Tabora to provision caravans.<sup>128</sup> And, importantly, at the main interior markets of Tabora and Ujiji, glass beads formed “the most important means of payment” for low-level purchases like food, with cloth generally used for ivory and slave purchases.<sup>129</sup> Consequently, although cloth was generally more abundant near major interior trade centers, opportunities for local people to obtain imported cloth by selling their surplus foodstuffs were likely relatively limited.

### *Porter wages*

Porter wages also increased caravan transportation costs and affected interior cloth stocks. Initially, porter remuneration was principally comprised of merekani and smaller amounts of kaniki and expensive colored cloths, which increased import levels in Unyamwezi, in particular, a veritable “nation of porters.”<sup>130</sup> However, other goods were often accepted in lieu of cloth. Cowry shells, for example, were popular in the late 1850s since they could be profitably exchanged north of Unyamwezi where they served as currency.<sup>131</sup> Imported glass beads were also a common form of wage payment.<sup>132</sup>

Professional porters enjoyed significant bargaining power as the demand for porter labor increased from the mid-nineteenth century onward. Rates varied, but porters could receive 18-20 yards of cloth per voyage in 1858, rising to 60 yards by 1881.<sup>133</sup> However, assuming that each porter carried two 35-pound frasilahs, porter wages increased the cloth-based cost of interior ivory acquisitions by only 9-10 yards per frasilah in the late 1850s and by 30 yards by the last quarter of the century, still leaving coastal financiers with a substantial profit (see Table 4.2).<sup>134</sup>

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<sup>127</sup> Stanley, *How I found Livingstone*, p. 173.

<sup>128</sup> Pallaver, 'Muslim communities', p. 6; Sheriff, *Slaves*, p. 181; Becker, *La vie*, vol. 2, p. 30.

<sup>129</sup> Pallaver, 'A recognized currency', pp. 23-24.

<sup>130</sup> Rockel, *Carriers*, pp. 220-223; Sheriff, *Slaves*, p. 182.

<sup>131</sup> Burton, 'Lake', p. 448.

<sup>132</sup> Pallaver, 'A recognized currency', p. 23.

<sup>133</sup> For porter wages during the second half of the nineteenth century, see Rockel, *Carriers*, pp. 211-228.

<sup>134</sup> Typical loads weighed 60-75 lbs. Stanley, *Dark continent*, vol. 1, p. 50; Rockel, *Carriers*, p. 218. For interior ivory prices, see Table 4.1.

**Table 4.2 Porterage wage burden per frasilah of ivory**

(prices and wages expressed in yards)

	Ivory price (interior)	Ivory price (Zanzibar)	Coastal profit	Porter wage	Wage burden
<b>1859</b>	44	722	678	10	1.5 %
<b>1873/6</b>	140	964	824	30	3.6 %

Sources: See Table 4.1 for ivory prices; Zanzibar ivory prices converted to yards based on Zanzibar merekani prices; porter wages from Rockel, *Carriers*, p. 223. Porter wages are based on the nearest available rates (1858 and 1881) and are divided by two since each porter typically carried two frasilahs.

Some estimates suggest that 100,000 porters were annually active by the late nineteenth century; others propose lower figures in the tens of thousands.<sup>135</sup> Taking the upper-bound participation estimate and very liberally assuming that all wages were paid in cloth, a maximum of 6,000,000 yards – one-seventh of East Africa’s total annual cloth imports or one-fifth of the cloth imported via Zanzibar alone – may have annually entered the interior as porter wages by the 1880s.<sup>136</sup>

However, much of this cloth never reached the interior. Porters received between two and four months’ worth of their wages before the journey inland and then either received a month-to-month wage while on the road or claimed a lump sum upon completion.<sup>137</sup> A substantial portion of the advanced wage was often spent at the coast as porters awaited the departure of upcountry caravans. Furthermore, as Glassman points out, by the 1880s porters commonly fell into extensive debt while sojourning at the coast. Indian shopkeepers advanced them cash at “exorbitant rates of interest, thus trapping them in ties of debt,” which reportedly allowed coastal businessmen to regularly claim around half of the advance wages paid to porters prior to departure.<sup>138</sup> Much of the remaining commodity currency wages acquired upfront were expended en route before reaching the deep interior since caravan food rations (*posho*) were often scant and food was expensive in the near-coast interior.<sup>139</sup>

By the 1870s, Wanyamwezi porters shifted their preferred remuneration to include valuable firearms, largely due to turmoil at home, but probably also because decades of collecting wages in cloth and other commodity currencies had gradually increased the stocks of these goods in

<sup>135</sup> Raum ‘German East Africa’, p. 170; Iliffe, *A modern history of Tanganyika*, pp. 44-45.

<sup>136</sup> Based on an 1881 wage of 60 yards. See Figure 3.1 for East Africa’s cloth import levels.

<sup>137</sup> Rockel, *Carriers*, pp. 213-214.

<sup>138</sup> Glassman, *Feasts and riot*, p. 60.

<sup>139</sup> Rockel, *Carriers*, p. 153; Cameron, *Across Africa*, p. 96; Burton, ‘Lake’, p. 409.

Unyamwezi, thus slowly diminishing their currency value in the immediate area.<sup>140</sup> Unlike less well-stocked regions of the deep interior, the local consumption value of imported cloth in Unyamwezi likely began to exceed its exchange value. Indeed, relative to other deep interior groups, the Wanyamwezi were reportedly well-clothed in imported cloth, having been influenced by coastal fashions brought home both literally and figuratively.<sup>141</sup>

While Wanyamwezi traders and porters did increase their consumption of imported cloth, improvements in global terms of trade for ivory did not result in the flood of cloth into most of the deep interior theorized in prevailing deindustrialization narratives. Rather, as I have illustrated, low interior ivory prices, regionally dependent tribute and provision prices, and minimal portage wage burdens limited the amount of cloth disbursing into the deep interior. Further, the cloth that did flow inland was concentrated in large part in the hands of privileged groups like the Wagogo and Wanyamwezi.

#### 4.5 The peak and decline of the ivory trade

The ivory trade, which drove the long-distance caravan system, would rapidly reach impressive heights during the last quarter of the century before experiencing an equally rapid decline before the century's end.<sup>142</sup> During this boom period, however, the amount of cloth imported into the interior of Tanzania in exchange for ivory did not increase appreciably. By the 1870s, steady depletion of elephant herds had forced caravans to plunge far into the deeper interior beyond Tanzania, where very little cloth was required to purchase ivory. To give an indication of relative prices, a small unit of ivory bought in the Manyema area (in the Congo basin) in the mid-1870s for the commodity currency equivalent of one cent could sell for \$1.10 at Tabora, where prices were already very low relative to Zanzibar.<sup>143</sup> Furthermore, in Manyema, cowry shells were the preferred means of exchange in market towns into at least the mid-1870s.<sup>144</sup> More still, as Arab merchants became increasingly established in the area in the 1870s and 1880s, they acquired slaves to use as ivory hunters or to exchange for ivory, further minimizing

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<sup>140</sup> Firearms had also become a common hongo demand by the 1870s as headmen sought to both protect and control their people in Unyamwezi and elsewhere. Gordon has argued that the adoption of firearms altered power relations in the interior, giving rise to "military chiefs" who came to monopolize trade at the expense of old elites. For firearms as wages, see Wilson and Felkin, *Uganda*, vol. 1, p. 43; Roscoe, *Twenty-five years*, p. 54; Roberts, 'Nyamwezi trade', p. 71; Rockel, *Carriers*, p. 68. On demands for firearms as hongo, see Stanley, *Dark continent*, vol. 1, p. 380. For the impact of firearms on socio-political organization and power relations, see Gordon, 'Wearing cloth, wielding guns', pp. esp. 33-37.

<sup>141</sup> Hore, 'On the twelve tribes', p. 7; Bennett, *Mirambo*, p. 32.

<sup>142</sup> The value of British, Indian, and American ivory imports climbed from \$866,557 in 1871 to \$1,269,043 in 1881 and peaked at \$1,904,278 in 1892, falling to \$585,889 by 1900 (see Figure 3.5).

<sup>143</sup> Meredith, *Elephant*, p. 85.

<sup>144</sup> Stanley, *Dark continent*, vol. 2, p. 69.

possible imported cloth expenditures and, consequently, reducing the distribution of cloth to independent ivory hunters by the final decades of the century.<sup>145</sup>

During the ivory boom of the 1880s, Zanzibar's merchants garnered immense boom-time profits, partly through diplomatic maneuvering. With the foundation of German East Africa (comprising mainland Tanzania, Rwanda, and Burundi) in 1885, trade agreements between the German-controlled mainland and Sultanate-controlled Zanzibar were negotiated, resulting in the addition of a fifteen percent tax on mainland goods sold at Zanzibar. The Sultan began a policy of augmenting ivory prices to generate larger tax profits, and, according to Bennett, "Indian merchants, who feared to oppose the Sultan, acted to bid up the price of ivory in the market."<sup>146</sup> Thus, rising ivory prices at Zanzibar, largely affected through arbitrary manipulation, would have had little impact on cloth-based ivory profits in the interior during the boom.

At the same time, interior profits became increasingly concentrated into the hands of the few who could claim the region's dwindling ivory supplies, particularly slaveholders west of Lake Tanganyika. In fact, according to Beachey, during the 1880s, "increasing competition for ivory resulted in its being forcibly taken from the Africans [as] both Belgian and Arab were no longer trading for ivory, but plundering it by use of force."<sup>147</sup> And to the east of Lake Tanganyika, ivory hunting became illegal in much of newly-established German East Africa with the imposition of colonial game laws in the 1890s, whereby "the staple product of the nineteenth-century economy became a trophy for wealthy tourists."<sup>148</sup> The center of East Africa's global ivory trade would subsequently shift north to Mombasa.<sup>149</sup> By the last decade of the century, interior trading markets fell into "deep depression" as the ivory trade declined.<sup>150</sup> Thus, the diffusion of imported cloth into the deep interior, already constricted through the global nineteenth century, was paradoxically probably *more* limited during the late-century ivory boom. This further complicates assertions that strong global terms of trade for primary products brought on deindustrialization in the global periphery.

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<sup>145</sup> Roberts, 'Nyamwezi trade', pp. 60-61. Captive boys were often trained as ivory and slave hunters. See Page, 'Manyema hordes', pp. 72-73, 78; Stanley, *In darkest Africa*, vol. 1, pp. 238-239.

<sup>146</sup> Bennett, 'Americans in Zanzibar: 1865-1915', p. 56. Most of the ivory shipped from Zanzibar continued to come "through the German sphere of influence." Portal, 'Report on the situation', p. 10.

<sup>147</sup> Beachey, 'East African ivory trade', p. 278. See also Gordon, 'Wearing cloth, wielding guns', p. 32.

<sup>148</sup> Iliffe, *A modern history of Tanganyika*, p. 130.

<sup>149</sup> Beachey, 'East African ivory trade', p. 289.

<sup>150</sup> Iliffe, *A modern history of Tanganyika*, p. 130.

#### 4.6 Cloth and the slave trade

Now that we have weighed the extent to which ivory trading increased cloth imports into the deep interior, we must also briefly consider the potential impact of the nineteenth-century East African slave trade on interior cloth import levels. Along with exports of ivory and coastally produced goods, Zanzibar merchants also dealt in slaves derived from the mainland. I argue, however, that the coastal slave trade had relatively little impact on the amount of cloth imported into Zanzibar and, ultimately, into the interior of central East Africa, especially Tanzania. For one, the export of slaves from Zanzibar was prohibited as of 1873, thus quelling any inflow of cloth imports into Zanzibar in exchange for slaves just *before* cloth imports into the island entrepôt began to rise precipitously.<sup>151</sup> Furthermore, most slaves traded along the central caravan routes were retained in the interior rather than transported to the coast.<sup>152</sup> This is an important distinction because it means that, although slaves might be purchased in the interior using imported commodity currencies that were circulating as a result of the ivory trade, substantial *additional* supplies of imported commodities were not being funneled into the interior in order to procure slaves for coastal sale.

Slave trading was indeed a staple of the exchange system in the deep interior, where captives were considered an important interregional trade item, “almost as much a form of currency as hoes or salt.”<sup>153</sup> Slaves could be procured in much of the deep interior at very low rates compared with ivory, meaning that fewer imported commodity currencies or interior-derived trade goods were required to obtain them, particularly far from major markets.<sup>154</sup> Wajiji traders, for example, acquired slaves from small, distant markets, then exchanged them for higher rates at Ujiji.<sup>155</sup> Likewise, Wanyamwezi merchants often procured slaves to profitably exchange elsewhere for ivory and provide as hongo at Ugogo on downcountry journeys.<sup>156</sup> As Renault points out, the interior slave trade was “not directly [linked to the Indian Ocean] by the sending of caravans of individuals for sale, but indirectly by ensuring supplies of ivory.”<sup>157</sup>

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<sup>151</sup> It is worth noting, however, that the application of slave labor to Zanzibar’s own plantations did increase the output of cloves, which were exported in exchange for commodities that were regularly reinvested into the caravan system.

<sup>152</sup> Roberts, ‘Nyamwezi trade’, p. 59.

<sup>153</sup> *Ibid.*, 60 (quote); Renault, ‘Structures’, p. 155.

<sup>154</sup> In the 1870s, one frasilah of ivory was worth 12 to 15 slaves near Manyema. Stanley and Neame, eds., *Exploration diaries*, p. 134.

<sup>155</sup> Brown, ‘Muslim influence’, pp. 625-626.

<sup>156</sup> Deutsch, ‘Notes’, p. 85; Roberts, ‘Nyamwezi trade’, p. 59; Mnyampala, *Gogo*, p. 45. Slaves imported into Ugogo were typically applied to cultivation, which undoubtedly augmented the region’s capacity to provision caravans. Unomah and Webster, ‘East Africa’, p. 300.

<sup>157</sup> Renault, ‘Structures’, p. 162.

The interior central East African slave trading system was only marginally connected with the coastal slave trade, particularly by the 1870s. Deutsch suggests that coast-bound slave trading by the Wanyamwezi showed an increase from mid-century. However, this soon tapered off with the British coastal anti-slavery blockade efforts of the early 1870s.<sup>158</sup> According to Unomah and Webster, British efforts to curb slave trading on the East African coast generated “great difficulty” for traders attempting to move captives from interior markets to the coastal slave markets and onward to Zanzibar. Consequently, many slaves remained indefinitely in interior market towns in central East Africa, with few making it to the coast.<sup>159</sup>

Western merchants and explorers often incorrectly assumed that most porters traveling to Zanzibar were slaves purchased in the interior and forced to carry ivory to the coast, where both would be auctioned, but this has been roundly contested by Rockel.<sup>160</sup> Rather, most slaves who arrived at Zanzibar during the second half of the nineteenth century were transferred from Kilwa, lying to the south of Zanzibar, which sourced slaves primarily from the southern East African hinterland, particularly northern Mozambique and Malawi, where export-focused slave raiding was carried out.<sup>161</sup> Caravans departing from Zanzibar to the central East African interior focused primarily on procuring ivory.<sup>162</sup> According to Beachey, transporting slaves from the deep interior to the coast was simply far less profitable than ivory, partly due to high mortality rates in transit.<sup>163</sup> Furthermore, the Zanzibar customs duty on slaves brought from the adjacent interior was between double and triple that for slaves brought from southern East Africa.<sup>164</sup>

More generally, the very nature of coastal slave exchanges limited the amount of imported cloth that entered East Africa as a result of slave exporting. French traders, the major Western buyers of East African slaves, typically exchanged mostly bullion at Zanzibar, exporting very few manufactures, while arms and ammunition served as principal exchange commodities at the Kilwa slave market to the south.<sup>165</sup> Indeed, rather than cloth imports, it was disruptive slave

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<sup>158</sup> Deutsch, 'Notes', p. 84.

<sup>159</sup> Unomah and Webster, 'East Africa', pp. 299-300. See also Renault, 'Structures', pp. 157-158; Brown, 'Muslim influence', p. 625.

<sup>160</sup> Rather, most porters heading from the interior to the coast were wage workers. For abolitionist misinterpretations of portage, see Rockel, *Carriers*, pp. 8-23. See also Roberts, 'Nyamwezi trade', p. 61. However, in the deeper interior, west of Lake Tanganyika, slaves were reportedly engaged as porters. Renault, 'Structures', pp. 152-153.

<sup>161</sup> According to Renault, roughly four-fifths of slaves arriving at Zanzibar came from Kilwa in the 1870s. Sheriff illustrates that those slaves that did come from Tanzania were derived primarily from Mrima coastal peoples and southern Tanzania rather than the deep interior. Renault, 'Structures', p. 146; Sheriff, 'Localisation', pp. 132-133, 142-144. For the prevalence of southern-derived slaves in the 1850s and 1860s, see Speer, "Report on Zanzibar," 1862, RG 59, Volume 3509 (Book 4), NACP, 45; Rigby, 'Report', p. 9; Alpers, *Ivory*, pp. 237-239, 243.

<sup>162</sup> Renault, 'Structures', p. 152.

<sup>163</sup> Beachey, 'East African ivory trade', pp. 275-276.

<sup>164</sup> Pawelczak, *The state*, p. 319; Burton, 'Lake', p. 356.

<sup>165</sup> Rigby, 'Report', p. 24.; Samuel R. Masury to owners of *Lucia Maria*, 17 July 1850, Box 11, MH 235, PEM.

raiding – aided by imported guns – that precipitated the destabilization of the Lower Shire Valley’s cloth industry in southern Malawi, as illustrated in Chapter 2. This contrasts markedly with the exports brought by foreign traders seeking interior-derived ivory, who consigned cloth, beads, and wire to Zanzibar’s merchants to stock caravans heading inland to procure ivory.<sup>166</sup> Thus, the coastal slave trade system generated little additional imported cloth into East Africa’s coastal entrepôts and the interior beyond.

#### 4.7 Interior cloth production in the global nineteenth century

As my research illustrates, relatively limited amounts of cloth were disbursed into Tanzania’s deep interior during the nineteenth-century boom in ivory exporting, and less still as a result of the East African slave trade. But did the imports that did reach the interior have an adverse impact on local cloth production, as suggested in the historiography? Baumann reported that in parts of Unyamwezi cloth production had disappeared by the end of the 1880s.<sup>167</sup> This was probably a result of the region’s unique direct relationship with coastal trading. Porter wages had increased stocks of foreign cloth in Unyamwezi, dulling its regional currency value, thus incentivizing consumption in place of exchange, while prolonged sojourns at the coast stimulated the adoption of coastal dress.<sup>168</sup> Deutsch supposes that the decline in cloth production in Unyamwezi occurred as a result of “the consumption of imported goods acquir[ing] social prestige in the second half of the century.”<sup>169</sup> In notable contrast to other regions visited by Hore – including well-trafficked Ugogo – in Unyamwzi, “almost every tolerably well-to-do individual” wore imported cloth by the late 1880s.<sup>170</sup>

But the attenuation of Unyamwezi’s domestic cloth industry can be linked not only to the increase in cloth stocks afforded by the unique employment choices of the region’s men but also to the *local labor supply implications* that arose from those choices. That is, among the Wanyamwezi, portage drew away a large portion of males – traditionally weavers throughout East Africa – during the non-agricultural season, when cloth making usually occurred, if not longer.<sup>171</sup> This pattern intensified through the second half of the nineteenth century, with men drawn away for increasingly longer periods, as what had once been a largely seasonal activity became a full-time profession.<sup>172</sup> Iliffe notes that in Unyamwezi, portage withdrew men from

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<sup>166</sup> For more details on Zanzibar’s global trading system, see Chapter 3.

<sup>167</sup> Baumann, *Durch Massailand zur Nilquelle*, p. 232.

<sup>168</sup> Deutsch, ‘Notes’, p. 80.

<sup>169</sup> *Ibid.*, 79.

<sup>170</sup> Hore, ‘On the twelve tribes’, pp. 6-7.

<sup>171</sup> Rockel, *Carriers*, pp. 48-49, 69. On gender differentiation in cloth making, see Burton, ‘Lake’, p. 382; Davison and Harries, ‘Cotton weaving’, p. 182.

<sup>172</sup> Rockel, *Carriers*, p. 49; Sheriff, *Slaves*, p. 182.

the local economy “on a massive scale.”<sup>173</sup> Huge proportions of labor were diverted from home production, with at least one-third of the Wanyamwezi male population absent at any given time by the 1890s.<sup>174</sup> This number was likely significantly higher in the preceding decades, when the long-distance caravan trade was at its peak, creating “a great shortage of labour in Unyamwezi to attend to dry-season tasks.”<sup>175</sup> While many Wanyamwezi porters ultimately returned home, some remained at the coast indefinitely, either in an effort to integrate into coastal society or, in some instances, as debt-bonded slaves.<sup>176</sup>

In Unyamwezi, household labor shortages were partly shored up with slave labor, but the labor of male slaves was generally applied to vital tasks – like soil preparation, harvesting, and hut building – and to trading expeditions rather than to industrial tasks like cloth production.<sup>177</sup> And on plantations the focus was on cultivation of food to provision caravans, not on the cultivation of raw cotton for industry.<sup>178</sup> Furthermore, women and children – rather than men, who may have previously practiced the art of weaving in their home villages – were the preferred slaves among the Wanyamwezi.<sup>179</sup>

Interestingly, the neighboring Wasukuma to the north also engaged in portage in exchange for cloth wages, yet here Baumann witnessed greater cloth production.<sup>180</sup> Thus, the presence of imported cloth did not necessarily entail the demise of local industry. Ongoing cloth production may have been enabled by a generally larger labor supply in Usukuma, which Burton noted as “perhaps the most populous province [...] in this part of Africa.”<sup>181</sup> Furthermore, among the Wasukuma, only very young men tended to engage in portage, leaving much of the local male labor force intact.<sup>182</sup> Additionally, a stronger Swahili and Arab presence in Unyamwezi relative

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<sup>173</sup> Furthermore, warfare in the 1870s led to depopulation in some areas. Iliffe, *A modern history of Tanganyika*, p. 76.

<sup>174</sup> Sheriff, *Slaves*, p. 182.

<sup>175</sup> Unomah and Webster suggest that the severe decline in male labor supplies explains why the Wanyamwezi became buyers rather than sellers of slaves during the second half of the century. Unomah and Webster, 'East Africa', pp. 284-285.

<sup>176</sup> Deutsch, 'Notes', p. 82; Glassman, *Feasts and riot*, pp. 60, 63.

<sup>177</sup> Unomah and Webster, 'East Africa', pp. 284-285, 297; Deutsch, 'Notes', pp. 83, 94.

<sup>178</sup> This stands in contrast to West Africa, where large plantations in places like the Sokoto Caliphate applied slave labor not only to food production but also to cotton and indigo cultivation to supply the domestic textile industry. Many slaves were also engaged in spinning and weaving. See Kriger, 'Textile production and gender'; Lovejoy, 'Plantations'.

<sup>179</sup> Women were considered more tractable and could also produce children who would subsequently belong to the slave owner's household. Deutsch, 'Notes', p. 92.

<sup>180</sup> Baumann, *Durch Massailand zur Nilquelle*, p. 232.

<sup>181</sup> Burton, 'Lake', p. 260. He also noted a particular regional abundance of water sources, which are crucial for cotton cultivation. Indeed, Usukuma, with its plentiful water supplies and rich soils, would eventually become the center of a colonial-era raw cotton boom in northwestern Tanzania during the 1930s. Hankins, 'Cotton', pp. 56-57.

<sup>182</sup> Raum 'German East Africa', p. 169.

to Usukuma may have generated greater proclivity toward the adoption of coastal fashions among the Wanyamwezi, diminishing demand for locally produced cloth.<sup>183</sup> But even in Unyamwezi, some cotton and bark cloth making was still reported at the peak of the caravan trade.<sup>184</sup> In fact, Wanyamwezi migrants in Bukoba in northwestern Tanzania were reportedly spreading the art of weaving at the close of the century.<sup>185</sup>

Importantly, in numerous areas where cotton cloth production had traditionally formed an important part of the local economy – particularly east of Lake Tanganyika – domestic spinning and weaving continued during and after the boom years of the long-distance caravan trade.<sup>186</sup> In the 1870s, Livingstone had been impressed by cloth made from cotton cultivated “all along the shores of Lake Tanganyika,” forming “the general clothing of all.”<sup>187</sup> Twenty years later, at the peak of the caravan trade, Kerr Cross noted specialist weavers in interior villages on the Nyasa-Tanganyika plateau with “several looms [...] in daily operation [and] wild cotton [...] woven into pretty patterns.”<sup>188</sup> Likewise, Wallace reported production and regional exchange of patterned domestic cloth in the late 1890s in the neighboring Rukwa region – where hongo had been regularly demanded of passing caravans – which continued into the early twentieth century.<sup>189</sup>

The perseverance of cloth production in much of the deep interior makes sense given the immense inland value and relative scarcity of imported cloth. We would expect poorer people to produce their own clothing rather than readily consume what little exchangeable imported cloth they might acquire, especially since cloth could be exchanged for important wealth-enhancing goods like cattle. Even in ivory market towns, where imported cloth was relatively more abundant, its high demand for trading purposes likely discouraged its consumption among poorer people. Accordingly, at the close of the 1870s, Hore had witnessed weaving in Ujiji, where imported cloth had become the standard currency upon which other market currencies

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<sup>183</sup> That is not to suggest that coastal influences were not present in Usukuma, rather that they were especially strong in Unyamwezi. By 1860, strong commercial links had been established between Zanzibar and Tabora, and numerous Arab and Swahili traders and entrepreneurs resided in the area through the second half of the nineteenth century. Unomah and Webster, 'East Africa', pp. 277-278, 306-308.

<sup>184</sup> Reichard, 'Die Wanjamuesi', p. 276.

<sup>185</sup> According to a Bukoba district report from 1900, “Weaving, hitherto unknown, is now being taught here and there by the Wanyamwesi.” Richter, 'Notitzen', p. 126.

<sup>186</sup> In addition to the sources discussed, see also Cameron, *Across Africa*, pp. 195-197; Thomson, *Central African Lakes*, vol. 2, pp. 220-221; Hore and Wolf, *Missionary*, p. 121; Johnston, *British Central Africa*, p. 419; Fülleborn, *Das deutsche Njassa- und Ruwuma-Gebiet*, p. 512; Rodriguez, 'Die Baumwollkultur in Deutsch-Ostafrika', pp. 223-224; Fromm, 'Ufipa', pp. 86, 94; Lechaptois, *Aux rives du Tanganika*, pp. 252-257.

<sup>187</sup> Waller, *Last journals*, pp. 215, 461, 463.

<sup>188</sup> Kerr Cross, 'Notes', p. 94.

<sup>189</sup> Boileau and Wallace, 'The Nyasa-Tanganyika Plateau', pp. 601, 613; Melland and Cholmeley, *Through the heart of Africa*, pp. 98-99. On hongo in the Rukwa area, see Tambila, 'A history', p. 78.

were based.<sup>190</sup> And the manufacture of “exceedingly finished material” was noted in the well-traversed region between Tabora and Ujiji even at the zenith of the ivory trade.<sup>191</sup>

#### 4.8 Conclusion

The line of reasoning presented here challenges assumptions that imported cloth flooded the interior of central East Africa and undermined domestic cloth industries as the region increasingly participated in global trade during the nineteenth century. While cloth imports into East Africa increased substantially from the 1870s onward, two related systems ensured that the flow of imports into the deep interior remained comparatively low. The first was an interior commodity currency system that integrated imported cloth as a valuable currency by the mid-nineteenth century and depended upon steady – rather than substantially increasing – import levels. Importantly, the use of imported cloth as a functioning currency through the century implies sustained scarcity in the interior. Accordingly, the cloth most in demand in the interior – American-made unbleached cloth – was consistently imported in remarkably low and steady amounts, as were other imported cloth currencies, like satini and kaniki.

The second was a coast-interior trading system that quickly expanded during the second half of the century in response to rising demand for East African ivory, which was purchased in the interior using imported commodity currencies, especially cloth. The deep interior was situated far from global trading nodes, and the distance was accentuated by reliance on portage, helping to create high coast-interior price differentials: imported cloth rose to extreme values as it moved inland, thus ivory could be procured at very low rates (relative to coastal prices), especially as the caravan system pushed even farther inland into the deeper interior beyond Tanzania from the 1870s onward. Once the ivory ultimately reached Zanzibar, it was sold at high global market prices. Thus, while global terms of trade for ivory – relative to machine-manufactured cloth and other imported commodities – were increasingly favorable during much of the nineteenth century, the benefits did not commensurately extend to most people living in the deep interior. The scale of imported cloth entering the interior consequently remained modest even during the 1870s and 1880s, when East African ivory exporting intensified before peaking at the end of the 1880s. In this sense, the case of interior Tanzania lends support to deindustrialization theory arguments that point to the importance of mechanized transportation developments in helping to stimulate significant terms of trade improvements in the tropics. In Tanzania, a *lack* of mechanization diminished the theorized development of substantially improved terms of trade in the deep interior regions from which ivory exports were derived.

People in the near-coast interior, particularly Ugogo, staked a more sizeable claim on ivory export profits. Here, chiefs demanded large hongo payouts from passing caravans, and locals

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<sup>190</sup> Hore, *Tanganyika*, pp. 85-86.

<sup>191</sup> Moloney, *With Captain Stairs to Katanga*, p. 104.

charged steep provision prices, opportunities facilitated by the comparatively low value of imported commodities in the area (relative to the deep interior) and the difficulty of avoiding this arid gatekeeper region to reach valuable ivory sources farther inland. Wayamwezi porters also claimed a portion of Zanzibar's cloth imports, which led to enhanced consumption of imported cloth in Unyamwezi. Likewise, successful trading and provisioning entrepreneurs located in and near major interior trade centers could accrue wealth through their participation in the long-distance trade boom.

For most inhabitants of the deep interior, however, imported commodities, especially high-valued cloth, were expensive luxury goods. Those who *could* obtain foreign-made cloth often used it as an exchange commodity, leaving ample space for local cloth production to continue alongside imports. Indeed, cloth production was documented well after the nineteenth-century ivory trade peaked and waned. While cloth production did decline in Unyamwezi, this was likely precipitated by a massive withdrawal of male labor from the region as a result of extensive long-distance portage activity during the caravan trade boom. As the next chapter reveals, a similar labor-dependent process of deindustrialization would occur decades later in Ufipa, where colonial-era policies drew large amounts of male labor out of the local economy and into the coastal plantation system.

## CHAPTER 5

### PRODUCTION, MIGRATION, AND DEINDUSTRIALIZATION IN UFIPA, TANZANIA, C. 1880-1940

#### 5.1 Introduction

Throughout the nineteenth century, production and regional exchange of patterned *seketa* cloth flourished in Ufipa, nestled between Lake Rukwa and the southern end of Lake Tanganyika in southwestern Tanzania's Rukwa region (see Map 5.1).<sup>1</sup> However, during the first decade of the twentieth century, this industry began to wane. Historians of Tanzania have assumed that deindustrialization resulted from competition with machine-made imports, with "foreign fabrics [...] rapidly displacing domestic cotton cloths" by the late nineteenth century.<sup>2</sup> Iliffe suggests that in Ufipa this process was initiated in the mid-nineteenth century when the region began engaging with long-distance caravans bearing imported cloth, yielding "destructive consequences" as "the local weaving industry decayed."<sup>3</sup> Willis, on the other hand, suggests that Ufipa's domestic industry was actually *stimulated* by the nineteenth-century caravan trade, but he believes that the industry was dying by the early 1900s as a result of "competition from cheap, factory-made calico."<sup>4</sup> St. John points specifically to late-nineteenth-century missionaries bringing "stores [of cloth] with which to build their stations and hire labourers [...] in such quantities that the local industries could not compete."<sup>5</sup> Raum suggests that European cloth dealt a "death blow to the indigenous weaving craft" in the lakes region, which he attributes to rising purchasing power and a general "change in taste" that favored imports, thus causing domestic cloth to "become scarce" by the end of the nineteenth century.<sup>6</sup> Tambila argues that by the 1880s and 1890s "mass produced goods began to slowly push out the artisan goods" in the Rukwa area and that demand for domestic textiles vanished by the early twentieth century in the face of lower relative prices for "cheap" imports.<sup>7</sup>

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<sup>1</sup> Present-day mainland Tanzania was called German East Africa from 1891 to 1914 (and then included present-day Rwanda and Burundi) and Tanganyika during the British colonial period thereafter (exclusive of Rwanda and Burundi). For the sake of clarity, this chapter refers to the region primarily as "Tanzania."

<sup>2</sup> Koponen, *People and production*, p. 374.

<sup>3</sup> Iliffe, *A modern history of Tanganyika*, pp. 60, 67.

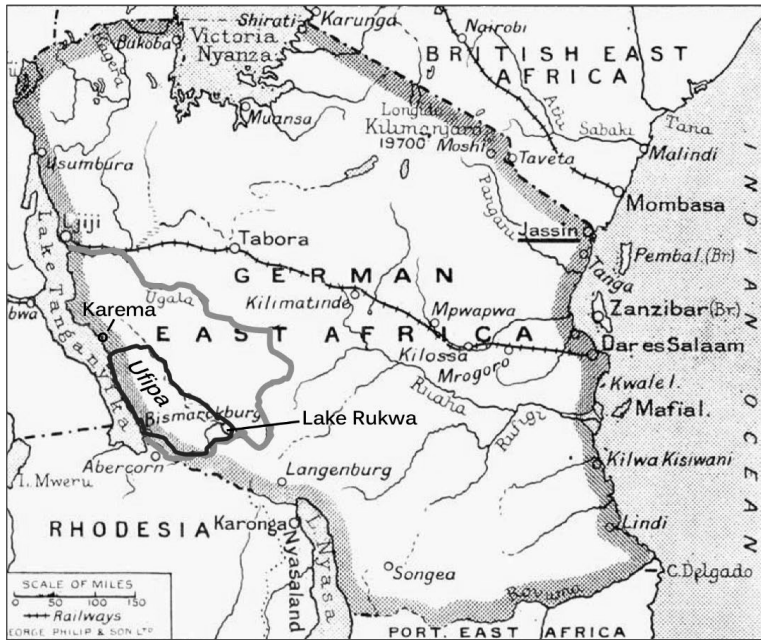
<sup>4</sup> Willis, *State*, pp. 152, 257.

<sup>5</sup> St. John, 'Kazembe', p. 227.

<sup>6</sup> Raum 'German East Africa', p. 193.

<sup>7</sup> Tambila, 'A history', pp. 80, 162-163. See also Seel, Mgawe, and Mulder, *The history and traditions of the Pimbwe*, pp. 18, 37.

**Map 5.1** German East Africa (modern-day Tanzania), c. 1915



Source: *The Illustrated War News*/Alamy

Black outline: Ufipa (comprising most of the Rukwa region)

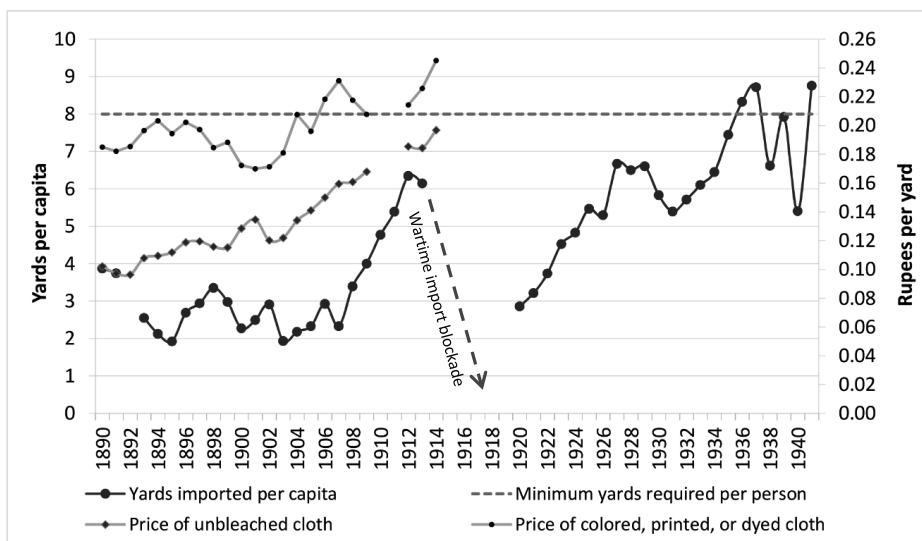
Grey outline: Bismarckburg district (German colonial period)

In this chapter, I offer an alternative analysis and explanation, arguing that industrial decline was not motivated principally by competition from cloth imports, but by *local structural change* in Ufipa's labor force from 1907 onward as colonial-era taxation drove men out of the money-scarce region in search of wage labor. Indeed, import data suggest that competition-centered explanations neglect important pieces of the deindustrialization puzzle. During the nineteenth century, Ufipa's cloth industry thrived alongside imports, even as they gradually increased until 1889. Thereafter, between 1890 and 1907, import growth stalled and import levels even *diminished* in Tanzania as ivory exporting declined during the early German colonial period. Meanwhile, prices for imported cloth persistently *increased*, particularly after the turn of the century (see Figure 5.1).<sup>8</sup> Yet this is precisely the period that several scholars suggest saw sweeping industrial deterioration caused by ruinous competition from "cheap" imports. Cloth

<sup>8</sup> Failure of American raw cotton production to meet global demand caused "wild speculation" on the world market, driving up raw material prices. A brief decline in the price of colored, printed, and/or dyed cloth was tied to the late-nineteenth-century adoption of cheap synthetic dyes. On cotton supplies, see Brode, *British and German East Africa*, p. 107. On synthetic dyes, see Stephen, 'German East Africa', p. 306.

imports would steeply increase from 1908 to 1913, but import levels remained below the “barest essentials” of at least 8 to 13 yards per person per annum, sufficient for two to three garments.<sup>9</sup> Import levels, which bottomed out during the First World War, would only reach minimum subsistence levels in the second half of the 1930s, well *after* Ufipa’s industrial decline was underway.

**Figure 5.1 Cotton cloth prices and per-capita imports into Tanzania, 1890-1941**



Sources: Imports, 1890-1913: estimated using Tanzanian import values provided in R. Tetzlaff, *Koloniale Entwicklung und Ausbeutung*, p. 293, and import prices derived from Bombay trade reports, 1890-1917, BL. Imports, 1920-1941: Tanganyika Blue Books, 1920-1941, TNA. Population data: Frankema-Jerven African Population Database 1850-1960, version 2.0. Note: Price data are derived from Zanzibar import prices from 1880-1899 and Dar es Salaam import prices from 1900-1916 to reflect the shift in Tanzania’s principal international port of entry.

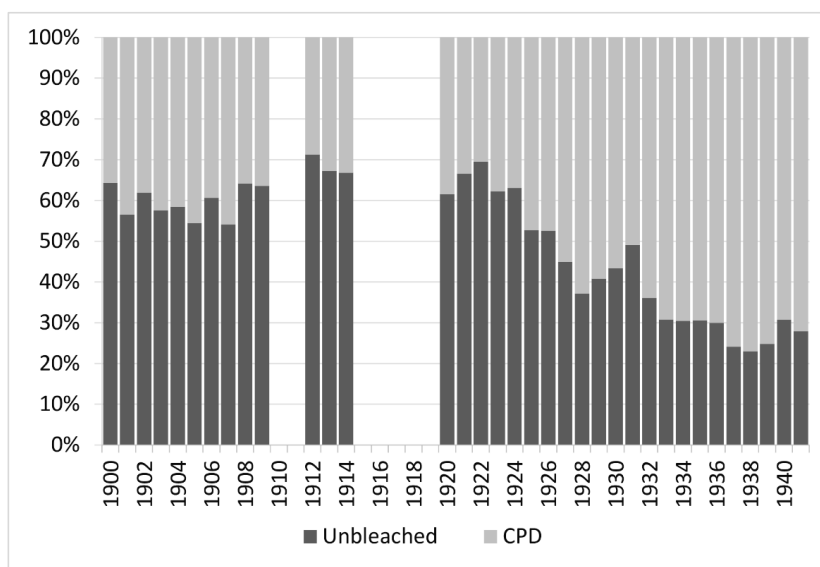
Further, as Fage has pointed out, the mere presence of imported cloth in Africa did not necessarily entail the abandonment of domestic cloth consumption.<sup>10</sup> Domestic cloth had its own unique qualities and niches for which imports were often not a direct substitute. Indeed, the *composition* of cloth imported into Tanzania during the period of Ufipa’s industrial decline further complicates competition-focused arguments. Observers like Friedrich Fülleborn were

<sup>9</sup> The minimum annual cash requirement to clothe a low-income four-person family in interior Tanzania (45-75 shillings in the early 1950s) is converted to yards based on the nearest available annual price for unbleached cloth (£0.07 in 1948). Minimum annual cash requirement: Gulliver, *Labour migration*, p. 18. Import price per yard: Tanganyika Blue Book, 1948, TNA. Yards per garment: Wyckaert, 'Fileurs et tisserands', p. 367.

<sup>10</sup> Fage, *A history of Africa*, pp. 272-273.

struck by the unique designs of the “very well done” patterned and colored domestic cloth produced in the lakes region.<sup>11</sup> Meanwhile, the largest share of cloth imported into nineteenth- and early-twentieth-century Tanzania was comprised of simple unbleached cloth. Only during the second half of the 1920s, nearly two decades after Ufipa’s industrial decline began, would the composition of imports begin to shift in favor of colored, printed, and/or dyed (hereafter, “CPD”) cloth (see Figure 5.2). Even still, only a portion of CPD imports was comprised of *patterned* cloth that would have been most aesthetically comparable to domestic seketa cloth. Furthermore, the locally made cloth was consistently touted as “much more durable and practical than the usually quite inferior calico introduced here.”<sup>12</sup> These data suggest that (purportedly) overwhelming competition cannot adequately explain the decline of cloth production in Ufipa.

**Figure 5.2**      **Composition of cotton cloth imports (quantity), 1900-1941**



*Sources:* Bombay trade reports, 1900-1917, BL; Tanganyika Blue Books, 1921-1941, TNA.  
*Note:* data for the years 1900-1914 are comprised of Indian exports to Tanzania, which formed the bulk of the colony’s cloth imports during the first decades of the twentieth century (see Obst and Kloster, ‘Der Handel’, pp. 481-482); 1920-1941 includes imports of all origin.

<sup>11</sup> Fülleborn, *Das deutsche Njassa- und Ruwuma-Gebiet*, p. 512. See also Wyckaert, ‘Fileurs et tisserands’, p. 368.

<sup>12</sup> Fülleborn, *Das deutsche Njassa- und Ruwuma-Gebiet*, p. 512. See also Lechaptois, *Aux rives du Tanganika*, p. 255.

Research on West Africa has illustrated that labor migration could seriously impede domestic industries “to the extent that village craftsmen [...] who would have produced something during the dry season, have migrated.”<sup>13</sup> Skinner found that among the Mossi in Burkina Faso, for example, significant labor constraints arose due to coercive colonial policies that prompted male labor migration, which led households to increasingly suspend cotton cultivation and cloth production. In the absence of domestic weaving, imported cloth began filling the place of domestic textiles even though *demand* for domestic cloth remained.<sup>14</sup> I argue that similar mechanisms undermined cloth production in East Africa’s Ufipa. Here, deindustrialization was an indirect consequence of colonial-era tax pressures that ramped up from 1907 – when the colonial administration began demanding rupee<sup>15</sup> payments – which prompted an almost immediate drain of men from the region and a decline in male-dominated cloth production.

In Ufipa, transactions were traditionally based on barter exchange rather than cash payments, precluding the possibility of raising tax money through handicraft production. At the same time, the prospect of obtaining rupees via peasant cash-crop production at home was mitigated by transportation difficulties. Consequently, a large portion of Ufipa’s male population had little choice but to migrate to distant plantations or railroad projects, returning home for at best two months per year, thus leaving scarce male labor for the region’s cloth industry. Some production did continue among remaining (mostly older) men, which suggests that demand for local cloth had not evaporated in the face of imports. However, the industry was doomed in the long run by the systematic withdrawal of Ufipa’s young men, which halted the reproduction of the skills of spinning and weaving. The reallocation of labor from industry to migrant wage labor was not driven by global market forces but by local structural change influenced by colonial policy. An associated increase in cloth imports into the region was largely a *symptom* of transformative labor migration and deindustrialization rather than a direct cause.

Accounts of European travelers and missionaries provide material to analyze Ufipa’s production history and ultimate deindustrialization within the context of significant economic change during the late nineteenth and early twentieth centuries. I first address the purportedly deindustrializing impact of the nineteenth-century caravan system and argue that Ufipa’s specific role as a mid-way stop, rather than a source of mobile traders or porters, allowed the region to simultaneously enjoy the fruits of long-distance trade while continuing to apply local manpower to domestic industries that depended on available male labor. From there, I move to the early twentieth century to examine the causes of deindustrialization. I first quantitatively

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<sup>13</sup> Berg, ‘Economics’, pp. 166, 169.

<sup>14</sup> Skinner, ‘Labour migration and its relationship’, pp. 386-7; Skinner, ‘Labor migration among the Mossi’, pp. 62-63, 70-72.

<sup>15</sup> Indian rupees circulated in much of (coastal) East Africa by the late nineteenth century. In 1890, the Deutsche Ostafrikanische Gesellschaft was contracted to mint German East African *rupies* – which were current with the existing Indian rupee – for circulation in the German colony. Sayers, *The handbook of Tanganyika*, pp. 184, 186.

challenge the proposition that the relative cheapness of imported cloth doomed domestic industry, illustrating that while the *cash* price of imports was considerably lower than for domestic cloth, the more important relative *barter* price was not. I then build the case that the foundation of Ufipa's industrial decline laid not with overwhelming competition but with the tax-driven exodus of male labor. Contemporary reports reveal that consumption of domestic seketa cloth continued even as the industry waned and imports increased.

## 5.2 Prosperity and industry in the nineteenth century

Ufipa was historically comprised of two large kingdoms: the dominant Nkansi kingdom in the north, described by Iliffe as "one of the most elaborate chiefdoms" of nineteenth-century Tanzania, and a smaller Lyangalile kingdom to the south.<sup>16</sup> The whole of Ufipa was divided into three contiguous geographical zones that specialized in either cloth or iron production. The majority of Ufipa's cotton cloth was produced in the Rukwa valley (along the western shore of Lake Rukwa) and along Lake Tanganyika's eastern shoreline. In the valley, in particular, much of the male population engaged in spinning and weaving, while certain families specialized in producing cloth worn exclusively by Ufipa royals.<sup>17</sup> Between the two lakeside cloth-producing centers lay the Ufipa plateau, where select specialists produced iron implements, including hoes (*ise*) used in agricultural production and as currency for large outlays like bridewealth. A well-developed system of barter exchange prevailed in the area, with Ufipa's cloth-producing zones extensively exchanging seketa for plateau-produced iron implements and, to a lesser degree, sending their goods beyond Ufipa.<sup>18</sup> Small quantities of seketa were reportedly taken to Lake Mweru in northeastern Zambia to exchange for salt.<sup>19</sup>

### *Integration into the long-distance caravan system*

By the mid-nineteenth century a "dramatic transformation" was underway with the westward expansion of the long-distance caravan trade as the principal route connecting Tabora with present-day Zambia cut directly through Ufipa.<sup>20</sup> Burton reported in the late 1850s that the Wafipa "have ever welcomed the merchants that visited them for slaves and ivory."<sup>21</sup> Indeed, the King of Nkansi instituted hospitality policies to encourage caravans and invited the

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<sup>16</sup> Iliffe, *A modern history of Tanganyika*, p. 21.

<sup>17</sup> Boileau and Wallace, 'The Nyasa-Tanganyika Plateau', p. 613 (quote); Willis, *State*, p. 281n258 citing Lyimo, "Role of crafts," 20. For earlier references to cloth production in Ufipa and its immediate surroundings, see Waller, *Last journals*, p. 461; Thomson, *Central African Lakes*, vol. 2, pp. 220-221; Cameron, *Across Africa*, pp. 195-197.

<sup>18</sup> Willis, *State*, pp. 146-157; St. John, 'Kazembe', pp. 202-207; Boileau and Wallace, 'The Nyasa-Tanganyika Plateau', pp. 601, 613.

<sup>19</sup> Boileau and Wallace, 'The Nyasa-Tanganyika Plateau', p. 613.

<sup>20</sup> Willis, *State*, pp. 87-88, 93 (quote); Burton, 'Lake', p. 257. The route from Unyamwezi to Ufipa had been operational since at least the early 1800s. Waller, *Last journals*, p. 418.

<sup>21</sup> Burton, 'Lake', p. 259.

settlement of Zanzibar merchants in his capital.<sup>22</sup> Ufipa inhabitants engaged readily with long-distance traders. Enterprising hunters could obtain tusks from elephant-abundant Lake Rukwa to sell at regional ivory markets or to caravans heading toward Tabora.<sup>23</sup> Villagers traded provisions to passing caravans and, by the 1880s, to the Karema mission station just north of Ufipa. Becker recounted Wafipa fishermen visiting to exchange dried fish, millet, and sesame seeds for cotton cloth and brass wire.<sup>24</sup>

But while Wafipa people sold goods to passing traders and often traveled small distances for exchange purposes, they generally did not participate in the *long-distance* travel pursued by other interior groups like the Wanyamwezi. Rather, men in the region “largely remained local, subsistence-oriented traders.”<sup>25</sup> In St. John’s view, the failure of the region’s men to become professionalized long-distance traders was economically “crippling.”<sup>26</sup> To the contrary, Ufipa’s nineteenth-century industrial prosperity depended on men remaining at home instead of seeking economic gain abroad. In contrast, as discussed in Chapter 4, Unyamwezi’s cloth industry disappeared before the century’s end as Wanyamwezi men were increasingly drawn into portage during the dry season, when cloth was typically produced.

### *The industrial benefits of trade*

Willis argues that Ufipa took “maximum economic advantage” of its involvement in long-distance trading networks as “market opportunities, both internal and external, coordinated by [the state] apparatus, fed back into and further stimulated the domestic cycles of production and exchange.”<sup>27</sup> According to Iliffe, however, Tanzania’s domestic textile producers could not enjoy the potential benefits of enhanced regional trade because local cloth was simply incapable of competing with imports.<sup>28</sup> Conversely, eye-witness accounts demonstrate that cloth production in Ufipa and surrounding areas flourished alongside the caravan trade.<sup>29</sup> Willis reasons that social differentiation was stimulated as the large administrative state grew increasingly rich from engagement with long-distance traders. This, in turn, stirred demand for new variants of locally produced cloth among prospering members of society.<sup>30</sup> By mid-century

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<sup>22</sup> Reichard, *Deutsch-Ostafrika*, p. 400; Thomson, *Central African Lakes*, vol. 2, pp. 217-218; Waller, *Last journals*, p. 532; Willis, *State*, pp. 93, 173-174.

<sup>23</sup> Lechaptois, *Aux rives du Tanganika*, p. 60.

<sup>24</sup> Becker, *La vie*, vol. 1, pp. 292-293.

<sup>25</sup> St. John, ‘Kazembe’, p. 223.

<sup>26</sup> *Ibid.*, 225.

<sup>27</sup> Willis, ‘Public and personal ideology’, p. 91 (first quote); Willis, *State*, p. 198 (second quote).

<sup>28</sup> Iliffe, *A modern history of Tanganyika*, p. 67.

<sup>29</sup> Waller, *Last journals*, pp. 461, 463; Cameron, *Across Africa*, pp. 195-197; Thomson, *Central African Lakes*, vol. 2, pp. 220-221.

<sup>30</sup> Willis, *State*, p. 156.

Wafipa producers were developing methods to spin finer thread and incorporate indelible natural dyes, particularly red and black, allowing them to produce a more diverse array of higher-quality products.<sup>31</sup> Since production for elites existed alongside “horizontal” exchange between parties of similar social status, all levels of society benefitted from improvements in the skill of the region’s craftsmen.<sup>32</sup> Furthermore, the cotton used by Wafipa weavers was reportedly of particularly fine quality compared with the coarser produce of Unyamwezi.<sup>33</sup>

Even as foreign cloth began entering local markets on a gradually increasing scale from mid-century onward, the extensive production and use of domestic cloth was noted by Europeans traveling in the region. In 1872, Livingstone reported seeing “a very great deal of cotton” cultivated and made into domestic cloth all along the Lake Tanganyika shoreline, which was corroborated by Cameron in 1876.<sup>34</sup> Thriving production and exchange of domestic cotton cloth in Ufipa was reported in 1897, well after Tanzania’s cloth import levels reached a nineteenth-century peak in 1890.<sup>35</sup> Rather than experiencing the deterioration postulated by Iliffe, cloth production had flourished in Ufipa during the region’s half-century engagement with long-distance traders.

#### *Declining prosperity, increasing extraction*

Circumstances began to alter in Ufipa in the 1890s. Caravan traffic through Ufipa and the broader Rukwa region progressively declined during the 1890s as the Belgian-controlled Congo Free State began diverting export trade away from the old eastern route through Tanzania and instead toward a western route to the Atlantic Ocean via the Congo River.<sup>36</sup> Rinderpest simultaneously raged through Tanzania, hitting Ufipa in 1892 and virtually wiping out the region’s once vast herds, depleting stores of wealth. The royal coffers were drained of resources as *hongo* payments<sup>37</sup> declined and cattle wealth vanished. Consequently, the royal administration began aggressively extracting wealth from common Wafipa households.<sup>38</sup> Up to the very late pre-colonial period, tribute to the state – comprised of domestic iron, cloth, and grain – reportedly required little compulsion.<sup>39</sup> But by 1893, Dupont reported,

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<sup>31</sup> Ibid., 152 citing Lyimo, ‘Role of crafts’, p. 10.

<sup>32</sup> Willis, *State*, p. 156.

<sup>33</sup> Burton, ‘Lake’, p. 381.

<sup>34</sup> Waller, *Last journals*, pp. 461, 463; Cameron, *Across Africa*, pp. 196-7.

<sup>35</sup> Boileau and Wallace, ‘The Nyasa-Tanganyika Plateau’, pp. 601, 613.

<sup>36</sup> Hinde, *The fall of the Congo Arabs*, pp. 1-4; Willis, *State*, p. 206.

<sup>37</sup> Commodity-based payments from caravans in exchange for passage.

<sup>38</sup> Willis, *State*, pp. 205-206.

<sup>39</sup> Ibid., 168.

“Tax collectors [...] take goats, chickens, salt, cloth, pickaxes, etc. It is a real plunder [...] To protect themselves from these unpleasant harassments, the Ouafipas move away from the capital and hide in the most remote provinces.”<sup>40</sup>

But in the midst of these pressures, cloth production still thrived in Ufipa. Wallace noted in the late 1890s, “All the villages on Rukwa weave cotton cloths [...] in most villages, especially in those of the Afipa and Awanda, a large portion of the men are engaged in either spinning the cotton or weaving.” However, Wallace suggests that imported cloth was displacing domestic cloth elsewhere in southwestern Tanzania, with “European calicoes” worn in the lakes corridor region south of Ufipa in lieu of domestic cloth previously produced in the area.<sup>41</sup> This was likely related to significant disruption in the corridor area during the 1890s due to aggressive colonial pacification efforts and inter-tribal discord.<sup>42</sup> For Ufipa, which was largely shielded from the turmoil in the south and principally depended on within-country industrial exchange, seketa production remained unaffected. As Wallace reported, “All the men and women round Rukwa wear them [and] a portion is traded to the Afipa on the plateau for iron hoes.”<sup>43</sup>

### 5.3 Industrial decline: a function of price?

A decade after Wallace reported extensive weaving and ongoing exchange in Ufipa, cloth production persisted but reportedly showed signs of decline. Based on statements from contemporary observers like Fromm, who surveyed Ufipa in 1908 and 1909, scholars have concluded that “cheap” imported cloth had undercut far more expensive domestic variants.<sup>44</sup> However, the barter-based (as opposed to *cash*-based) price difference between imported cloth and domestic cloth was small, undermining this line of argumentation. Before considering alternative explanations for declining production – namely, labor migration stimulated by colonial taxation – let’s examine relative prices.

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<sup>40</sup> Dupont, ‘Souvenirs du Tanganika’, p. 68.

<sup>41</sup> Boileau and Wallace, ‘The Nyasa-Tanganyika Plateau’, pp. 601, 613.

<sup>42</sup> In the 1890s, German conflict with the Uhehe embroiled neighboring lakes corridor people, undoubtedly disrupting domestic production. In 1890 Kerr Cross had noted, “several looms found in daily operation. Wild cotton [...] grows plentifully, and is woven into pretty patterns,” an observation confirmed by Johnston who briefly joined Kerr Cross. However, ten years later, Fülleborn found no more than three looms in operation in the same area. Mbilinyi has argued that “military conquest and severe reprisals against local resistance” in the region, along with drought, locust plagues, and rinderpest, generally “broke the capacity [...] to sustain themselves economically.” Kerr Cross, ‘Notes’, p. 94; Johnston, *British Central Africa*, p. 419; Fülleborn, *Das deutsche Njassa- und Ruwuma-Gebiet*, p. 512; Mbilinyi, ‘Agribusiness and casual labour in Tanzania’, p. 131. On pacification and disruption in the area, see Pizzo, ‘To devour the land’.

<sup>43</sup> Boileau and Wallace, ‘The Nyasa-Tanganyika Plateau’, p. 613.

<sup>44</sup> Fromm: “The time is not far off when sekerta [*sic*] will be a rarity” as “cheap imported materials [...] have almost completely displaced this industry.” Fromm, ‘Ufipa’, pp. 86, 94. See also Rodriguez, ‘Die Baumwollkultur in Deutsch-Ostafrika’, pp. 223-224.

Cloth import prices steadily rose from the 1890s through the first decades of the twentieth century (see Figure 5.1), while the cost of transporting cloth to the interior remained high. The challenge of transporting goods between the coast and Ufipa persisted well into the twentieth century and was undoubtedly intensified by the decline of caravan traffic through the region by the 1890s.<sup>45</sup> The central railroad, which was eventually completed in 1914, would bypass this region, with the nearest access point at Kigoma (Ujiji), well over 300 km to the north, forcing continued dependence on human portage. In 1937 Greig noted, “transport adds considerably to the cost” of imported manufactures in Ufipa.<sup>46</sup>

Codrington reported in 1902 that portage from the coast to the Rukwa area took 70-80 days and cost £106 per British ton (2,240 lbs.), equivalent to the weight of roughly 10,338 yards of unbleached cloth. Thus, it cost £0.010 (Rp 0.154) per yard to transport cloth to Ufipa in the early twentieth century, more than doubling the regional price relative to the initial import price at the coast (Rp 0.12 per yard of unbleached Indian cloth in 1902).<sup>47</sup> This significant price increase does not include further increases due to transaction costs and comparatively limited quantities of cloth in the interior, as discussed in Chapter 4.

#### *Seketa cloth: a high price premium?*

What about the *relative* price of locally produced cloth compared with imports? In 1908, a European missionary, Brother Rodriguez, reported that one seketa cloth, invariably 3.6 yards in total, cost 2-3 rupees (Rp 0.56-0.83 per yard).<sup>48</sup> If we compare Rodriguez’s reported seketa cash price with the regional price of unbleached Indian cloth in 1908 (Rp 0.315, including portage fees), seketa indeed appears to be significantly dearer.<sup>49</sup> Tambila has taken Rodriguez’s reported cash price as evidence that seketa cloth “was more expensive than imported cloth and therefore no longer attractive for consumers.”<sup>50</sup> However, the high cash price of seketa cloth reported by Rodriguez becomes less meaningful upon closer inspection. For one, this was the rupee price charged specifically to European visitors.<sup>51</sup> Interestingly, the

<sup>45</sup> In 1908, Rodriguez cited high transportation costs as a major deterrent to cash-crop production in the region. Rodriguez, 'Die Baumwollkultur in Deutsch-Ostafrika', pp. 223-224.

<sup>46</sup> Greig, 'Iron smelting in Fipa', p. 80.

<sup>47</sup> One 30-yard piece of unbleached Indian cloth weighed 6.5 lbs. The cloth portage cost is a lower-bound estimate since higher-quality cloth, like American-made *merikani*, weighed more, at 9.5 lbs. per 30-yard piece (7,073 yards per British ton), thus costing £0.015 (Rp. 0.225) per yard carried. Portage rate: Codrington, 'A voyage on Lake Tanganyika', p. 603. Cloth weights: Cave, 'Report for the year 1897', pp. 13-14. Unbleached cloth price (1902): Bombay trade report, 1905-1906, BL.

<sup>48</sup> Seketa size: Wyckaert, 'Fileurs et tisserands', p. 367. Seketa price (1908): Rodriguez, 'Die Baumwollkultur in Deutsch-Ostafrika', p. 224.

<sup>49</sup> 1908 coastal price of unbleached cloth (Rp. 0.161): Bombay trade report, 1909-1910, BL.

<sup>50</sup> Tambila, 'A history', p. 163.

<sup>51</sup> “The seketa [...] are also a favorite article for many Europeans, who are glad to buy the piece for the price of 2-3 Rupees.” Rodriguez, 'Die Baumwollkultur in Deutsch-Ostafrika', p. 224.

rupee price demanded of Europeans in 1908 corresponds almost *exactly* with a newly imposed colonial head tax of 3 rupees, which as of 1907 became payable in cash only (as opposed to in kind or in labor).<sup>52</sup> In the still non-monetized, rupee-deficient Rukwa region, the seemingly high reported cash price for seketa cloth may have reflected the new cash needs of people seeking rupees from foreigners for tax payments.

In fact, the picture looks quite different when we consider relative *exchange values* – that is, *barter* prices as opposed to *cash* prices – which are far more revealing in the barter-based context of the Ufipa economy. The *cash-based* price premium of seketa cloth (priced between 77 and 166 percent higher than unbleached imported cloth) in 1908 was far above the *barter-based* price premium of seketa (only 11 percent higher than imported cloth) reported by Wallace at the close of the nineteenth century (see Table 5.1).<sup>53</sup> The slightly higher barter value of seketa cloth must have partly reflected the unique qualities of the domestic cloth – in terms of substantial durability, intricate design, and cultural value – relative to primarily unbleached imported cloth. Indeed, demand for seketa persisted in spite of its modest exchange premium. Even Fromm, who believed that the local cloth industry would soon be annihilated as a result of competition from “cheap imported materials,” reported that as of 1909 the traditional exchange of valley-produced cloth for plateau-produced iron continued.<sup>54</sup>

**Table 5.1      Cash and barter price premiums of seketa versus imported cloth**

Cash price: domestic <i>seketa</i> cloth	Cash price: imported unbleached cloth	Cash-based price premium of seketa cloth	Barter-based price premium of seketa cloth
Rupees/yard	(incl. portorage fees) Rupees/yard	seketa rupee price relative to imported cloth rupee price	3.6 yards seketa cloth = 4 yards imported cloth
0.56 – 0.83	0.315	<b>77 – 166%</b>	<b>11%</b>

*Sources:* seketa price in 1908: Rodriguez, ‘Baumwollkultur in Deutsch-Ostafrika’, p. 224; unbleached cloth price at Dar es Salaam in 1908 (Rp 0.161): Bombay trade report, 1909-1910, BL; portorage fees: Codrington, ‘A voyage on Lake Tanganyika’, p. 603; exchange value of seketa and unbleached imported cloth in Rukwa region in 1897: Wallace, ‘The Nyasa-Tanganyika Plateau’, p. 601.

<sup>52</sup> For the head tax, see Bursian, *Die Häuser- und Hüttensteuer in Deutsch-Ostafrika*, p. 15. For the period in which tax payments became cash-based, see Tambila, ‘A history’, p. 184.

<sup>53</sup> One seketa cloth (invariably 3.6 yards according to Wyckaert) was the equivalent in barter terms to four yards of imported calico. Wyckaert, ‘Fileurs et tisserands’, p. 367; Boileau and Wallace, ‘The Nyasa-Tanganyika Plateau’, p. 601.

<sup>54</sup> Fromm, ‘Ufipa’, pp. 90, 93.

The already very modest barter price premium of seketa cloth relative to unbleached imported cloth would have disappeared entirely when compared with imported colored, printed, and/or dyed (CPD) cloth, which was significantly more expensive than unbleached imports and more aesthetically comparable to patterned and dyed seketa cloth. Between 1880 and 1900, imported CPD cloth cost between 63 and 93 (average: 73) percent more than unbleached imports based on coastal import prices.<sup>55</sup> Although this divergence decreased gradually, unbleached and CPD cloth prices would only show significant convergence in the early 1930s.<sup>56</sup> Furthermore, compared with unbleached cloth, CPD cloth was imported into Tanzania in smaller quantities until the late 1920s. Relative scarcity would have further augmented its exchange value in places like Ufipa.

In any case, we should be wary about overemphasizing the importance of relative prices within the regional context. In the Rukwa valley portion of Ufipa, the art of weaving was traditionally a widespread skill, meaning that here households could simply produce for their own needs.<sup>57</sup> In this context, the “cost” of seketa cloth among cloth-producing people was primarily the *labor input* required to cultivate cotton and produce cloth. Overall, price does not seem to have played the crucial role in the decline of cloth production that historians have assumed. So what had changed between the end of the nineteenth century, when Wallace noted extensive production, and the end of the first decade of the twentieth century, when Fromm reported encroaching displacement of the local industry?

#### **5.4 Colonial integration and economic transformation**

The waning of Ufipa’s textile industry corresponds closely with a series of dramatic changes that occurred as the German colonial administration increasingly extended its reach into the Rukwa region. The process of colonial integration, which began at the end of the nineteenth century but ramped up during the first years of the twentieth, brought profound changes to the region. The imposition of taxation, in particular, would have substantial implications for the organization of labor in Ufipa and, consequently, for domestic production.

##### *The extension of colonial rule to Ufipa*

Compared with a more chaotic military pacification process that had affected the lakes corridor region to the south through the 1890s, the slightly delayed extension of the colonial reach to Ufipa and the rest of the Rukwa region was relatively subdued.<sup>58</sup> In 1899, the Bismarckburg military station was established on the southeastern bank of Lake Tanganyika to oversee

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<sup>55</sup> CPD cloth price premiums relative to unbleached cloth derived from Bombay trade reports, 1880-1900, BL.

<sup>56</sup> Tanganyika Blue Books, 1931-1941, TNA.

<sup>57</sup> Tambila, 'A history', p. 32; Boileau and Wallace, 'The Nyasa-Tanganyika Plateau', p. 613.

<sup>58</sup> Waters, 'Social organization', p. 71.

administration of the newly established Bismarckburg district (see Map 5.1). In an early assault on local custom, the military administration ordered Ufipa kings to discard their seketa robes and instead wear western-style suits. Roles traditionally assumed by Ufipa's extensive royal administration came to be subsumed by White Father missionaries, who were authorized by the colonial administration to act as official arbiters of disputes among district inhabitants.<sup>59</sup>

However, the colonial policy with the most significant long-term implication for socio-economic organization in the region was the imposition of colonial taxation. In Bismarckburg district, head tax was collected from "men of *working age*" beginning in 1900.<sup>60</sup> The explicit "intention," as explained at an 1899 Governor's roundtable, "was to raise the colored population to work."<sup>61</sup> For many inhabitants of the region, described in 1903 as "the dead-looking corner of the protectorate at the southern end of Lake Tanganyika," this would eventually entail venturing far abroad to seek wage work.<sup>62</sup> Rather than competition from imported cloth, I argue that it was the drain of able-bodied men from the region that undermined Ufipa's textile industry, which relied exclusively on male labor for both spinning and weaving.

This did not occur immediately. Initially, tax collection proceeded fairly slowly and was collected largely in labor or in kind through 1906.<sup>63</sup> While tax payments – alongside royal tributary demands – increased pressure on households, most villagers could, for the time being, obtain the resources to meet tax demands while remaining at home and maintaining traditional production systems. Consequently, cloth production still thrived in Ufipa during the first several years of the twentieth century. When colonial surveyors toured Bismarckburg in 1901, they noted "small scale" cotton cultivation and weaving throughout the southern portion of the district.<sup>64</sup> In late 1904, another colonial survey expedition reported the persistence of product specialization in Ufipa, including cotton cultivation, weaving, and iron production.<sup>65</sup>

#### *Cash-based taxation and labor recruitment*

However, by 1907 a substantial change was underway throughout the region, coinciding with broader economic shifts in Tanzania. Obst and Kloster point to the year 1907 as a pivotal turning point in the economic development of the German colony, as output rapidly increased

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<sup>59</sup> Tambila, 'A history', pp. 132, 136.

<sup>60</sup> Circular issued by Governor Liebert, 18 May 1899, cited in *ibid.*, 155; Seel, Mgawe, and Mulder, *The history and traditions of the Pimbwe*, p. 33.

<sup>61</sup> Governor Liebert quoted in Bursian, *Die Häuser- und Hüttensteuer in Deutsch-Ostafrika*, p. 11.

<sup>62</sup> See chapter 6 (especially pp. 183-193) in Tambila, 'A history'. Quote from "Notes on the building of the telegraph line to Kigoma", 7 March 1903, cited in *ibid.*, 152.

<sup>63</sup> *Ibid.*, 153, 155-156, 184.

<sup>64</sup> Komitee, *Bericht über die Sitzung des Geschäftsführenden Ausschusses vom 2. Juni 1902*, p. 11.

<sup>65</sup> Fuchs, *Die Wirtschaftliche Erkundung*, p. 346.

on European-owned sisal and rubber plantations in the northeastern coastal region.<sup>66</sup> Writing in 1913, they proclaimed that German East Africa had become in an “astonishingly short time [...] a plantation colony!”<sup>67</sup> The success of the plantation system and the simultaneous construction of the central railroad depended on drumming up significant amounts of manpower from a labor-scarce, land-abundant colony.<sup>68</sup>

In Bismarckburg, 1907 also marked the beginning of mandatory tax payment in rupees – rather than in kind or local labor service. Tambila argues that the root of development-retarding labor migration from the Rukwa region was in the imposition of cash-based taxation given the pronounced scarcity of rupees in the barter-based regional economy.<sup>69</sup> As Biermann put it, village communities were being “forced hot house fashion into a greater dependence on the market in order to pay taxes and survive.”<sup>70</sup> Indeed, 1907 also saw the initial arrival of numerous labor recruiters who would become ubiquitous in Ufipa, descending first on the Rukwa valley.<sup>71</sup>

Cash-based taxation, coupled with royal tribute due four to five times per year, heavily burdened Ufipa households.<sup>72</sup> Melland and Cholmeley reflected in 1910 that the “very high tribute” collected by Ufipa headmen in cash, clothes, labor, and livestock amounted to “a double tax” for Ufipa villagers. Furthermore, Wafipa commoners often paid *more* in colonial taxes than their wealthier counterparts:

Collection [...] is left to the chief, who [...] is able to make up the total without calling upon his friends [...] If the sum produced falls below the estimate, police are sent to fetch in the people and their flocks, and once again it is not the chief nor his friends that suffer.<sup>73</sup>

The colonial administration became increasingly effective in collecting taxes (see Figure 5.3), although per-capita collection remained below the three rupees demanded per man, partly due to plantation exemptions. If a migrant laborer remained at the same plantation for at least six

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<sup>66</sup> Colonial policy was divided in 1907. Following the Maji Maji uprising in 1905, Governor Rechenberg leaned toward a pro-peasant planter policy, particularly with respect to cotton, while plantation owners, on the other hand, sought the creation of a wage labor force. See Sunseri, 'Baumwollfrage', pp. 46-8; Iliffe, 'Effects'. Pro-peasant policy extended primarily to regions that were well positioned to serve the colony as a viable source of exportable produce. The great distance of the Rukwa region to transportation facilities mitigated this possibility.

<sup>67</sup> Obst and Kloster, 'Der Handel', p. 470.

<sup>68</sup> Zache, *Deutsch-Ostafrika*, p. 41.

<sup>69</sup> Tambila, 'A history', pp. 155, 199.

<sup>70</sup> Biermann, 'Survey', p. 31.

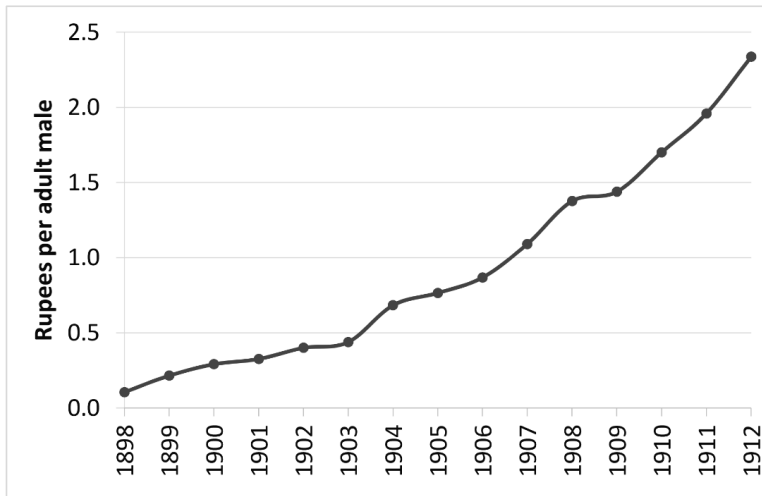
<sup>71</sup> Tambila, 'A history', p. 184.

<sup>72</sup> On tribute, see Lechaptois, *Aux rives du Tanganika*, p. 95.

<sup>73</sup> Melland and Cholmeley, *Through the heart of Africa*, p. 98.

months, he was exempt from the annual head tax. Bursian considered this policy a key motivating factor driving labor migration and a clear indication that “the government places the main weight not on the taxable amount but on regular work.”<sup>74</sup>

**Figure 5.3. Taxes collected per adult male in German East Africa, 1898-1912**



Sources: Koponen, *Development for exploitation*, pp. 222 (Table 4.3), 390 (Table 6.2); population data: Frankema-Jerven African Population Database 1850-1960, version 2.0. Note: the adult male population is assumed to comprise roughly one-third of German East Africa's total population excluding the Rwanda and Burundi residences, which paid almost no tax (0.002 rupees per man by 1910).

In Ufipa, there were few opportunities to gain rupees close to home. Some work was available at mission stations, but these were quickly overrun.<sup>75</sup> In many cases, Africans turned to cash-crop production as “an alternative to leaving the village.”<sup>76</sup> The possibility of cash-crop production, Sunseri notes, “left wage labour open to peasant volition [thus] peasants were not simply or uniformly pumped into the colonial economy by repressive taxation.”<sup>77</sup> However, Munro points out that where cash-crop production was unfeasible, “migratory labour over long distances was usually the only means of access to cash incomes.”<sup>78</sup> In Ufipa, alternative choices

<sup>74</sup> Bursian, *Die Häuser- und Hüttensteuer in Deutsch-Ostafrika*, pp. 15-16.

<sup>75</sup> Richter, *Geschichte der Berliner Missionsgesellschaft, 1824-1924*, p. 666; Koponen, *Development for exploitation*, p. 347.

<sup>76</sup> Berg, 'Development', p. 405.

<sup>77</sup> Sunseri, 'Labour migration', p. 587.

<sup>78</sup> Munro, *Britain in tropical Africa*, p. 45.

were impeded by transportation difficulties that made export-oriented peasant agriculture simply unprofitable.<sup>79</sup> Potentially profitable rubber sources had already been over-exploited when Fuchs surveyed the area in 1904.<sup>80</sup> Tambila points to wax collection as a possible source of money.<sup>81</sup> However, wax collection in German East Africa was just beginning to pick up when severe drought in 1908 killed off essential flowers throughout the colony, resulting in the “destruction of whole bee colonies,” which were still in a slow process of recovery as of 1913.<sup>82</sup>

Consequently, the only viable option was labor migration, which kicked off almost immediately after the imposition of cash-based taxation. By 1908, “a large part of the men” of Ufipa were reportedly forced to seek work far afield on coastal plantations or distant railroad projects to obtain tax money.<sup>83</sup> Young men from the cloth-producing valley began laboring at the coast in two-year stints.<sup>84</sup> As labor was drained from Ufipa, missionaries in the region came to consider labor recruitment “for this unhappy land, a scourge worse than the slave trade.”<sup>85</sup>

#### *Regional labor drain and the impact on cloth production*

Migrants were generally contracted for 180 full days of plantation labor, but typically had to remain for a year or more before fulfilling their quota. During this time, they often acquired significant debt, which kept them tied to the plantation.<sup>86</sup> Added to the long duration spent laboring were the weeks or even months required to walk nearly 800 km to northeastern coastal plantations and back again.<sup>87</sup> A Bismarckburg district official reported in 1910, “many ruined and deserted villages [that] are immediately striking, while in others 75 percent of those one meets are women [who report]: ‘the men have gone to work on the coast and have not yet returned.’”<sup>88</sup> Generally speaking, some labor migrants never made their way home due to illnesses that often struck down men in regions with unfamiliar disease environments, climates, and diets.<sup>89</sup> A Rukwa area missionary reported that, while many return between contracts,

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<sup>79</sup> Rodriguez, 'Die Baumwollkultur in Deutsch-Ostafrika', pp. 223-224.

<sup>80</sup> Fuchs, *Die Wirtschaftliche Erkundung*, p. 346; Tambila, 'A history', pp. 160-161.

<sup>81</sup> Tambila, 'A history', p. 172.

<sup>82</sup> Obst and Kloster, 'Der Handel', pp. 478-479.

<sup>83</sup> Fromm, 'Ufipa', p. 93.

<sup>84</sup> “Notes on Rukwa,” 12 December 1908, cited in Tambila, 'A history', p. 185.

<sup>85</sup> White Fathers annual report (1912-13) quoted in Koponen, *Development for exploitation*, p. 640.

<sup>86</sup> Workers relied on plantation credit advances for food and clothing. Paying off advances often required extra months of labor, thus requiring *further* advances. Should a disillusioned migrant leave without fulfilling his full contract or paying off his advances, his wages would be forfeited, and “the plantation would have had him for years for nothing.” German colonial officer H. Fonck cited in Tambila, 'A history', pp. 181-182.

<sup>87</sup> On time-consuming foot travel associated with labor migration in sub-Saharan Africa, see Berg, 'Development', p. 398.

<sup>88</sup> Koponen, *Development for exploitation*, p. 640.

<sup>89</sup> Berg, 'Development', p. 398. Schwetz, 'Contribution', p. 323.

“others die down there.”<sup>90</sup> Likewise, in Unyamwezi, migration to the coast resulted in striking depopulation and significantly declining birth rates by the early twentieth century.<sup>91</sup>

Male labor was consequently drained away from home villages, a rapid “transfer [that] imposed a heavy toll on the peasant reproduction nexus.”<sup>92</sup> According to Bierman, home economies suffered immensely: “as the net was thrown even wider in search for male labour, the economic foundation of many peasant societies were undermined.”<sup>93</sup> In Ufipa, the increasing absence of a large share of men undoubtedly upset household labor allocation and sharply undermined the textile industry, which relied almost exclusively on male labor.<sup>94</sup> Consequently, the industry, though ongoing to an extent, was showing signs of decline as of 1908.<sup>95</sup> Interestingly, Lechaptois, who lamented the disruptive hunt for male laborers in the Rukwa region believed, like most Europeans, that the local industry “unfortunately tends to disappear in the face of the invasion of cheap European fabrics.”<sup>96</sup> But this purportedly deindustrializing “invasion” occurred just as the large-scale migration of men out of the region was ramping up.

In Ufipa, Fromm reported frequently coming across what were essentially “women’s villages [...] under the ‘masculine’ protection of frail and disabled old men.”<sup>97</sup> The loss of much able male labor meant, first, that there were far fewer men available to spin and weave. Secondly, and most important in the long-run, was the withdrawal of *young* men from villages. Learning the skill of cloth-making traditionally involved a dedicated apprentice period with an established weaver (see Image 5.1), but by 1908, youths began to pour out of the region, staying away for years at a time in search of rupees for taxes and eventual bridewealth payments.<sup>98</sup> Boys as young as 12 were reportedly heading to the coast with labor recruiters.<sup>99</sup> The failure to *reproduce* spinning, dyeing, and weaving knowledge ultimately sealed the industry’s fate. Skinner noted in the case of Mossi villages in Burkina Faso, “When youths migrate at a very early age they never learn to weave; moreover, they often regard cloth-making as an outmoded economic activity of dubious utility.”<sup>100</sup> Wafipa males who were fifteen in 1908 reached their

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<sup>90</sup> “Notes on Rukwa,” 12 December 1908, cited in Tambila, ‘A history’, p. 185.

<sup>91</sup> van der Burgt, ‘Zur Entvölkerungsfrage Unjamwes und Usumbwas’.

<sup>92</sup> Biermann, *Tanganyika railways*, p. 11.

<sup>93</sup> Biermann, ‘Survey’, p. 31.

<sup>94</sup> In Ufipa, spinning and weaving were male tasks. Boileau and Wallace, ‘The Nyasa-Tanganyika Plateau’, p. 613.

<sup>95</sup> Fromm, ‘Ufipa’, pp. 86, 94; Rodriguez, ‘Die Baumwollkultur in Deutsch-Ostafrika’, pp. 223-234.

<sup>96</sup> Lechaptois, *Aux rives du Tanganika*, p. 255.

<sup>97</sup> Fromm, ‘Ufipa’, p. 93.

<sup>98</sup> On apprenticeship, see Lyimo, “Role of crafts,” 19 cited in Willis, *State*, p. 280n51. On outmigration of young males, see Tambila, ‘A history’, p. 185. By the turn of the century, bridewealth in the region amounted to about 20 francs (12 rupees). Lechaptois, *Aux rives du Tanganika*, p. 146.

<sup>99</sup> Koponen, *Development for exploitation*, p. 617.

<sup>100</sup> Skinner, ‘Labour migration and its relationship’, p. 387.

seventies in the mid-1960s, when Willis found that “the once-universal art of cloth-making in Ufipa is now known only to a handful of old men in the Rukwa valley.”<sup>101</sup> This suggests that the reproduction of cloth-production skills indeed ceased right around the time that labor migration took off.

**Image 5.1**      **Young weavers in the Rukwa region, c. 1908**



Source: Rodriguez, ‘Baumwollkultur in Deutsch-Ostafrika’, p. 225

Labor migration also shrunk the local pool of consumers for domestic cloth in places like the cloth-consuming Ufipa plateau. Beyond diminishing industrial production possibilities and exchange opportunities, labor migration also impacted agricultural production capacity, particularly since the average Wafipa household, the main locus of production, was relatively small (3-6 members).<sup>102</sup> As men departed for long periods, male labor was removed not only during the dry slack season, when cloth production was most likely to occur, but increasingly during the agricultural wet season.<sup>103</sup> Fromm reported that while agricultural work had traditionally been divided between men and women, “recently [...] since the men have been working on railroad construction and on the large plantations near the coast, the cultivation of

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<sup>101</sup> Willis, *The Fipa*, p. 26.

<sup>102</sup> Only wealthy men who could afford numerous concubines produced larger families. Fromm, ‘Ufipa’, p. 81.

<sup>103</sup> Iliffe points out that while caravan portage had often allowed men to return home to perform essential wet-season planting tasks, plantation work tended to keep men far from home into the wet season. Iliffe, *A modern history of Tanganyika*, p. 167. By the second decade of the twentieth century, there was an increasing tendency to extend official labor contracts beyond the 180 days intended to encompass the dry season. Men under such contracts could not return, even in theory, for the agricultural wet season. Koponen, *Development for exploitation*, p. 642.

the fields is almost exclusively left to women who have stayed at home.”<sup>104</sup> And by the early twentieth century, slaves were reportedly no longer an option for shoring up diminished labor in Ufipa.<sup>105</sup>

With the absence of a significant portion of the region’s adult males, communal labor burdens for certain labor-intensive agricultural and construction tasks undoubtedly increased for remaining able-bodied village men, diminishing available time for industrial pursuits.<sup>106</sup> According to Berg, when extended labor migration movements occur, “those who remain are forced to shift their energies to the most immediate tasks, notably the maintenance of food crops.”<sup>107</sup> This would have been particularly true for the extensive portions of Ufipa that relied on *intuumba* cultivation, a highly labor-intensive mound-building system designed to enhance soil fertility, which required adult male labor during both the wet and dry seasons.<sup>108</sup>

#### *Relative resilience in the Rukwa valley*

However, in the Rukwa valley section, villagers did not rely on the labor-intensive mound system prevalent in other parts of Ufipa. The fertility of the soil surrounding Lake Rukwa allowed for a less labor-intensive ridge cultivation system (*imyaandi*).<sup>109</sup> Furthermore, cotton grew with particular ease in the valley soil, even when left wild.<sup>110</sup> Consequently, the labor input required for both subsistence agriculture and cloth production were comparatively lower in the valley. Along with some communal male and/or female labor to harvest and de-seed the cotton, the principal requirement for cloth production was the availability of male labor for spinning and weaving during the dry season.<sup>111</sup>

While cloth production reportedly waned in much of Ufipa, ongoing production was noted in the valley portion as of 1910, some years after labor migration had begun to drain the area of male labor. Melland and Cholmeley saw cultivation of “a good deal of cotton” in the valley and reported that inhabitants were “well-clothed [...] wearing the cloth of their own manufacture” along with imports.<sup>112</sup> Much of this production was probably undertaken by older men, unable to make the arduous journey to the coast to perform heavy plantation work but capable of

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<sup>104</sup> Fromm, 'Ufipa', p. 89.

<sup>105</sup> Ibid., 89-90.

<sup>106</sup> Communal labor was often engaged for particularly labor-intensive tasks like threshing and compost-mound construction. Willis, *State*, p. 123.

<sup>107</sup> Berg, 'Economics', pp. 168-169.

<sup>108</sup> Mbegu, 'Making the most of compost', p. 137; Lunan, 'Mound cultivation', pp. 88-89.

<sup>109</sup> Willis, *The Fipa*, p. 23.

<sup>110</sup> Fromm, 'Ufipa', p. 94.

<sup>111</sup> On communal de-seeding work, see Wyckaert, 'Fileurs et tisserands', p. 355.

<sup>112</sup> Melland and Cholmeley, *Through the heart of Africa*, pp. 29-30.

working a loom.<sup>113</sup> The ongoing consumption of seketa cloth alongside available imports speaks to the value of the local product. The valley's still ongoing, if reduced, industry continued to fascinate European visitors.<sup>114</sup>

Kjekshus, however, attributes continued production to the “patronage of Christian missions” and implies that by the early 1910s, domestic industry had faded to such an extent that villagers had forgotten how to construct their own looms, for “when the White Fathers of Ufipa sought to rescue the local weaving industry, one of their difficulties was the reconstruction of the local looms.”<sup>115</sup> However, Kjekshus mistranslated the French text of Monsignor Lechaptois, who wrote that the White Fathers wished to “improve [the industry] by perfecting it a little; but we have always been stopped by the difficulty of setting up a cotton *spinning machine* [my emphasis].”<sup>116</sup> Rather than rescuing a forgotten industry, missionaries had simply unsuccessfully attempted to speed up yarn production via mechanization. The traditional hand-spindle technique employed in Ufipa may have been labor intensive, but it produced solid yarn that contributed to seketa cloth's considerable durability.<sup>117</sup> The durability and aesthetic appeal of local cloth relative to imports, rather than ineffective missionary interference, accounted for the industry's persistence.

## 5.5 Imports as a motivation to migrate?

Just as labor migration was beginning to ramp up in German East Africa, Franz Stuhlmann noted that production of durable seketa cloth was ongoing throughout the Rukwa region, but had predicted that it would “not be long before such materials [...] will be an ethnographic rarity.” His prediction rested on the assumption that “*die bequemen Leute*” (“the comfortable people,” connoting laziness) would not continue to produce cloth when they could more easily consume imported textiles.<sup>118</sup> This is a surprising characterization of people who, in this precise period, were beginning to trek several hundreds of kilometers to labor for most of the year. Far from comfortable, this was an incredibly labor-intensive path.

In Berg's view, “the possibility of buying European cloth [...] seems to have been the single greatest incentive to money earning [and] the earliest spur to voluntary emigration” in sub-

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<sup>113</sup> The art was apparently no longer performed by young men by the second decade of the twentieth century when Wyckaert described the weavers as “old” (*vieux tisserands*). Wyckaert, ‘Fileurs et tisserands’, p. 355.

<sup>114</sup> Around 1912 a loom was sent to the Bankfield Museum in England. Ling Roth, *Studies in primitive looms*, p. 42.

<sup>115</sup> Kjekshus, *Ecology control*, pp. 80, 109.

<sup>116</sup> Lechaptois discusses *un métier à filer le coton* (cotton spinning machine), not *un métier à tisser le coton* (loom). Rodriguez also reported unsuccessful missionary efforts to introduce imported machinery. Lechaptois, *Aux rives du Tanganika*, pp. 255-256; Rodriguez, ‘Die Baumwollkultur in Deutsch-Ostafrika’, p. 224.

<sup>117</sup> On the virtues of spindles, see Franquemont, *Respect the spindle*.

<sup>118</sup> Stuhlmann, *Beiträge zur Kulturgeschichte von Ostafrika*, p. 508.

Saharan Africa. He argues that the role of taxation has often been over-exaggerated, even if it helped encourage migration, because “in most cases it took about one month spent in earning wages to supply tax money.”<sup>119</sup> However, considering the sheer distance traveled to plantations, it is unlikely that migrants would remain for only one month, nor would they gain tax exemption without a stay of at least six months, while accumulation of plantation debts diminished earnings. Indeed, the real wages earned by labor migrants were generally low, particularly considering the opportunity cost of migration. Laborers were paid 12-15 rupees per 30-days’ labor on the comparatively high-paying northeastern plantations, while wages were much lower farther inland, at 3-5 rupees.<sup>120</sup> However, even where wages were high so too were food costs, which drained migrant earnings on near-coast plantations. During the German colonial period, food and clothing prices rose, but wages did not increase commensurately.<sup>121</sup> Although labor demand consistently surpassed supply, wage levels did not increase accordingly, even as world market prices for plantation products like sisal rose.<sup>122</sup> After laboring for a year or more, the maximum that a worker might bring home by the early 1910s was 10 to 20 rupees.<sup>123</sup> But was the prospect of consuming imported cloth spurring migration, as suggested by Berg?

#### *The substitution assumption*

There are two implicit, tenuous assumptions in both the argument that labor migration was motivated by desires for imported manufactures and the supposition that cloth production in Ufipa was declining as a direct result of import competition. First, it is assumed that foreign and domestic cloth were regarded as generally interchangeable by consumers, which neglects substantial differences in qualities, use values, and design. As a contemporary ethnographer noted, “foreign invaders” could be clearly “distinguished from the products of native craftsmanship” in East Africa.<sup>124</sup> Furthermore, distinctive local products maintained important ceremonial space in the Rukwa region. For example, although imported cloth was consumed alongside seketa by 1910, it was reported that “when proceeding to worship, the priest attires himself in a cotton cloth of native manufacture.”<sup>125</sup>

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<sup>119</sup> Berg, 'Development', pp. 401, 404. Berg notes that while consumption of imported goods was the most important initial driver in labor migration, continued migration was strongly encouraged by the eventual “transformation of customary transactions into money terms.”

<sup>120</sup> Calvert, *German East Africa*, p. 99; Koponen, *Development for exploitation*, pp. 656-657.

<sup>121</sup> Iliffe, *A modern history of Tanganyika*, p. 158.

<sup>122</sup> Biermann, 'Survey', p. 30; Bald, *Deutsch-Ostafrika*, p. 140.

<sup>123</sup> Koponen, *Development for exploitation*, pp. 656-657; van der Burgt, 'Zur Entvölkerungsfrage Unjamwes und Ussumbwas', p. 710.

<sup>124</sup> Schurtz, 'Die geographische Verbreitung der Negertrachten', p. 153.

<sup>125</sup> Melland and Cholmeley, *Through the heart of Africa*, p. 40.

Secondly, it is often supposed that imports were superior to locally made cloth.<sup>126</sup> However, numerous contemporaries praised the region's domestic cloth for its tasteful, intricate designs and marked durability relative to imports.<sup>127</sup> In fact, the *quality* of most imports had diminished, as lower-quality Indian and English variants increasingly replaced sturdier American-made imports. By the turn of the twentieth century, American traders were increasingly diverting attention from Zanzibar and Tanzania to northern East Africa as American demand for the region's hides and skins increased.<sup>128</sup> However, interior Tanzanian consumers retained a preference for American cloth, and alternatives were frequently "not met with success" on the market as interior consumers continued to request the American product well into the twentieth century.<sup>129</sup>

#### *A "change in taste"?*

Raum suggests that changing tastes boosted consumption of imports and a consequent "spread of European clothes" killed domestic production.<sup>130</sup> Colored, printed, and/or dyed (CPD) imports – especially *kangas* – did alter the fashion landscape on the Swahili Coast by the end of the nineteenth century.<sup>131</sup> However, most of this comparatively expensive cloth was consumed by coastal people and interior elites.<sup>132</sup> The majority of cloth imports into Tanzania was comprised of unbleached cloth up to the mid-1920s (see Figure 5.2), which was out of step with traditional tastes in Ufipa, where consumers favored patterned clothing. Some CPD imports were available in Ufipa during the early twentieth century. The "ladies" of "wealthy" Wafipa men might wear brightly colored coastal fashions, while the Queen of the Lyangalile kingdom of Ufipa wore imported flower-printed cloth.<sup>133</sup> But these varieties were far more expensive than larger-scale unbleached imports and likely out of reach for poorer consumers.<sup>134</sup> Indeed, as of 1926, only unbleached cloth and monochromatic dyed *kaniki* were singled out as important cloth imports consumed in the interior.<sup>135</sup>

<sup>126</sup> See, for example, Rodriguez, 'Die Baumwollkultur in Deutsch-Ostafrika', p. 224.

<sup>127</sup> Fülleborn, *Das deutsche Njassa- und Ruwuma-Gebiet*, p. 512; Boileau and Wallace, 'The Nyasa-Tanganyika Plateau', p. 613; Lechaptois, *Aux rives du Tanganika*, p. 255; Wyckaert, 'Fileurs et tisserands', p. 368.

<sup>128</sup> Americans still traded at Zanzibar, but the largest share of American cloth imported into Zanzibar was re-exported to the northeast. *Commercial relations, 1906*, p. 435.

<sup>129</sup> Weddell, 'Zanzibar', p. 1012 (quote); Obst and Kloster, 'Der Handel', p. 482.

<sup>130</sup> Raum 'German East Africa', p. 193.

<sup>131</sup> Fair, 'Remaking fashion'.

<sup>132</sup> For *kangas* as coastal dress, see Hardinge, 'Report for the year 1896', p. 8; Cave, 'Report for the year 1897', p. 14; O'Sullivan-Beaure, 'Report on the Island of Pemba', pp. 15-16; Kestell-Cornish, 'Report for the year 1901', p. 5.

<sup>133</sup> Fromm, 'Ufipa', p. 86.

<sup>134</sup> See page 130 for discussion on the high price of CPD cloth imports relative to unbleached imports.

<sup>135</sup> *Tanganyika trade report, 1926*, pp. 2-5.

Did this represent changing tastes, with most Wafipa consumers gravitating toward more subdued fashions? Qualitative sources suggest that regional consumers continued to strongly prefer patterned cloth. At the start of WWI, labor migration was disrupted as European plantations were shuttered, and men began to return home.<sup>136</sup> Cloth imports simultaneously ceased during the war, and Ufipa's diminished textile industry experienced a brief boost.<sup>137</sup> The extent and duration of this uptick in production was likely limited and short-lived given that the majority of the region's able-bodied men would be pressed into military portage by 1916.<sup>138</sup> However, it allowed a missionary to record the highly complex demand patterns of the region's consumers and capture a photograph of plaid-like domestic varieties (see Image 5.2):

Some “want it with checkers, others with stripes, some with serpentines or diamonds; [some] ask for a white background and black drawings, while their neighbors prefer a black background and white drawings; And then there are the blacksmiths, a proud caste, who demand a special mark [...] The weaver knows all these little requirements of taste, vanity, or rank.”<sup>139</sup>

**Image 5.2** Rukwa region women wearing domestic cloth of various designs, c. 1914



Source: Wyckaert, 'Fileurs et tisserands,' p. 370.

<sup>136</sup> Sabea, 'Mastering the landscape', pp. 422-423; Iliffe, *A modern history of Tanganyika*, p. 272.

<sup>137</sup> See Wyckaert, 'Fileurs et tisserands'.

<sup>138</sup> On the Rukwa region's WWI involvement, see Tambila, 'A history', p. 208.

<sup>139</sup> Wyckaert, 'Fileurs et tisserands', p. 368.

Unbleached cloth, or even monochromatic dyed cloth, would have been a poor direct substitute for the durable, uniquely designed, and socio-culturally significant domestic cloth, making it unlikely that the early-twentieth-century decline in Ufipa's industry hinged on some inability of seketa cloth to compete with imports of lower functional and aesthetic quality. Likewise, it would have been counterintuitive for men to choose to migrate as a means to secure these imports instead of remaining at home and producing/consuming domestic cloth if this had been economically feasible.

## 5.6 The British colonial period and the disappearance of production

### *Resumption of labor migration and the rise of competitive imports*

Surviving wartime porters returned home after WWI, and the cessation of labor migration persisted for several years as plantations awaited resale by the now-British colonial administration.<sup>140</sup> During this time, cloth production in Ufipa was noted by British colonial officials investigating their new holdings in the 1920s.<sup>141</sup> Granted, the scale of production was likely fairly low given significant population losses due to wartime famine and disease.<sup>142</sup>

Within a few years, however, plantations began to reopen. The collection of taxes, levied on all adult males over the age of sixteen, simultaneously resumed in 1922 at a rate of 6 shillings (equivalent to 3 rupees) per man.<sup>143</sup> Consequently, the large-scale exodus of male labor to coastal plantations recommenced with vigor by 1923.<sup>144</sup> An official in Ufipa reported as of 1924, "In August [...] it is an uncommon thing to encounter any able-bodied men in the villages: all have gone to the coast in search of their tax."<sup>145</sup> In some parts of the Rukwa region and its surroundings, including Karema, taxes were raised to 10 shillings in 1925.<sup>146</sup>

The British colonial period saw a general expansion in peasant cash-crop production in the former German colony, but such opportunities remained comparatively limited in the still transportation-deficient Rukwa area. Circumstance would continue to relegate the region's men

<sup>140</sup> British officials began auctioning closed plantations two years after the war. Sabea, 'Mastering the landscape', p. 423.

<sup>141</sup> Ufipa District Book vol. II: Cotton in Ufipa, 1 March 1957 cited in Steidl, 'Kolonialer Naturschutz und Tsetse-Kontrolle in West-Tansania, ca. 1920-1960', pp. 46-47.

<sup>142</sup> Henderson, 'German East Africa, 1884-1918', p. 161; Gewald, 'Colonial warfare', pp. 19-22; Tambila, 'A history', pp. 210-213.

<sup>143</sup> In 1922, the British administration introduced the shilling to replace the rupee. "Hut tax" was paid by male hut owners, while an equivalent "poll tax" was levied on those who did not own a hut. Sayers, *The handbook of Tanganyika*, pp. 183-184.

<sup>144</sup> In 1924, a missionary noted, "The men are away again in excess [...] the 6 shillings tax is the cause," as quoted in Tambila, 'A history', p. 251.

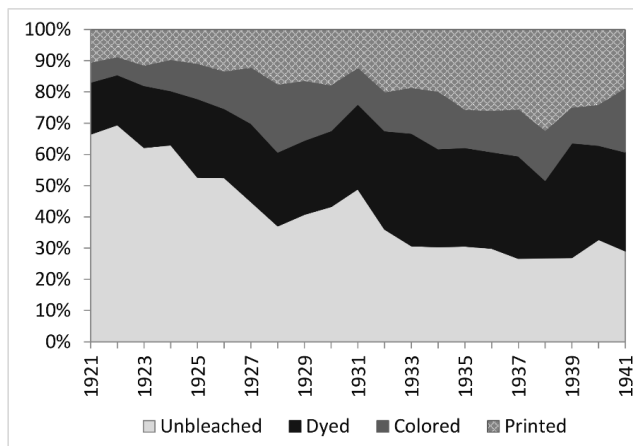
<sup>145</sup> Ufipa District Annual Report, 1924, quoted in Willis, *State*, p. 269n37.

<sup>146</sup> Sayers, *The handbook of Tanganyika*, pp. 184-185; Tambila, 'A history', p. 251.

to long-distance migration well into the 1950s.<sup>147</sup> As the pre-war pattern of male labor drainage resumed in the 1920s, domestic cloth production dwindled.<sup>148</sup>

Just as Rukwa region men began heading back to coastal plantations, cloth imports into Tanzania began a rapid ascent. Furthermore, the composition of cloth imports began to change. In the mid-1920s, import levels of CPD cloth began to rise, and by the 1930s, the share of unbleached cloth had declined substantially (see Figure 5.4). Trade reports link this shift to increasing incomes, as “demand for higher priced goods,” particularly kanga prints, was “fostered by, an increase in the general prosperity of the native population.”<sup>149</sup> However, this consumption-stimulating prosperity was primarily enjoyed by peasant cash-crop producers. Migrant labor wage rates, on the other hand, remained stagnant, while cloth import prices, which had surged during the war years, remained elevated. This suggests that the families of Wafipa labor migrants were not capable of actively partaking in this consumer revolution, at least not initially.<sup>150</sup> As had been the case in the early years of the twentieth century, it was tax-driven economic necessity, rather than ambition to consume imported cloth, that drove the resumption of industry-stifling labor migration by 1923.

**Figure 5.4** Shares of cotton cloth imports by type, 1921-1941



Source: Tanganyika Blue Books, 1921-1941, TNA.

<sup>147</sup> On general British-era expansion of peasant production, see Leubuscher, *Tanganyika territory*, pp. 7-8. For ongoing labor migration from the Ufipa District and surrounding areas, see Smythe, *Fipa families*, pp. 17-18; Hirst, 'Net migration', p. 32.

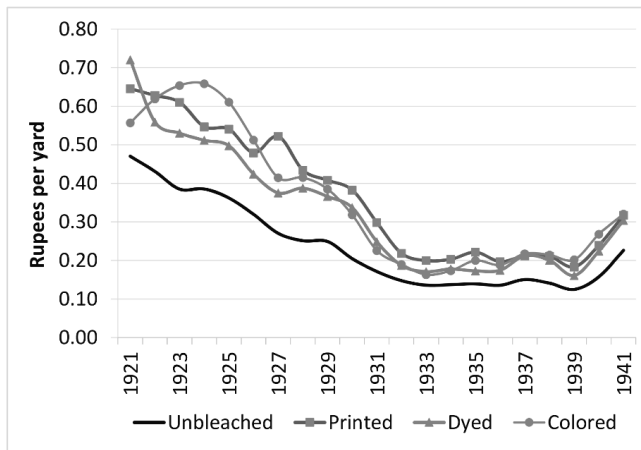
<sup>148</sup> According to Tambila, the last vestiges of the Rukwa region cloth industry disappeared entirely in the inter-war period. Tambila, 'A history', p. 256.

<sup>149</sup> *Tanganyika Territory*, 1928, p. 2; McQuade, *Tanganyika Territory*, 1935, p. 10 (quote).

<sup>150</sup> For wage stagnation, see Leubuscher, *Tanganyika territory*, p. 9.

By the 1930s, however, consumption possibilities would change for lower-income people, as cloth prices finally receded to pre-war levels by 1930. Furthermore, around this time, CPD import prices at last began to converge with historically cheaper unbleached imports (see Figure 5.5).

**Figure 5.5 Prices of cloth imports by type, Tanzania, 1921-1941**



*Source:* Tanganyika Blue Books, 1921-1941, TNA.

Thus, while scholars have assumed that “cheap” imports outpriced and outcompeted patterned seketa cloth in the late nineteenth and early twentieth century, prices for CPD cloth would only begin to come within reach of lower-income Wafipa consumers much later, during the 1930s, almost three decades after production of seketa cloth had initially started to wane in Ufipa.

The importation of larger quantities of cloth – which finally reached per-capita subsistence levels in the mid-1930s (see Figure 5.1) – comprised of more aesthetically competitive varieties likely dampened the possibility of any eventual comeback of the domestic cloth industry in Ufipa. However, the ultimate cause of industrial decline had been the taxation-driven drain of labor from the region from 1907 onward and the post-war renewal of labor migration. The cloth industry was not alone in this respect. By the 1930s, the iron industry had also faltered. With respect to iron production, Tambila points to “disruptive effects” of labor migration based on Greig, who noted in the 1930s that even the once-privileged class of ironworkers were disbursing, as labor migration “breaks up the old yearly routine” of smiths on the Ufipa plateau.<sup>151</sup> The traditional intra-Ufipa exchange pattern of valley cloth for plateau iron had finally been extinguished by this time, as “the natives from the shore of Lake Tanganyika and

<sup>151</sup> Tambila, 'A history', p. 257; Greig, 'Iron smelting in Fipa', p. 80.

from the Rukwa valley no longer come to the plateau as they used to, to make their purchases.”<sup>152</sup>

## 5.7 Conclusion

From the mid-nineteenth to the mid-twentieth century, Ufipa’s economy underwent significant shifts, including the rise of long-distance trade participation, colonial integration, and large-scale labor migration. Ufipa’s cloth industry survived and even flourished during the nineteenth-century caravan trade in spite of gradually increasing access to foreign-made cloth. While Ufipa inhabitants did not, themselves, become large-scale long-distance traders like the Wanyamwezi, they benefited economically from trade participation and remained largely focused on the development of domestic production.

During the first decade of the twentieth century, however, cloth production began to wane as local dynamics changed in response to broader colonial policies geared toward securing wage labor in a labor-scarce colony. The imposition of cash-based taxation within the context of a barter-based regional economy, with limited local opportunities for earning cash, forced many men to migrate, sapping the region of male labor and halting the reproduction of industrial skills. As male labor drained out of the region, the male-dominated cloth industry declined.

This was not a case of sweeping industrial deterioration due to ruinous competition from cheap imports, nor a story of altered local tastes. In barter exchange terms, domestic cloth was not dramatically more expensive than imported cloth. Domestic cloth was also significantly higher in quality and aesthetic appeal relative to the mostly unbleached imports up to the mid-1920s. Consequently, even as imported cloth increasingly entered Ufipa with returning labor migrants from 1908 onward, local production continued among the region’s remaining older men, albeit on a significantly diminished scale. Over time, however, the large-scale withdrawal of young men from the region permanently undermined industrial reproduction. The colonial administration attempted to stimulate cloth production during the lean years of WWII.<sup>153</sup> But this endeavor did nothing to reverse the loss of skill among young men away on coastal plantations or, at this point, in Zambian mines. Twenty years later, in the mid-1960s, the art of spinning and weaving was reportedly all but forgotten.<sup>154</sup>

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<sup>152</sup> Greig, 'Iron smelting in Fipa', p. 80.

<sup>153</sup> Kjekshus, *Ecology control*, p. 109.

<sup>154</sup> Willis, *The Fipa*, p. 26.



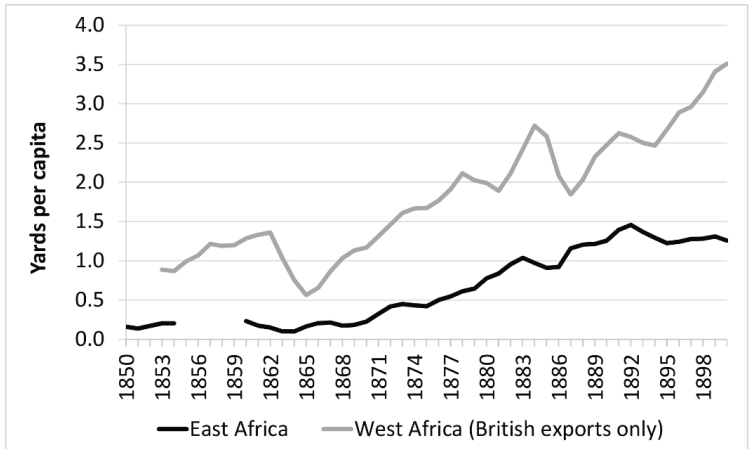
CHAPTER 6

A COMPARATIVE ANALYSIS OF EAST AND WEST AFRICAN COTTON CLOTH PRODUCTION FROM THE EARLY MODERN TO THE POST-COLONIAL ERA

6.1 Introduction

During the nineteenth and early twentieth centuries, cotton textile industries in central and southern East Africa withered as the preceding case studies on Malawi and Tanzania have illustrated. However, at the same time, production in northern East and West Africa experienced stimulus and development. Most deindustrialization theories focus on the destabilizing effects of global forces, especially import competition. But, as Figure 6.1 illustrates, nineteenth-century per-capita cloth imports into more industrially resilient West Africa from Britain alone *surpassed* East African imports from Britain, India, and the United States. What then accounts for differing regional outcomes? This final chapter analyzes secondary literature on the more robust industries of West Africa and northern East Africa to place the preceding case studies on central and southern East Africa in comparative perspective and identify underlying regional factors that would ultimately affect nineteenth- and twentieth-century industrial outcomes as global integration intensified across the continent.<sup>1</sup>

Figure 6.1 Per-capita imports into East and West Africa, 1850-1900



Sources: see Appendix 1: sections (a) and (b). Notes: West Africa’s imports include only the share exported from Britain. Data are reflected in three-year moving averages.

<sup>1</sup> In the context of this study, central and southern East Africa refer to Tanzania and Malawi. Northern East Africa refers to the Horn countries (Ethiopia and Somalia). West Africa refers to the numerous countries spanning the western portion of the continent from Senegal to Nigeria.

Although each case is unique, broad regional conclusions can be teased out. Resilient industries tended to arise and persist (1) where textile traditions were adopted comparatively early, allowing robust industries and demand for domestic cotton cloth to develop several centuries prior to global integration and colonization; (2) in areas with relatively dense populations and access to comparatively large markets; (3) where pre-colonial institutions helped encourage industrial growth (e.g., the development of domestic cloth currencies and pro-industry state policies), (4) where local endowments and geography favored income-enhancing cash-crop cultivation; and (5) where nineteenth- and twentieth-century colonial intervention and fiscal institutions were less disruptive.

As a crucial starting point, I first broadly identify underlying regional characteristics that influenced the relative strength of textile industries *prior* to the nineteenth-century era of intensifying globalization. Subsequent sections highlight the unique development trajectories and productive strategies of more robust northern East and West African hand-loom industries during the nineteenth and twentieth centuries relative to the cases of industrial decline in central and southern East Africa examined in the preceding chapters. To make the comparative analysis feasible and coherent, I focus primarily on the area encompassing modern-day Nigeria, which offers excellent ground for gauging the impact of external forces on domestic cloth production in the West African context. Nigeria, which came under British colonial rule by the turn of the twentieth century, housed a number of textile industries that continued to thrive and even derived benefits from global encounters.

## **6.2 The relative antiquity of cotton textile production**

A first notable difference between the longer-resilient textile industries of West Africa and northern East Africa versus those in central and southern East Africa lies in their comparatively earlier development. A longer history of production afforded more time to develop techniques, create specialized products, and establish consumer demand and loyalty to regional “brands” prior to an uptick in imports from the nineteenth century onward. Indeed, the existence of already entrenched and widespread preferences for a wide array of locally made cloth – often deeply ingrained with cultural value – advantaged many West African and northern East African producers during the nineteenth and twentieth centuries.<sup>2</sup> In many parts of central and southern East Africa, on the other hand, the production and consumption of domestic cotton cloth was still in the process of spreading at the start of the nineteenth century, which would heighten the region’s industrial vulnerability in the era of global integration.<sup>3</sup>

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<sup>2</sup> Renne notes the importance of “social and ideological factors” underlying cloth production in West Africa. Renne, *Cloth*, p. 132.

<sup>3</sup> Clarence-Smith, ‘The expansion’, pp. 93-94.

### *The East-West spread of textile traditions*

The earliest establishment of cotton textile production on the continent probably occurred in relatively densely populated northern East Africa by the fourth century.<sup>4</sup> Production on northern East Africa's Benadir Coast began somewhat later, with the thirteenth-century foundation of the Sultanate of Mogadishu by Muslim immigrants from the Arabian Peninsula. However, a direct knowledge transfer allowed the industry to develop rapidly, soon shipping cloth of renowned quality to Egypt.<sup>5</sup> Cotton cloth production reportedly spread westward with Muslim merchants along trans-Saharan trade routes. Indeed, cloth industries developed in Islamic trade centers as religious conventions of modesty encouraged high per-capita cloth consumption.<sup>6</sup> Weaving and the use of cloth currency was reported in the Senegal River Valley by the eleventh century, with spinning and weaving techniques likely reaching southern Nigeria by the middle of the thirteenth century.<sup>7</sup>

In West Africa, different regions began specializing in particular cloths, and "a complex consumer market" for both cloth and raw material inputs developed well before the era of Atlantic trading, thus providing armour against foreign competition as imports gradually increased from the fifteenth century.<sup>8</sup> Foreign producers could not effectively serve the highly specified demands of West African consumers, which could vary considerably, even from village to village, although imported cloth was regularly unraveled and used to embellish domestic textiles.<sup>9</sup> Seventeenth-century European merchants reportedly required West African cloth to profitably engage with coastal traders. For example, from 1644 to 1646, as many as 96,000 meters of domestic cloth were exported from the Bight of Benin on Dutch ships alone for trade with the Gold Coast, Gabon, Angola, São Tomé, and even the West Indies and Brazil.<sup>10</sup> The early development of cloth industries in West Africa helped stimulate comparatively high cloth consumption. Consequently, by the nineteenth century, West Africa not only *produced* more cloth than East Africa but also *imported* more cloth per-capita (see Figure 6.1).<sup>11</sup>

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<sup>4</sup> Kriger, 'Mapping', p. 91.

<sup>5</sup> Unlike most of sub-Saharan Africa, the Benadir region utilized productivity-enhancing spinning wheels. Alpers, *East Africa and the Indian Ocean*, p. 81.

<sup>6</sup> Levtzion, *Ancient Ghana and Mali*, pp. 119-120.

<sup>7</sup> Kriger, 'Mapping', pp. 96-98.

<sup>8</sup> *Ibid.*, 99.

<sup>9</sup> Flint, 'Economic change', p. 388; Kriger, 'Mapping', pp. 107-08.

<sup>10</sup> Kriger, 'Textile production and gender', p. 372; Kriger, 'Mapping', pp. 102-104.

<sup>11</sup> Thornton has pointed out that the sub-Saharan African regions that tended to import the most cloth were also those regions with the most developed textile industries. Thornton, *Africa and Africans*, pp. 51-52.

### *Delayed development south of the Horn*

We find a much later genesis of cotton textile production in the interior of southern and central East Africa, which may have been linked with the relatively limited spread of Islam and Christianity to these regions, at least up to the mid-nineteenth century.<sup>12</sup> In the case of southern East Africa, nineteenth-century ethnologist Heinrich Schurtz postulated that production techniques eventually spread inland – probably from Arab settlements in coastal Mozambique – via riverways.<sup>13</sup> Travellers reported production and regional exchange of plain-weave unbleached cloth in the Lower Zambezi River area by the sixteenth century, although textile fragments dating to perhaps the fourteenth or fifteenth centuries have been excavated.<sup>14</sup> Schurtz believed that southern East Africa's cotton cloth industries were still in a comparatively nascent developmental stage by the nineteenth century since other forms of clothing continued to abound.<sup>15</sup> In many areas, the products and methods of production remained rudimentary up to the nineteenth century compared with the more complex cloth varieties that had developed elsewhere on the continent, especially in West Africa.<sup>16</sup> Compare, for example, the utilitarian *machila* cloth characteristic of nineteenth-century southern Malawi's Lower Shire Valley (Image 6.1) with the complexity of nineteenth-century *kente* cloth from the Gold Coast (modern-day Ghana) in Image 6.2.



**Image 6.1** Mang'anja loom and cloth, 19th c.

*Source:* National Museum of Scotland



**Image 6.2** Detail of kente cloth, 19th c.

*Source:* Gilfoy, *Patterns of Life*.

<sup>12</sup> For the comparatively late spread of Islam to the region's interior, see Lapidus, *A history of Islamic societies*, pp. 434-435.

<sup>13</sup> Schurtz, 'Die geographische Verbreitung der Negertrachten', p. 152.

<sup>14</sup> Davison and Harries, 'Cotton weaving', pp. 175, 178.

<sup>15</sup> Schurtz, 'Die geographische Verbreitung der Negertrachten', p. 152.

<sup>16</sup> Kriger, 'Mapping', pp. 99-105.

Although intricately patterned cloths were being produced by the nineteenth century in some parts of southern East Africa, the production methods for these finer varieties remained extremely labor intensive, with a single cloth reportedly taking up to nine months to complete, even with the use of imported yarn, while a warp-patterned Gold Coast kente cloth could be produced in one week.<sup>17</sup> The fixed single-heddle loom used throughout southern and central East Africa slowed production.<sup>18</sup> In West Africa, by contrast, a greater variety of looms had developed by the seventeenth century, including multi-heddle and treadle looms, which allow for more efficient weaving of complex patterned cloth.<sup>19</sup>

Compared with southern East Africa, cloth production likely spread even more gradually into the interior of modern-day Tanzania in central East Africa, long secluded from coastal influence due to a lack of riverways. Dating the area's adoption of cotton textile production is difficult since traveller accounts remain scarce prior to the nineteenth century, but development likely began relatively late since cotton cloth continued to face "much competition" from alternative garments (bark cloth, raffia, and skins) up to the turn of the twentieth century.<sup>20</sup> Kjekshus hypothesizes that cotton production was gradually adopted from the coast and "started to blossom" just before the global integration of the region began in the nineteenth century.<sup>21</sup> However, by the mid-nineteenth century, central East African producers were creating "somewhat more elaborate cloths," including the patterned weaves of Ufipa in southwestern Tanzania, which enjoyed strong local demand.<sup>22</sup>

### 6.3 Population density and industrial development

West Africa's earlier exposure to Islam – and thus cotton cloth production – was partly driven by the trade prospects of the comparatively densely populated region. Indeed, Muslim merchants of the trans-Saharan trade network began trading with the region by at least the eighth century.<sup>23</sup> This brings us to a crucial underlying local factor that influenced the relative strength of pre-colonial West African and northern East African textile industries: population density. Thick population clusters and the comparatively fertile environments that supported them provided the necessary ingredients for robust textile industries: labor, raw cotton, and substantial local markets for cloth.

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<sup>17</sup> Davison and Harries, 'Cotton weaving', p. 181; Browne, 'Rural industry', p. 34.

<sup>18</sup> Davison and Harries, 'Cotton weaving', p. 189; Ling Roth, *Studies in primitive looms*, pp. 41-44.

<sup>19</sup> Kriger, 'Textile production and gender'; Browne, 'Rural industry'.

<sup>20</sup> Clarence-Smith, 'The textile industry', p. 269.

<sup>21</sup> Kjekshus, *Ecology control*, p. 106.

<sup>22</sup> Clarence-Smith, 'The expansion', p. 95 (quote); Boileau and Wallace, 'The Nyasa-Tanganyika Plateau', pp. 601, 613.

<sup>23</sup> Hodder, 'Indigenous cloth trade', p. 204.

West Africa has been generally “less lightly populated” than most of historically labor-scarce, land-abundant sub-Saharan Africa. Nigeria, in particular, houses three comparatively dense clusters: the Hausa region in the north, Igboland in the southeast, and the Yoruba area in the southwest.<sup>24</sup> Sophisticated textile industries showing signs of proto-industry emerged here and in much of West Africa, including along the coastal belt and in urbanized inland entrepôts, like Timbuktu. A full-fledged “artisan class” developed in many West African cities, with distinctive spinning, weaving, dyeing, and embroidering professionals. Strong demand allowed many manufacturers to support themselves almost entirely by their trade.<sup>25</sup> In northern Nigeria, for example, large settlements with full-time craft specialists had emerged before the fifteenth century, “fueled by migration and the efflorescence of trade.”<sup>26</sup> As urban centers grew, regional divisions of labor emerged, and by the early eighteenth century parts of northern Nigeria supported as many as 300 people per square mile, with industrial centers like Kano and Katsina importing large amounts of grain from rural “breadbaskets.”<sup>27</sup> Northern Nigeria’s population would become still denser during the nineteenth century when *jihād* movements led to the mass enslavement and resettlement of people within the newly formed Sokoto Caliphate.<sup>28</sup>

#### *Diversity of endowments in East Africa*

Turning to northern East Africa, the highlands of Ethiopia are among the most densely populated sub-Saharan African regions, sustained by steady rainfall, various altitudes that support a wide variety of high-yielding crops, including “excellent quality” cotton, and plateaus conducive to intensive plough-based agriculture.<sup>29</sup> The cool climate of the Ethiopian plateau generated heavy demand for domestically produced cloth among the region’s large population. Consequently, nearly all of Ethiopia’s extensive cloth output was consumed within the country.<sup>30</sup> To the east of Ethiopia, by contrast, coastal Somalia is characterized by a hot climate with irregular rainfall and lower agricultural yields, not conducive to high population densities and expansive local markets. Here, however, demographic and environmental conditions were mitigated via imported slave labor used within cloth-producing households and, eventually, on nineteenth-century cotton and grain plantations established in more fertile inland areas. In the centuries before the expansion of slave plantations, raw cotton was imported from India to feed

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<sup>24</sup> Austin, ‘Labour-intensity and manufacturing’, p. 202 (quote); Flint, ‘Economic change’, p. 386.

<sup>25</sup> Flint, ‘Economic change’, p. 388.

<sup>26</sup> Watts, *Silent violence*, pp. 44-45.

<sup>27</sup> *Ibid.*, 61-62.

<sup>28</sup> Lovejoy, ‘Plantations’, p. 342.

<sup>29</sup> Pankhurst, *Economic history of Ethiopia*, pp. 184-185, 191-192, 204; McCann, *People of the plow*, p. 23; Crummey, ‘Abyssinian feudalism’, p. 120.

<sup>30</sup> Clarence-Smith, ‘The expansion’, pp. 92-93.

the region's growing industry, made possible by easy access to Indian Ocean trade networks.<sup>31</sup> Indeed, the Benadir Coast's textile industry enjoyed a strategic *geographic* position, with coastal access to export markets along the East African seaboard, along with caravan access to large distant interior markets, including southern Ethiopia.<sup>32</sup> The majority of cloth produced in urban Mogadishu, for example, was destined for external consumption.<sup>33</sup>

In the generally sparsely populated areas to the south of the Horn, local endowments were not conducive to proto-industrial divisions of labor,<sup>34</sup> nor did the region's cloth industries, primarily situated in the deep interior, enjoy fortuitous geographic positioning akin to the Benadir Coast. Consequently, although industries developed, they remained comparatively small in scale. Tanzania's approximately 5.5 million inhabitants in the mid-nineteenth century were spread across nearly 365,000 miles, an average of about 15 people per square mile. By the 1960s, population density still measured only about 15.2 per square mile in southwestern Tanzania's Ufipa area.<sup>35</sup> Population densities were higher in Malawi, at roughly 47 people per square mile in 1850, with inhabitants of places like the Lower Shire Valley drawn to fertile land along the banks of the Shire River.<sup>36</sup> However, the *total* population and thus market size of Malawi, an estimated 2.15 million in 1850, remained relatively small compared with regions in northern East and West Africa. In 1850, Nigeria and Ethiopia contained roughly 12.5 million and 11.3 million inhabitants, respectively.<sup>37</sup> Furthermore, the population of the Lower Shire Valley was significantly diminished by slave raiding in the mid-nineteenth century, which dramatically altered local industrial production possibilities, as explored in Chapter 2. Interestingly, this occurred at nearly the same time that a rapid decline in the trans-Atlantic slave trade began *augmenting* population densities in the already industrially rich areas of West Africa, enhancing local production and consumption capacity.<sup>38</sup>

While the Lower Shire Valley's local markets were comparatively small, the region's river-side location did facilitate external access to Lower Zambezi markets.<sup>39</sup> The scale of this exchange was undoubtedly considerably lower than, for example, the Benadir Coast's ocean-going

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<sup>31</sup> Alpers, *East Africa and the Indian Ocean*, pp. 80-85; Sheriff, *Slaves*, pp. 71-72.

<sup>32</sup> Abir, 'Southern Ethiopia', pp. 129-132; Clarence-Smith, 'The expansion', p. 92.

<sup>33</sup> Alpers, *East Africa and the Indian Ocean*, p. 80.

<sup>34</sup> Clarence-Smith points to East Africa's generally sparse populations, low agricultural productivity, and low per-capita incomes as deterrents to proto-industrial development. Clarence-Smith, 'The textile industry', p. 265.

<sup>35</sup> Willis, *State*, p. 236n31.

<sup>36</sup> Density estimate derived from historical populations reported in the Frankema-Jerven African Population Database 1850-1960, version 2.0. See Frankema and Jerven, 'Writing history backwards and sideways'. On settlement near the Shire River, see Mandala, *Work*, p. 20.

<sup>37</sup> Frankema and Jerven, 'Writing history backwards and sideways'.

<sup>38</sup> Flint, 'Economic change', pp. 386, 398.

<sup>39</sup> Alpers, *Ivory*, pp. 25, 55; Mandala, *Work*, p. 48.

exchange, but it was probably greater than regional textile exchange in the river-scarce and more lightly populated Tanzanian interior. This is not to say that regional and long-distance trade networks did not develop in Tanzania, but these were constrained by transportation challenges between dispersed, comparatively low-populated communities.<sup>40</sup> Trade did intensify during the nineteenth century, but principally along global-oriented coast-interior routes rather than via dense, crisscrossing networks, which were characteristic of West Africa and gave early rise to numerous crossroads trading centers in the region.<sup>41</sup> In general, central and southern East Africa's exchange opportunities were simply much lower in *magnitude* compared with the local and external markets available to producers in sub-Saharan Africa's more robust textile-producing regions, especially, as we will see, in West Africa.

#### 6.4 The environmental roots of West African exchange networks

The extensive development of exchange networks throughout West Africa was encouraged not only by early incorporation into the broader trans-Saharan trade system but also by the region's diverse geographic characteristics. Three distinctive ecological zones – desert, savanna and rainforest, ranging from north to south – became closely integrated, forming vast “economic regions [...] sub-divided into areas of localized specialization” based on their highly differentiated productive capacities. Major urbanized economic centers developed in Sahel areas that “straddled the ecological frontier” between arid and fertile land.<sup>42</sup> One such city was Kano, the famed center of northern Nigeria's textile industry, which produced indigo-dyed cotton cloth demanded by desert traders like the Tuareg for protection from the harsh Sahara climate.<sup>43</sup>

A transhumance system diminished the costs of transportation between the desert and savanna zones as desert people regularly travelled south for water and pasture, bringing trade goods along with them.<sup>44</sup> Furthermore, riverways facilitated water transport in much of West Africa, while the region's overland trade, which more commonly utilized pack animals, was more efficient than in East Africa, which depended primarily on human portage.<sup>45</sup> Importantly, the prevalence of Islam in West Africa provided a “blueprint” for commercial exchange relations via a shared “code of conduct which made trust and credit possible.”<sup>46</sup> Strong connections

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<sup>40</sup> For studies on pre-colonial exchange networks in central East Africa, see Gray and Birmingham, eds., *Pre-colonial African trade*.

<sup>41</sup> I am grateful to Ewout Frankema for this insight.

<sup>42</sup> Lovejoy and Baier, 'Desert-side economy', p. 553. See also Hopkins, *An economic history of West Africa*, pp. 58, 63; Watts, *Silent violence*, p. 65.

<sup>43</sup> Spittler, 'Foreign cloth', p. 72; Candotti, 'Hausa textile industry', p. 193.

<sup>44</sup> Lovejoy and Baier, 'Desert-side economy', p. 557.

<sup>45</sup> Hopkins, *An economic history of West Africa*, pp. 63, 72; Pawelczak, *The state*, p. 36.

<sup>46</sup> Hopkins, *An economic history of West Africa*, pp. 64-65.

between ecological zones stimulated the flow of labor and capital, and by the eighteenth century wealthy desert-zone financiers were invested in savanna industry, while poorer immigrants ventured south to labor as textile producers.<sup>47</sup>

Regional exchange relations also developed within and between the savanna, rainforest, and coastal zones. For example, cloth produced in northern Nigeria was shipped eastward toward Borno in the Lake Chad area, while Borno-made cloth was, in turn, sent westward to Hausaland and southward to the rainforest areas of southwestern Nigeria.<sup>48</sup> By 1500, the territories loosely comprising modern-day Nigeria constituted a “dynamic area” linked by trade on regional and local levels.<sup>49</sup> The rainforest and coastal zones of southwestern Nigeria, for example, were intimately connected via ancient networks facilitated by an extensive river system.<sup>50</sup> These well-developed exchange networks within and between zones would become further galvanized with the expansion of slave and commodity trading during the eighteenth and nineteenth centuries, accompanied by increasing exchange of domestic cloth.<sup>51</sup>

Local, regional, and long-distance exchange of cotton goods extended beyond the finished material, indicating a significant division of labor in West Africa uncommon in central and southern East Africa textile industries.<sup>52</sup> Already in the fifteenth-century, European observers had noted widespread marketing of industrial inputs in West Africa.<sup>53</sup> Weavers in the Oyo Empire of southwestern Nigeria, for example, purchased yarn from specialized spinners at local markets.<sup>54</sup> Raw cotton was sold at West African markets and even imported from slave plantations on the Portuguese-controlled Cape Verde Islands.<sup>55</sup> The local and regional marketing of West African raw cotton created secure linkages between domestic manufacturing and cash-crop cotton that would persist well into the twentieth century.<sup>56</sup>

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<sup>47</sup> Lovejoy and Baier, 'Desert-side economy', pp. 568-569, 579; Watts, *Silent violence*, p. 66.

<sup>48</sup> Kriger, 'Textile production and gender', p. 370; Flint, 'Economic change', p. 388.

<sup>49</sup> Falola and Heaton, *A history of Nigeria*, pp. 37-38.

<sup>50</sup> Chuku, *Igbo women*, p. 68.

<sup>51</sup> Dalrymple-Smith, 'A comparative history', pp. 118, 145, 148; Aronson, 'Patronage and Akwete weaving', pp. 62-63.

<sup>52</sup> See chapters 2 and 5.

<sup>53</sup> Kriger, 'Mapping', p. 99.

<sup>54</sup> Law, *The Oyo Empire*, p. 207.

<sup>55</sup> Kriger, 'Mapping', pp. 99, 104.

<sup>56</sup> Roberts, *Two worlds*; Maier, 'Persistence'; Hogendorn, 'Cotton campaign'; Bassett, *Peasant cotton revolution*, pp. 63-85.

## 6.5 Industry-stimulating pre-colonial institutions

### *Cloth currency*

As West Africa's regional and long-distance exchange networks developed, so too did industry-stimulating institutions, including the widespread use of domestic cloth currency, which began circulating in parts of West Africa by the eleventh century.<sup>57</sup> While a large part of long-distance trade was comprised of high-end finished goods, trade was lubricated by the export of lower-end cloth currency strips, which, alongside other commodity currencies, formed divisible general-purpose money. By the early nineteenth century, the strips were ubiquitous, and the century's intensifying exchange activity further boosted industry in regions specializing in cloth currency production.<sup>58</sup>

Take for example, southeastern Nigeria's Tivland, which was traversed by major trade routes linking ecological zones. Alongside finished cloth, Tiv weavers produced and exported long, narrow cloth strips coiled directly off the loom onto a spool. These were then cut to varying lengths based on the monetary unit common in any given locale and combined into whole pieces forming larger denominations.<sup>59</sup> While Tivland's cloth currency remained principally integrated into inter-regional trade, cloth currency produced in the Gambia was integrated into global-oriented trade networks. European merchants at the coast accepted interior-produced cloth currency as a form of collateral in exchange for imported rice, which local merchants transported inland to procure groundnuts to subsequently take coastward and exchange for the European-held cloth currency. This cloth-currency collateral system simultaneously stimulated domestic textile production and encouraged farmers to engage in lucrative export-oriented groundnut production, thus increasing incomes and regional demand for manufactures.<sup>60</sup> In much of West Africa, the use of domestic cloth currency continued to stimulate domestic industry into the colonial era and even circulated in some areas up to the mid-twentieth century.<sup>61</sup>

Turning to East Africa, we find less deeply ingrained domestic cloth currency institutions in most areas. Cloth currency did circulate in northern East Africa, although it was typically comprised of imported cloth, while domestic salt bars formed the principal commodity currency in Ethiopia, for example.<sup>62</sup> However, in the Ethiopian highlands, raw cotton was often used as

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<sup>57</sup> Kriger, 'Mapping', p. 96.

<sup>58</sup> Johnson, 'Cloth as money', pp. 195-198.

<sup>59</sup> Dorward, 'Precolonial Tiv trade', pp. 577-584; Johnson, 'Cloth as money', pp. 195-196.

<sup>60</sup> Johnson, 'Cloth as money', pp. 199-200.

<sup>61</sup> Dorward, 'Precolonial Tiv trade', p. 581; Johnson, 'Cloth as money', p. 200.

<sup>62</sup> Pankhurst, 'Primitive money', pp. 233-236.

small change, indicative of the importance of local textile production in the region.<sup>63</sup> South of the Horn, domestic cloth had formed a currency in the Lower Zambezi region of southern East Africa prior to the introduction of imported cloth. The longevity of the region's domestic cloth currency and the reasons underlying its displacement are unclear and require further investigation, although this may have been linked with eighteenth-century imperial Portuguese efforts to replace domestic cloth with Indian imports.<sup>64</sup> In central East Africa, where cloth production and consumption was comparatively late in spreading, pervasive cloth currency institutions seem to have only gained steam during the nineteenth century, with a rise in long-distance coast-interior trading geared toward global exchange. Consequently, the cloth used as currency was not locally made; rather, as detailed in Chapter 4, this role was filled by machine-made cloth imported into the region via coastal caravans seeking ivory for global markets. Thus, the stimulus to local production provided by currency institutions in West Africa was not similarly enjoyed by central East African cloth producers.

### *Centralized states and pro-industry institutions*

Another important regional difference with consequences for industrial development was the early development of centralized states in comparatively densely populated West Africa compared with a general absence of strong states in more sparsely populated East Africa, with the exception of Ethiopia's Abyssinian Empire. The growth of cloth industries in decentralized parts of West Africa, like Tivland, and the organic development of industry-boosting cloth currency institutions suggest that a powerful state apparatus was not a necessary pre-condition for industrial expansion. However, the external exchange of goods produced by decentralized societies was undoubtedly aided by the development of centralized states elsewhere in West Africa since state policies tended to encourage regional and long-distance commerce, which could provide substantial tax revenues. Some large states, like Ashanti and Dahomey, even established state trading enterprises and provided backing for long-distance ventures.<sup>65</sup>

The imposition of trade- and industry-oriented policies could significantly boost production both within and beyond centralized states. This was exemplified in the nineteenth century by northern Nigeria's Sokoto Caliphate, which was created via the martial consolidation of Hausa kingdoms and formed an integrated territory ranging 150,000 square miles.<sup>66</sup> The already substantial and long-established trade carried on between ecological zones intensified with the

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<sup>63</sup> Powell-Cotton noted the use of handfuls of cotton as small change in parts of highland Ethiopia. Powell-Cotton, *Sporting*, p. 244.

<sup>64</sup> For domestic cloth currency in southern East Africa, see Davison and Harries, 'Cotton weaving', pp. 187, 189. On imported cloth as currency in the region, see Machado, 'Gujarati Indian merchant networks', pp. 90-95, 102, 109-110, 150, 170, 243.

<sup>65</sup> Hopkins, *An economic history of West Africa*, p. 62.

<sup>66</sup> Watts, *Silent violence*, pp. 48-49.

founding of the caliphate, and the annual import-export trade of the city of Kano alone was estimated at £100,000 in the mid-nineteenth century.<sup>67</sup> The expansion of the caliphate's economy "acted as a focal point for economic development within West Africa as a whole."<sup>68</sup>

The state actively pursued commercial advancement through pro-industry policies.<sup>69</sup> For example, weavers, tailors, dyers, and indigo cultivators were often exempted from taxation.<sup>70</sup> Furthermore, the caliphate used the extensive military capacity and wide "spatial reach" enjoyed by strong states to secure industry-augmenting slave labor.<sup>71</sup> Expansion of slave-based plantations substantially increased agricultural output, including raw cotton, indigo, and food to feed artisans.<sup>72</sup> Imported slaves consisted not only of agricultural laborers but also industrial workers from nearby textile-producing regions, like Nupe in west-central Nigeria, who disseminated a wider array of production techniques to the north.<sup>73</sup>

Scholars have noted that the expansion of slave-labor institutions may have dampened the full economic potential of centralized states by simultaneously reducing market demand abroad in besieged regions and depressing the purchasing power of large portions of the local populace.<sup>74</sup> Overall, however, state-sponsored economic prosperity and industrial expansion seem to have increased consumption opportunities for broad segments of society in the Sokoto Caliphate.<sup>75</sup> Shea has illustrated how rising demand both within and beyond the caliphate prompted the development of economies of scale in Kano's dyeing processes. He also argues that industrial rationalization efforts under the caliphate resulted in higher labor efficiency, training improvements, and reductions in capital expenditures and transportation costs.<sup>76</sup>

A final crucial advantage of large states was the ability to provide protection, which was particularly crucial amid the ever-present risk of slave raiding.<sup>77</sup> Indeed, while the Sokoto Caliphate was *expanding* its industrial labor force during the nineteenth century, vulnerable

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<sup>67</sup> Hopkins, *An economic history of West Africa*, p. 51.

<sup>68</sup> Lovejoy, 'Plantations', p. 346.

<sup>69</sup> Candotti, 'Hausa textile industry', pp. 198-199.

<sup>70</sup> Morel, *Nigeria: its peoples and its problems*, p. 120.

<sup>71</sup> Austin, 'Markets', p. 27.

<sup>72</sup> Candotti, 'Hausa textile industry', pp. 196-197; Lovejoy, 'Plantations'.

<sup>73</sup> Kriger, 'Textile production and gender', p. 374.

<sup>74</sup> Austin, 'Markets', p. 29; Hopkins, *An economic history of West Africa*, p. 25; Mahadi and Inikori, 'Population and capitalist development', pp. 71-72.

<sup>75</sup> According to Candotti, the expansion of Kano's textile industry was supported "by a large domestic market of ordinary consumers." Kriger notes that Kano products ranged from highly elaborate and expensive robes for elites to low-cost "poor man's" shirts. Candotti, 'Hausa textile industry', p. 198; Kriger, 'Robes of the Sokoto Caliphate', p. 55.

<sup>76</sup> Shea, 'Big is sometimes best'; Shea, 'Economies of scale', p. 56.

<sup>77</sup> Austin, 'Markets', p. 19.

decentralized Mang'anja communities in southern East Africa were aggressively *drained* of labor by raiders seeking slaves for Indian Ocean plantations. As Chapter 2 details, labor-intensive textile production consequently faded from the Lower Shire Valley's economy, particularly since, unlike the Sokoto Caliphate, Mang'anja villages had little capacity to subsequently shore up local labor supplies by securing captives.

Ufipa, on the other hand, was among the most sophisticated states in pre-colonial Tanzania, established between the sixteenth and early eighteenth centuries and spanning some 25,390 square miles.<sup>78</sup> As explored in Chapter 5, during the first half of the nineteenth century the centralized state encouraged trade but – unlike the Sokoto Caliphate – did not actively invest in industry. This likely had much to do with the different evolution of trade orientation in West versus East Africa. By the nineteenth century, West African merchants and states could gain considerably by investing in well-developed regional and long-distance commodity production and exchange networks. But in central East Africa the greatest profits were to be gained from the newly established coast-interior trade system oriented toward global markets. Thus, where Sokoto Caliphate policies aimed to increase industrial output, the pro-trade policies of Ufipa's administration were mainly geared toward attracting passing ivory traders with only limited interest in the region's textile products. Increasing caravan traffic through Ufipa *did* indirectly stimulate domestic industry by enhancing regional wealth.<sup>79</sup> As wealthier groups emerged, demand for more elaborate varieties of domestic cloth developed.<sup>80</sup> However, the magnitude of these industrial benefits was comparatively limited next to the considerable growth experienced in the Sokoto Caliphate.

## 6.6 The impact of global trade

### *Cash-crop exporting and industrial expansion*

Another significant difference between many nineteenth- and early-twentieth-century West African economies and their central and southern East African counterparts was the capacity to simultaneously engage in cash-crop exporting while sustaining domestic industries, which was conditioned by local geography and ecology, labor availability and institutions, and the extent of regional demand for domestic cloth. Indeed, Iliffe points out that domestic industry remained most competitive “where cash-crop wealth expanded markets” for high-quality cloth.<sup>81</sup> In the case of southeastern Nigeria's Igboland, for example, a globally oriented nineteenth-century

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<sup>78</sup> Iliffe, *A modern history of Tanganyika*, p. 21; Willis, *State*, pp. 3, 14.

<sup>79</sup> Willis, *State*, p. 174.

<sup>80</sup> *Ibid.*, 156.

<sup>81</sup> Iliffe, *Africans*, p. 221. See also Austin, 'Labour-intensity and manufacturing', pp. 209-210.

palm oil boom invigorated domestic textile production by augmenting regional incomes and demand for both imported and domestic cloth.<sup>82</sup>

Southern Igboland's experience undermines assumptions that African textile industries could only thrive under geographic protection from imports.<sup>83</sup> Rather, coastal access via riverways enabled the region's industry-stimulating boom in cash-crop exporting.<sup>84</sup> Igboland's ecology facilitated the transition to palm-oil exporting since palms grew wild, initially demanding only to be collected and processed.<sup>85</sup> Although the latter task was labor-intensive, demographic conditions allowed households to effectively cope with additional labor demands. In fact, Igboland emerged from the slave-trade era with the highest population density in the whole of West Africa in spite of supplying a large number of captives to Atlantic markets. This was due in part to extensive migration into Igboland, high regional reproductive rates, and social and legal institutions that discouraged large-scale violence and helped spare the region from the sort of highly disruptive slave raiding experienced in places like Malawi's Lower Shire Valley.<sup>86</sup> Furthermore, with the ending of the trans-Atlantic slave trade, slaves were increasingly applied to commercial food production in the northern hinterland and to household palm-oil processing, which freed up female household labor.<sup>87</sup> This would prove crucial in the expansion of the Igbo textile industry since here, as opposed to East Africa and other parts of West Africa, women were the dominant weavers.<sup>88</sup> As demand for domestic cloth grew alongside incomes, the textile industry expanded. Many Igbo women, particularly in the Akwete area, became almost full-time weavers and developed more intricately patterned "Akwete" cloth on wider looms to compete with imports on the basis of quality.<sup>89</sup>

This outcome was not possible where cash-crop production was ill-favored by geographic and/or demographic conditions. In Ufipa, located deep within the river-scarce central East African interior, isolation from coastal trade depots ultimately contributed to deindustrialization in the early twentieth century. High transportation costs for cash-crop exports prohibited sufficient generation of cash incomes for colonial tax payments at home, leading to mass labor migration to European-owned coastal plantations, which drained industrial labor from the

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<sup>82</sup> Kriger, *Cloth in West African history*, pp. 45-47.

<sup>83</sup> See, for example, Austen, *African economic history*, p. 99.

<sup>84</sup> Lynn, *Commerce*, p. 37.

<sup>85</sup> Chuku, *Igbo women*, pp. 49-50.

<sup>86</sup> Nwokeji, 'Atlantic Slave Trade', p. 618; Dalrymple-Smith, 'A comparative history', p. 161.

<sup>87</sup> Flint, 'Economic change', p. 386; Austin, 'Cash crops and freedom', p. 18; Dalrymple-Smith, 'A comparative history', pp. 163-165; Kriger, *Cloth in West African history*, p. 51.

<sup>88</sup> Chuku, *Igbo women*, p. 66.

<sup>89</sup> Ibid., 69-70; Kriger, *Cloth in West African history*, pp. 49-51; Austin, 'Labour-intensity and manufacturing', p. 210. For many Akwete women, weaving remained a full-time profession up to at least the late twentieth century. Aronson, 'Patronage and Akwete weaving', p. 65.

region. In southern East Africa's Lower Shire Valley, on the other hand, access to riverways did make profitable cash-crop exporting possible during the mid-nineteenth century. However, a *combination* of cash-crop production and labor-intensive industry proved impossible in the labor-depleted region within the context of altered factor endowments following the extensive slave raids of the 1860s and 1870s.<sup>90</sup>

### *The effects of imported manufactures*

The southern Igboland case also helps shed light on the impact of machine-made imports on local industries in sub-Saharan Africa. In many places, as cloth imports increased during the second half of the nineteenth century, so too did domestic production, indicating an expansion in the scale and range of cloth goods consumed.<sup>91</sup> Rather than signaling deindustrialization, foreign competition often *stimulated* local innovation.<sup>92</sup> For example, alongside distinctive Akwete cloth, Igbo weavers reproduced popular imported patterns, flipping on its head the European strategy of mimicking African cloth noted by Rodney.<sup>93</sup> On northern East Africa's Benadir Coast, competition from imports similarly stimulated industrial adaptation and development. By the mid-1890s, the position of the region's traditionally unbleached cloth was eroding in its export markets as competition with unbleached American imports intensified. This inspired a "strategic carving out of a new market," as perceptive weavers began turning out unique colored and striped cloth.<sup>94</sup>

In both the Benadir region and Igboland, development of new products was aided by the incorporation of imported yarn.<sup>95</sup> Use of machine-made yarn became common in much of West Africa, and imports into the region increased rapidly during the late nineteenth century (see Figure 6.2).<sup>96</sup> Some weavers continued to rely exclusively on hand-spun yarn, particularly in interior regions where imports were more difficult to come by and consequently more expensive.<sup>97</sup> But by the twentieth century, Akwete cloths were made entirely of yarn imported from Europe, which substantially increased industrial productivity while offering a broader range of colors.<sup>98</sup>

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<sup>90</sup> See chapters 2 and 5.

<sup>91</sup> Fage, *A history of Africa*, pp. 272-273; Hopkins, *An economic history of West Africa*, p. 121.

<sup>92</sup> Hodder, 'Indigenous cloth trade', p. 205.

<sup>93</sup> Aronson, 'Patronage and Akwete weaving', p. 66. For imitation of domestic African cloth by foreign producers, see Rodney, *How Europe underdeveloped Africa*, p. 104.

<sup>94</sup> Alpers, *East Africa and the Indian Ocean*, pp. 86-88.

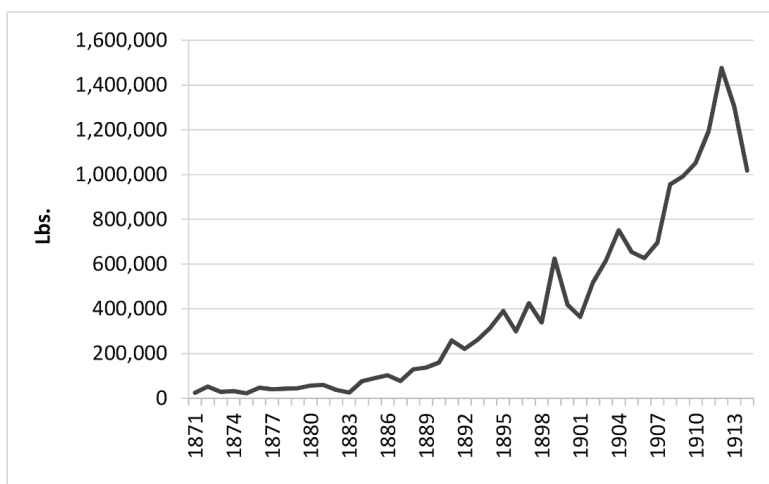
<sup>95</sup> Afigbo and Okeke, *Weaving tradition*, p. 33; Aronson, 'Patronage and Akwete weaving', p. 65; Alpers, *East Africa and the Indian Ocean*, pp. 88, 90.

<sup>96</sup> Austin, 'Labour-intensity and manufacturing', p. 210; Johnson, 'Technology', p. 260.

<sup>97</sup> Renne, *Cloth*, pp. 148-149.

<sup>98</sup> Kriger, *Cloth in West African history*, p. 49.

**Figure 6.2 Aggregate yarn imports into West Africa from Britain, 1871-1914**



Sources: UK annual trade reports, 1871-1917, BL.

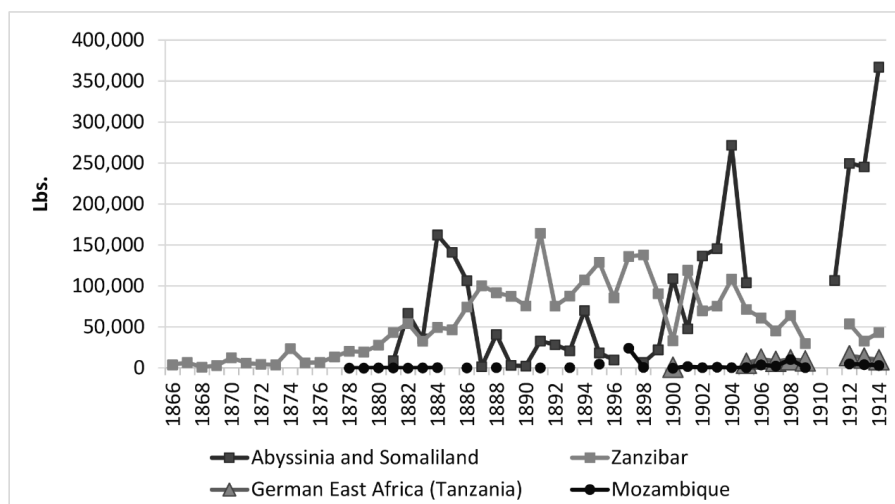
Likewise, northern East African producers imported yarn directly from Bombay – and occasionally from Britain – and purchased most of the yarn that was imported into Zanzibar (see Figure 6.3), with more still re-exported from Aden.<sup>99</sup> Imported yarn eased the Benadir region’s debt late-nineteenth-century transition to colored cloth production and boosted Ethiopia’s textile industry. By the late nineteenth century, cloth imports entered land-locked Ethiopia in increasing quantities, ramping up after the opening of the Ethio-Djibouti Railway in 1901.<sup>100</sup> However, Ethiopian producers remained “supremely resilient, dynamic and adaptable to change,” and domestic *shamma* togas – preferred for their finer weave and greater durability – were increasingly produced using a combination of domestic and imported yarns, which helped local producers remain competitive in terms of both aesthetic and price.<sup>101</sup>

<sup>99</sup> Clarence-Smith suggests, for example, that much of the 2.5 million pounds of yarn imported into Aden from India in 1894 was re-exported to the Benadir Coast. Clarence-Smith, 'The cotton textile industry of sub-Saharan Eastern Africa in the *longue durée*', p. 8. For Zanzibar’s yarn imports and re-exports to northern East Africa, see Portal, 'Report for the year 1891', pp. 18, 32.

<sup>100</sup> For expansion of Ethiopian imports by the turn of the century, see chapter 9 in Pankhurst, *Economic history of Ethiopia*.

<sup>101</sup> Spring and Hudson, *North African textiles*, p. 119; Pankhurst, *Economic history of Ethiopia*, pp. 260-261; 'Report for the year 1905-06 on the trade of Abyssinia', p. 5.

**Figure 6.3 Yarn imports into East Africa, 1866-1914**



Source: Bombay and UK annual trade reports, 1866-1917, BL.

South of the Horn, on the other hand, yarn imports were nearly non-existent. In the case of Tanzania (German East Africa as of 1885), largescale importation of yarn was simply not feasible for textile centers situated in the deep interior, most of which could only be reached via human porters. Based on figures of yarn imported via Mozambique's ports, the use of imported yarn likewise remained comparatively minimal in southern East Africa. In any case, higher imports into the region would have had little impact on the Mang'anja weaving industry in the Lower Shire Valley, which was already thrown into disarray by the 1860s. While yarn imports might have theoretically sped up part of the production process, the labor-intensive nature of weaving on the single-heddle ground loom made the industry impracticable in the post-slave-raid era, which saw significant labor depletion in the region.<sup>102</sup> Thus, geographic and demographic conditions prohibited producers in places like Tanzania's Ufipa and Malawi's Lower Shire Valley from reaping industry-stimulating benefits associated with nineteenth- and twentieth-century global trade intensification.

## 6.7 Colonial agendas and local agency

### *Regional determinants of colonial institutions*

A final crucial regional difference is found in the relative impact of colonization on domestic industries in East versus West Africa, which depended on the particular colonial institutions that were imposed and on the strength of pre-colonial industries and domestic demand. Indeed,

<sup>102</sup> Davison and Harries, 'Cotton weaving', p. 189.

it was early-twentieth-century colonial hut tax policies in Ufipa that ultimately prompted the region's men to seek wage labor opportunities far afield, initiating deindustrialization.

Hut taxes like those imposed in German East Africa were common in most of East Africa's settler-oriented colonies, simultaneously providing a source of revenue for the colonial state and labor for European plantations in the sparsely populated region. Northern East Africa, by contrast, remained relatively free from colonial intervention. And in the already commercially developed West African colonies, trade duties provided the bulk of colonial revenue, while the absence of European plantations diminished interest in coercively generating a wage labor force. Direct taxes consequently remained comparatively limited and peasant cash-crop production more widespread in West Africa.<sup>103</sup> Although the West African experience was not entirely uniform. In the land-locked French West African colony of Burkina Faso, for example, which had few cash-crop opportunities, we do find a case of coercion-driven labor migration and deindustrialization that resembles the experience of Ufipa.<sup>104</sup>

However, by and large, West Africa experienced comparatively less intensive state intervention, which Roberts suggests rested partly in the "more developed precolonial webs of production and exchange" in West versus East Africa.<sup>105</sup> Indeed, when colonial administrations – be they French, German, or British – attempted to actively dislodge West African cotton cloth industries in an effort to secure African cotton for European looms, they typically proved unsuccessful.<sup>106</sup> This was largely a result of "an enduring local market [for raw cotton] and a centuries-old consumer preference for local cloth styles."<sup>107</sup>

### *The failure of "cotton imperialism" in British Nigeria*

During the early twentieth century, the British Cotton Growing Association (BCGA) made concerted efforts to transform northern and southern Nigeria into major markets for British-made cloth and the principal raw cotton suppliers for the Lancashire textile industry.<sup>108</sup> This did not go as planned. For one, British exports were simply not competitive with local textiles. It was reported that "no native [...] will take the English material if he can possibly get the latter."<sup>109</sup> Moreover, the vast majority of Nigeria's raw cotton was consumed by domestic textile producers, who offered farmers remuneration far above the artificially low BCGA

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<sup>103</sup> Frankema and van Waijenburg, 'Structural impediments', pp. 914-921.

<sup>104</sup> Skinner, 'Labour migration and its relationship', pp. 385-387. Austin links labor coercion in French colonies to their often "relatively unfavourable environment." Austin, 'Cash crops and freedom', p. 19.

<sup>105</sup> Roberts, *Two worlds*, p. 286.

<sup>106</sup> Ibid., 366-371; Bassett, *Peasant cotton revolution*, pp. 63-85; Maier, 'Persistence'; Hogendorn, 'Cotton campaign'; Beckert, *Empire*, pp. 364-374.

<sup>107</sup> Maier, 'Persistence', p. 73.

<sup>108</sup> Johnson, 'Cotton imperialism', p. 182.

<sup>109</sup> Northern Nigeria Report, 1906-07 cited in *ibid.*, 184.

buying price.<sup>110</sup> Furthermore, Nigerian textile producers continued to demand local cotton strains, which farmers could efficiently intercrop with foods, while the BCGA unsuccessfully pushed monocrop variants.<sup>111</sup>

At the same time, other cash crops, like cocoa, palm oil, kola, benniseed (sesame), and groundnuts, offered more attractive global export prices.<sup>112</sup> For example, while the Kano-Lagos railway was built to facilitate the export of northern Nigerian cotton, it was groundnuts that were sent coastward upon completion in 1912, much to the disappointment of the BCGA.<sup>113</sup> And as had occurred with the nineteenth-century palm oil boom in Igboland, when farmers' incomes rose through groundnut exporting, so too did consumption of locally woven cloth "in preference to the cheaper but less durable Lancashire cloth," which consequently further drove local cotton prices well above the set BCGA price.<sup>114</sup> Thus, the Nigerian groundnut boom, aided by the BCGA-lobbied railway construction, ultimately destroyed BCGA hopes of both a source of raw cotton and a large export market for British cloth.

After decades of propaganda, railroad construction, experimentation with new cotton strains, and the introduction of ginneries, the chief barrier to raw cotton exporting would continue to be the inability to "divert the supply of cotton from the Nigerian hand-loom to the power-loom of Lancashire."<sup>115</sup> Things played out very differently in British colonies without domestic cotton textile industries. In Uganda, which ultimately became the largest raw cotton exporter in British Africa, no cotton textile industry had ever existed. In the Lower Shire Valley, which was situated in British-held Malawi and would become the second largest raw cotton exporter in British Africa, the local cloth industry – and thus the local market for raw cotton – had virtually vanished prior to the colonial period.

## **6.8 Persistence and decline in the colonial and post-colonial eras**

Colonization altered many aspects of social and economic life in Nigeria, but in the midst of these changes, resilient local producers adapted and derived strength from long-established demand patterns, especially in southern Nigeria. For example, in 1913, British officials targeted cloth currency institutions in Tivland, collecting large quantities of cloth strips as tax payments, which were then exported out of the region. The Tiv economy's cloth currency conventions

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<sup>110</sup> Hogendorn, 'Cotton campaign', pp. 60, 62, 66.

<sup>111</sup> Vincent, 'Cotton growing in Southern Nigeria', pp. 68-70, 229-230.

<sup>112</sup> Ibid., iv; Hogendorn, *Nigerian groundnut exports*; Dorward, 'An unknown Nigerian export'; Morel, *Nigeria: its peoples and its problems*, pp. 227-228.

<sup>113</sup> Hogendorn, 'Cotton campaign', pp. 63-65.

<sup>114</sup> L.H. Lamb, Director of Northern Nigeria's Department of Agriculture, July 1913 cited in Hogendorn, *Nigerian groundnut exports*, p. 110.

<sup>115</sup> McPhee, *Economic revolution*, p. 44 cited in Johnson, "Cotton imperialism," 184.

were undermined by this rapid withdrawal, which was followed by colonial demands that taxes be paid in official coin currency. However, the sudden removal of much Tiv cloth had created a bullish market for domestic textiles, which consequently increased local demand for raw cotton and thwarted BCGA hopes of securing the region's cotton.<sup>116</sup>

Regional patterns of production and exchange continued to persist and evolve during and beyond the colonial period. As of the 1950s, the Tiv were annually weaving not only at least half of their own clothing, but also producing “a great deal more for export.”<sup>117</sup> Motor transport allowed Bùnù weavers in southwestern Nigeria to send increasing amounts of cloth to Igboland by the 1930s, which continued up to the start of the Nigerian Civil War in 1967 when trade with the secessionist southeast rapidly halted.<sup>118</sup> In Igboland, the war reportedly spurred a production boom that generated a “rapid diffusion” of Akwete weaving techniques throughout the southeast.<sup>119</sup>

In northern Nigeria, on the other hand, hand-loom weaving would show greater decline from around the 1920s.<sup>120</sup> Watts suggests that a rise in the price of raw materials dampened industry as exports of cotton increased somewhat – though never dramatically – alongside increased importation of cheap European cloth.<sup>121</sup> However, raw cotton exports from southern Nigeria, though minimal, were generally double those from the north.<sup>122</sup> Rather, a decline in northern textile output was likely tied to region-specific adjustment challenges. The heavily slave-dependent northern Nigerian economy faced waning slave-labor institutions during the colonial period and a population that could increasingly choose to abandon textile-related labor in favor of other employment opportunities.<sup>123</sup> Furthermore, the decline of the trans-Saharan caravan trade by the start of the 1920s must have diminished long-established external markets for northern Nigeria's cloth.<sup>124</sup> And while the local market was large, it was also heavily comprised

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<sup>116</sup> Dorward, 'An unknown Nigerian export', pp. 438-439, 443; Dorward, 'Precolonial Tiv trade', pp. 589-590.

<sup>117</sup> Bohannan and Bohannan, *The Tiv of Central Nigeria*, p. 53.

<sup>118</sup> Renne, *Cloth*, pp. 136, 139-142.

<sup>119</sup> Chuku, 'Women in the economy', p. 44.

<sup>120</sup> In Katsina Province, for example, 1,282 weavers were active in Yandaka District alone in 1909. By 1931, only 244 weavers were found across six districts surveyed in Katsina, although this decline may not be representative of the whole of the former Sokoto Caliphate. As of the early 1970s, women in some Katsina area villages were still spinning cotton into thread to sell to weavers outside of their non-weaving villages. Watts, *Silent violence*, p. 63; Hill, *Rural Hausa*, pp. 321, 333.

<sup>121</sup> Watts, *Silent violence*, p. 220.

<sup>122</sup> Johnson, 'Cotton imperialism', p. 184.

<sup>123</sup> Some former slaves continued to work in textile production, but alternative options included groundnut cultivation (in lieu of cotton cultivation), portage, mining, and leatherworking. On cash-earning opportunities for former slaves and slaves seeking to purchase their freedom, see Lovejoy and Hogendorn, *Slow death*, pp. 200, 219-221.

<sup>124</sup> Johnson, 'Calico caravans', p. 116.

of impoverished former slaves who were beginning to earn wages but still remained “on the low end of the income distribution” and thus did not provide sufficient demand for the more expensive, higher-quality textiles that remained the life-blood of many southern Nigerian producers serving wealthier consumers.<sup>125</sup> However, Kano’s ancient weaving and dyeing industry did not simply evaporate, and its trade relations with desert people remained intact, if diminished. Even today, Tuareg people continue to wear the region’s characteristic indigo veils.<sup>126</sup>

Generally speaking, textile production continued in much of Nigeria well into the post-colonial era. Imports from Japan and India would ultimately claim a large relative share of the expanding Nigerian textile market, but locally made cloth retained a strong foothold. When the Federation of British Industry surveyed the Nigerian cloth industry in the mid-1960s, it was estimated that 50,000,000 square yards of cloth were annually woven on Nigerian hand-loom, comprising 13 percent of all cloth consumed in Nigeria.<sup>127</sup> As a comparative reference point, the output of Nigerian handlooms thus exceeded all machine-made cloth annually imported into Tanzania at mid-century by roughly 9.5 million yards.<sup>128</sup> Weaving would eventually decline in places like Bùnù, which remained tied to hand-spun yarn, but production continues to thrive and supplement household incomes in places like Tivland and Igboland to the present day, bolstered by persistent demand for domestic cloth with deeply ingrained cultural value.<sup>129</sup> Likewise, on the Benadir Coast, upwards of 1,000 households were reportedly weaving in the 1950s to feed the “constant demand” for Benadir cloth in neighboring countries. The industry would only substantially fade from the coastline with the violent social and economic upheaval brought by the onset of civil war in the late 1980s.<sup>130</sup> In highland Ethiopia, hand-loom weaving persisted through the twentieth century and was reportedly spreading as of the early twenty-first century, with farmers increasingly taking up weaving to generate additional income.<sup>131</sup>

## 6.9 Conclusion

While dynamic textile industries continued to survive and even thrive in West Africa and northern East Africa beyond the colonial period, industries in southern and central East Africa collapsed during the late nineteenth and early twentieth centuries. As this regional comparative

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<sup>125</sup> On incomes, see Lovejoy and Hogendorn, *Slow death*, pp. 223, 228-229.

<sup>126</sup> Spittler, 'Foreign cloth', p. 72.

<sup>127</sup> Johnson, 'Cotton imperialism', p. 186.

<sup>128</sup> Tanganyika Blue Book, 1948, TNA.

<sup>129</sup> Renne, *Cloth*, pp. 143-146; Aronson, 'Patronage and Akwete weaving'; Joseph, 'Nigeria: Tiv weaving cottage industry boosts Benue's economy'; Diogu, 'Functions of cloth'.

<sup>130</sup> Alpers points out, however, that by the 1960s weavers had fallen prey to exploitative merchants who relegated weavers to meagre earnings for their products. Alpers, *East Africa and the Indian Ocean*, pp. 93-95.

<sup>131</sup> Watson and Regassa, 'Konso', pp. 244-245.

analysis has illustrated, these very different industrial outcomes were conditioned by underlying regional variables that affected the robustness of industry prior to the nineteenth century and influenced industrial resiliency in confrontation with global forces from the nineteenth century onward. Cotton cloth traditions developed comparatively early in northern East and West Africa, affording local producers ample time to develop and secure strong local, regional, and long-distance market niches prior to the rise in global trade integration and colonization. Relatively dense populations and extensive long-distance trade networks provided large markets for textiles, encouraging professional specialization. Furthermore, centralized states proliferated in comparatively densely populated West Africa and encouraged trade and industry, as did the development of domestic cloth currency institutions. In the more sparsely peopled regions of southern and central East Africa, large industry-stimulating centralized states generally did not emerge, local markets were smaller, regional exchange more limited, and industrial production less specialized.

The better-developed industries of northern East and West Africa would prove more durable during the increasingly globally oriented nineteenth and twentieth centuries. In West Africa, local geography, ecology, and demographics allowed textile producers to benefit from enhanced demand as incomes increased with cash-crop exporting. And in both northern East and West Africa local manufacturers responded to – and even benefitted from – imported manufactures through innovative adaptation. In central and southern East Africa, on the other hand, geographic and demographic conditions had inhibited these industry-stimulating benefits of global trade. A final difference is found in the impact of colonization and metropolitan agendas on textile industries, which depended not only on the relative strength of pre-colonial industries but also on the particular colonial institutions that were imposed in different regions. Where more densely populated and commercially developed West African peasant colonies were subject to indirect rule, thinly populated East African settler colonies often faced coercive labor institutions that undermined pre-colonial production systems. While global trade and colonization certainly affected sub-Saharan African textile industries, the nature and consequences of these forces were strongly mediated by local conditions.

## CHAPTER 7

### CONCLUSION

This thesis has offered the first in-depth comparative study of the decline of handicraft textile production in late pre-colonial and colonial sub-Saharan Africa, focusing on cases of industrial decline in southern and central East Africa (specifically, Malawi and Tanzania) with a comparative eye toward more resilient industries in northern East and West Africa (especially Somalia, Ethiopia, and Nigeria). The comparative geographic and temporal approach taken in this dissertation reveals how and why deindustrialization unfolded in different parts of sub-Saharan Africa at different times, thus bringing to light crucial causal mechanisms that varied across space and time.

The central aim of this thesis has been to uncover when and why East Africa's handicraft cloth industries declined. Most deindustrialization theories focus principally on external factors, especially global market forces and external competition, as the ultimate causes of industrial decline in the global "periphery." With respect to sub-Saharan Africa, much emphasis has been placed on the purportedly deindustrializing impact of machine-made cloth imports from the eighteenth century onward. However, as I have argued throughout this thesis, competition from cloth imports does not satisfactorily explain the decline of East African cloth industries during the nineteenth and early twentieth centuries. Fresh quantitative data has revealed comparatively *higher* per-capita import levels in northern East and West Africa, where handicraft textile industries continued to thrive long after production in central and southern East Africa withered.

Through comparative analysis, this thesis offers an alternative perspective, arguing that *local structural pre-conditions* took the lead in guiding industrial outcomes. The demographic, environmental, geographic, and institutional makeup of a given locale moderated the local industrial consequences of *time-dependent external forces* – which could precipitate structural change and deindustrialization (as in southern and central Africa) or not (as in northern East and West Africa) – as the continent was increasingly integrated into the global trading world and the European colonial system during the nineteenth and twentieth centuries. Local conditions, however, could change over time, as a result of both internal and external developments, thus affecting a given locale's relative vulnerability to the potentially deindustrializing impact of external forces.

#### 7.1 Overview of the studies

Chapter 2 examined the deindustrialization of southern Malawi's Lower Shire Valley during the second half of the nineteenth century. Cloth was produced in the valley from at least the

sixteenth century, but by the 1860s, production and regional export of cloth rapidly declined and failed to regain footing. Here, cloth imports did not cause industrial decline – for import levels would only rise significantly *after* industry had virtually disappeared – nor did strong global terms of trade for tropical products motivate producers to reallocate labor from domestic industry to export-oriented raw materials production. Industrial labor *was* reallocated from industry to cash-crop production of sesame oilseeds. Crucially, however, this reallocation occurred when terms of trade for sesame oilseeds had declined and stagnated, suggesting that enhanced global market opportunities did not prompt this transition. Rather, the valley’s deindustrialization and subsequent shift to cash-crop production were stimulated by local factor endowment changes precipitated by both global and local forces. First, local labor supplies declined sharply in the 1860s due to slave raiding – stimulated by global demand for plantation-produced products – and famine. Soon after, local supplies of fertile land increased substantially due to spontaneous local environmental change, which Mandala has highlighted as a major driver of local production choices in the region.<sup>1</sup> The altered ratio of local factor endowments (land relative to labor) significantly affected labor allocation in the region, as villagers permanently abandoned labor-intensive cloth production in favor of far less labor-dependent cash-crop cultivation. Conversely, in more labor-abundant African regions, like West Africa, cloth production continued to thrive *alongside* cash-crop exports.

Chapters 3 and 4 detailed East Africa’s largely Zanzibar-centered nineteenth-century global trade and traced the first major growth in imports of machine-made cloth into the region. These chapters explore how East African demand for imported cloth developed over the course of the nineteenth century and illustrate the comparatively limited extent to which foreign imports reached the deep interior of mainland Tanzania through the century. I argued in Chapter 3 that the scale and composition of nineteenth-century cloth imports were strongly influenced by activity on Zanzibar and the East African coast, although the nature of that activity changed over time. Between the 1830s and 1860s, a rise in imports of cloth into Zanzibar, East Africa’s principal redistribution center, was driven in large part by the hyper-competitive practices of opposing foreign trading groups operating on the island. Thereafter, import levels were increasingly conditioned by production and demand patterns on Zanzibar and the coast and coastal hinterland. From the 1870s, the export value of goods produced by coastal and near-coast groups shot up and their consumption of imports grew apace as imports of British- and especially Indian-made cloth rapidly increased.

In Chapter 4, I illustrated that the value of Zanzibar’s global exports of ivory – principally derived from the deep interior of Tanzania and beyond – also increased substantially in the second half of the nineteenth century as ivory export quantities grew while ivory prices rose precipitously at Zanzibar. Terms of trade for East African ivory consequently improved relative

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<sup>1</sup> Mandala, *Work*, pp. 8-11, 94-95, 270-272.

to imported cloth. Crucially, however, the benefits of terms-of-trade improvements were not commensurately shared with the deep interior regions from which most ivory came. Cloth imports increased dramatically in price as they moved farther into the interior. This was a result of high transportation and transaction costs and relatively limited stocks of imported cloth in most of the deep interior, where imported cloth was consequently used as a valuable commodity currency. Tellingly, the most popular imported cloth currency in the interior – American-made *merikani* – was imported into East Africa in comparatively low and steady amounts through the century. While imported cloth prices remained high in the interior, ivory prices were very low but increased substantially as the ivory moved toward the coast and finally surged when sold at Zanzibar to global buyers. Interior groups that were heavily engaged in coast-interior caravan activities were better positioned than other interior people to benefit from global improvements in ivory terms of trade. Imported cloth was consequently comparatively more attainable for Wanyamwezi people, for example, who organized caravans and increasingly worked as wage porters. I argue, however, that a decline in textile production in Unyamwezi was less a consequence of increasing availability of imported cloth and more a result of the ever-increasing large-scale withdrawal of male labor from the region for portage work.

Chapter 5 explored industrial decline in Ufipa, situated in the Rukwa region of what would become German East Africa (principally comprised of modern-day Tanzania), where industry flourished through the nineteenth century, only declining when the German colonial reach extended to the interior-situated region during the early years of the twentieth century. The imposition of colonial tax policies, partly geared toward accruing a wage labor force for the colony's coastal plantations, fundamentally altered Ufipa's labor supply. In the previously non-monetized Rukwa region, where economic activity was traditionally based on barter exchange, rupees could not be obtained in sufficient quantities at home. A lack of mechanized transportation to the geographically isolated interior region diminished possibilities for profitable export-oriented cash-crop production, while limited local wage-labor opportunities left few alternative options. Consequently, colonial taxation generated a rapid exodus of male labor from the region. Crucially, the majority of cloth imported into Tanzania during the period of Ufipa's deindustrialization was flimsy unbleached material, which was a poor substitute for Ufipa's durable, patterned cloth. Demand for the local product persisted even as a drain in male labor significantly diminished industrial output. Ultimately, however, an ongoing drain of young men from the region undermined the reproduction of cloth-making skills in Ufipa, causing the industry to fade into obscurity in the long-run.

Chapter 6 placed my in-depth case studies of southern and central East Africa in comparative perspective by engaging existing studies on the more resilient handicraft textile industries of northern East and West Africa to pinpoint the most significant regional factors that influenced differing industrial outcomes in East and West Africa during the nineteenth and twentieth

centuries. While each case is unique, certain broad patterns emerge upon close regional comparative examination.

First, the relatively more robust textile industries of northern East and West Africa developed many centuries earlier than the ultimately more fragile industries of southern and central East Africa. A longer history of textile production enabled these regions to develop production techniques, specialized products, and substantial market niches long before cloth imports showed a significant uptick in the nineteenth and twentieth centuries. Second, regions with particularly robust handicraft textile industries tended to have comparatively dense populations, which offered both large sources of industrial labor and substantial local and regional markets for domestic cloth. Beyond its own relatively dense population, Nigeria's extensive engagement in long-distance trade – conditioned by regional geography that encouraged inter-zone exchange – provided a large outlet for the region's textile products. Northern East Africa's Mogadishu also enjoyed substantial export markets facilitated by its seaside location. Markets for domestic textiles in central and southern East Africa were, by contrast, comparatively small, and long-distance exchange was constrained by local geography.

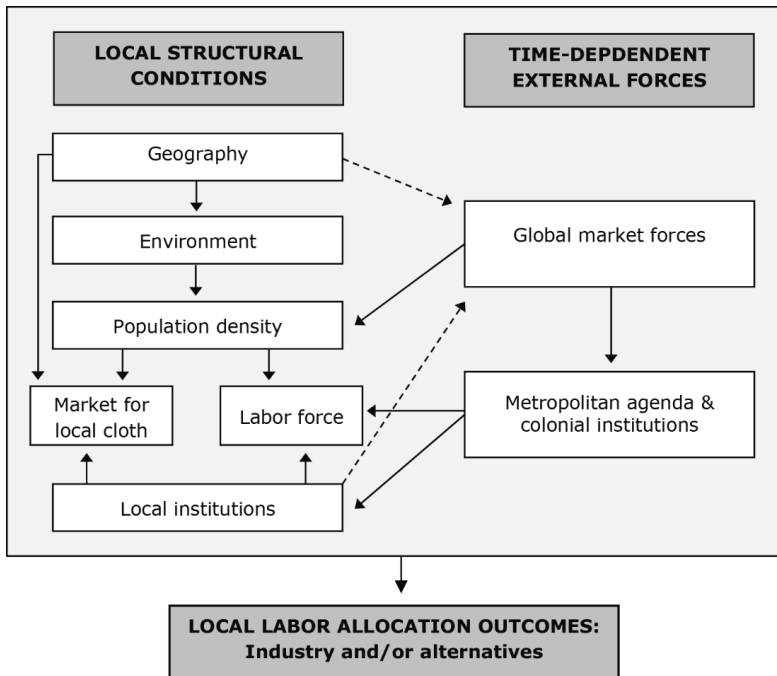
Third, textile industries were strongest in regions, like West Africa, that developed industry-stimulating pre-colonial institutions, including pro-trade state policies and domestic cloth currency conventions. The fourth factor – the ability to profitably export cash crops – impacted the capacity of industries to weather and even benefit from increasing global integration during the nineteenth and twentieth centuries. In southern Nigeria, for example, domestic textile production experienced a boost as incomes rose with rising palm-oil exports, a benefit not available to landlocked Ufipa in Tanzania. The final crucial regional factor identified in this comparative analysis lies in the relative intensity of colonial intervention in local economies, which derived largely from pre-existing local conditions. In West African colonies, which experienced greater autonomy than much of the East, domestic textile producers effectively thwarted colonial efforts to divert raw cotton from local looms to European factories. Likewise, northern East Africa was relatively unfettered by colonial intervention. In Tanzania, however, colonial policy prompted a deindustrializing exodus of male labor. Malawi's deindustrialization, however, occurred prior to the colonial era.

## **7.2 Identifying determinants of industrial outcomes**

This thesis has explored the numerous local and external factors, addressed in the introduction and modeled in Figure 1.4, that interacted to influence local-level production possibilities and labor allocation choices. Comparative analysis has helped identify how *existing local structural conditions* influenced the degree to which industries continued to thrive in confrontation with *time-dependent external forces*, which could, in turn, affect local conditions. The dynamic relationship among and between local and external factors is illustrated in Figure 7.1.

**Figure 7.1      Local and external determinants of industrial outcomes**

*Dashed lines indicate a mediating effect*



### *Local structural conditions*

In the cases examined in this dissertation, numerous local structural conditions interacted in a complex dance of mutual influence. To begin with, *geographic location* played a central role in influencing an array of local conditions, affecting local *environmental conditions* – quality and quantity of arable land, rainfall levels, etc. – which influenced the regional capacity to cultivate raw cotton along with vital food crops and possible exportable cash crops. Environmental conditions also helped determine the local range of possible agricultural systems and the length of the agricultural season, thus affecting the amount of time that people in a given region could feasibly devote to industrial production. Further, local environmental characteristics influenced the size and density of the local *population*, which directly impacted the *size of the local market* for cloth and the extent of the local *labor force*. Taken together, a region’s environmental and demographic makeup directly impacted local production possibilities. This proved crucial in the case of the Lower Shire Valley, for example, where altered local factor endowments and a lengthened agricultural season raised the opportunity cost of cloth production. Furthermore, factor endowments (i.e., labor and land, determined by

population and environment) influenced the development of local *institutions* – including socio-political organization (e.g., small chiefdoms versus large states) and local labor institutions (e.g., gender divisions of labor, coercive/slave labor systems, etc.) – which, in turn, affected production possibilities.

The local geographic character of a given region also affected the extent of the local market for cloth given that geography influenced the intensity of regional trade networks, while climate and altitude determined the amount of clothing required for basic subsistence. Ethiopia, for example, consumed large amounts of cloth in the relatively cool highlands, while northern Nigerian producers enjoyed extensive demand from Saharan groups to the north, who required much cloth to protect themselves from the harsh desert environment. Market demand was also influenced by local labor institutions. In northern Nigeria, for example, slave labor institutions likely diminished the purchasing power of segments of the population, who consequently could not afford the higher-quality variants of domestic cloth that, in the case of southern Nigeria, helped sustain the local industry in the face of import competition. Pre-colonial currency institutions also affected cloth industries. In West Africa, the use of domestic cloth currency helped support local producers specializing in cloth-strip currency. In East Africa, imported cloth typically served this function during the nineteenth century, but the use of imported cloth as valuable currency helped retain market space for domestic cloth as a consumption good.

Alongside economic institutions, local cultural institutions impacted on market demand, particularly where religious custom necessitated extensive cloth consumption. This was the case in much of northern East and West Africa and along the East African coastline. Furthermore, unique, culturally ingrained qualitative consumption preferences dictated market demand and often helped domestic producers withstand competition from foreign imports, as was the case in much of West Africa and northern East Africa and – at least up to the early twentieth century – in East Africa's Ufipa.

#### *Time-dependent external forces*

Existing local structural conditions interacted with external forces that arose during the nineteenth and twentieth centuries and thus mediated the impact of global processes on local industry (a mediating effect is represented by dashed lines in Figure 7.1). Local labor institutions in Nigeria, for example, helped ensure that domestic cloth prices remained competitive with imported cloth, even as industrial development and declining oceanic transportation costs led to a decline in prices for machine-made imported cloth. Geographic location also helped determine how and to what extent imports affected local industries since the distance of a given region to the coast, and the nature of the terrain lying between, influenced transportation costs. Imported cloth was consequently extremely expensive in much of the land-

locked interior of East Africa. So, too, however, was industry-stimulating yarn, which weavers in more accessible West Africa used to speed up production and increase output.

As global demand for raw materials increased in the industrializing world and terms of trade for tropical primary products consequently improved during the nineteenth century, *global market forces* could encourage a rise in export-oriented agricultural production, thus affecting local labor allocation choices. However, this was not necessarily the principal cause of a transition to cash-crop production. In the Lower Shire Valley, for example, cash-crop cultivation did arise during the last quarter of the nineteenth century, as cloth production was abandoned. However, this was principally a result of altered local factor endowments rather than enticing terms of trade for sesame oilseeds. Furthermore, the relationship between cash-crop production and industry depended fundamentally on local conditions. In southern Nigeria's Igboland, for example, global market forces helped bolster the domestic textile industry by raising local incomes through cash-crop cultivation and thus increasing market demand for domestic cloth. This dynamic was facilitated by the ease with which Igboland adopted palm-oil exporting – conditioned by demographic and environmental factors – and the relatively high prices for oil that could be obtained because of the region's geographically unfettered access to export markets.

On the other hand, external forces could also have a transformative impact on local structural conditions. For example, global demand for slave labor and/or slave-produced commodities could lead to diminished populations, thus depleting the local labor supply and simultaneously shrinking the domestic market for cloth, as occurred in the Lower Shire Valley. With the coming of colonial rule to sub-Saharan Africa by the end of the nineteenth century, the *metropolitan agenda* – partly influenced by global demand for primary products and local factor endowments – was reflected in the imposition of *colonial institutions* that could lead to a number of local-level changes that indirectly influenced labor allocation. In colonial Nigeria, for example, the metropolitan anti-slavery agenda led to alterations of local labor institutions, which affected the slave-dependent cloth industry in northern Nigeria. And colonial fiscal policy in German East Africa led to shifts in Ufipa's local labor supply in terms of quantity and composition. However, this outcome was influenced by the region's geographic position, which diminished the possibility of earning sufficient income from local cash-crop production. In fact, the region had become more economically isolated as caravan traffic dwindled with the late-nineteenth-century decline in caravan-based ivory trading and the development of colonial-era railways. Had the central rail line not bypassed Ufipa, the outcome may have been different. In northern Nigeria, for example, the colonial construction of the Kano-Lagos railway, intended to funnel the region's cotton to British looms, ultimately generated a ground-nut export boom instead, which boosted demand for the region's cotton cloth. The metropolitan agenda could also mediate global market forces, as occurred throughout Nigeria, where the British Cotton

Growing Association set cotton buying prices at levels far below the natural market prices, which effectively encouraged local cotton growers to sell their crops principally to domestic cloth producers who offered higher prices than global buyers.

In short, studies of East and West African handicraft textile industries have illustrated that regional industrial outcomes differed substantially during the nineteenth and early twentieth century as the continent became increasingly integrated into the global economy. Rather than uncovering some mono-causal factor, like global market forces or competition from imports, which are often fingered as ultimate causes of deindustrialization in the global periphery, comparative analysis has revealed that industrial outcomes depended upon diverse combinations of local structural factors that influenced the existing strength of textile industries and their relative capacity to successfully confront external forces during the nineteenth and twentieth centuries.

### **7.3 African industrial pathways: past, present, and future**

While this dissertation has focused on handicraft production, the comparative findings can help enrich recent debates on potential labor-intensive pathways to *modern* industrial development (i.e., based on inanimate energy sources) in sub-Saharan Africa. Although traditional handicraft production and modern mechanized production constitute very different industrial modes, highlighting the salient local structural conditions that influenced differing industrial trajectories and labor allocation choices in nineteenth- and early-twentieth-century Africa draws attention to certain long-held path dependencies, some of which may be in the process of breaking down.

Up to at least the mid-twentieth century, sub-Saharan Africa was generally labor-scarce and land-abundant, albeit to a relatively less extreme degree in West Africa compared with most of East Africa. Consequently, Austin et al. have noted, while highly differentiated seasonality could support dynamic *handicraft* industries, the continent's factor endowments were, by and large, ill-suited to prompt a labor-intensive route to modern industrialization – pioneered by labor-abundant, land-scarce East Asia and conditioned by low relative wage costs – nor was capital accumulation sufficient to stimulate a capital-intensive route to mechanized industry. Most entrepreneurs and colonial states in Africa pursued profitable land-extensive ventures rather than funneling labor or capital into the development of modern industry. Post-colonial governments attempted to boost industry through import-substitution industrialization schemes with moderate success during the 1960s and 1970s. However, state-led industrial initiatives halted with the introduction of structural adjustment programs in the 1980s and 1990s, and

African countries were rapidly opened up to foreign imports in accordance with the neoliberal policy prescriptions of the “Washington Consensus.”<sup>2</sup>

These dynamics help account for the failure of nineteenth- and twentieth-century African economies to experience significant and sustained modern textile manufacturing growth in spite of centuries-old production traditions. However, Africa is in a state of flux. Populations began to increase significantly from the mid-twentieth century onward – thus gradually pushing down real wages – while the labor force has become increasingly educated, generating some of the fundamental pre-conditions for labor-intensive industrialization.<sup>3</sup> The historically land-abundant continent is projected to become increasingly labor-abundant as the twenty-first century progresses, which Frankema and van Waijenburg suggest will likely augment the urban labor force and expand domestic market integration, thus engendering significant economic expansion over the coming half-century.<sup>4</sup> Furthermore, while global market competition remains strong, African export possibilities have expanded with the easing of import restrictions in developed countries on textiles produced in Africa.<sup>5</sup>

As the continent’s population continues to expand, labor-intensive development of African textile industries may become increasingly feasible. Some of the region-specific industrial outcomes and significant local structural conditions identified in this thesis may again play a role in influencing industrial trajectories. For one, the successful maintenance of regional demand for culturally distinct handicraft textiles in Ethiopia and much of West Africa – relative to central and southern East Africa – may provide a valuable ready-made consumer niche should these industries pursue greater mechanization. Second, countries with the highest population densities will be more likely to develop global wage advantages and attract foreign direct investment to manufacturing, as in the case of Ethiopia, where foreign-owned export-oriented yarn factories have recently been established.<sup>6</sup> Third, given the intense competition from other emerging economies in the twenty-first-century global marketplace, the size of the domestic market will likely again figure heavily in the industrial potential of a given country. Larger countries like Nigeria and Ethiopia, with extensive and comparatively well-integrated internal markets, will be better poised to expand manufacturing on the basis of *domestic* demand than much smaller countries, like Malawi.

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<sup>2</sup> For an extended discussion on barriers to labor-intensive industrialization in nineteenth- and twentieth-century sub-Saharan Africa, see Austin, ‘Labour-intensity and manufacturing’; Austin, Frankema, and Jerven, ‘Patterns’.

<sup>3</sup> Austin, ‘Labour-intensity and manufacturing’, pp. 213-214.

<sup>4</sup> Frankema and van Waijenburg, ‘Africa rising?’.

<sup>5</sup> The first five years of this century saw the expiration of the restrictive Multi Fibre Agreement, along with the implementation of the Everything But Arms program of the EU and the African Growth and Opportunity Act of the United States, which allow duty-free imports of textiles produced in Africa.

<sup>6</sup> Austin, Frankema, and Jerven, ‘Patterns’, p. 27.

At the same time, however, many of the local structural dynamics that influenced nineteenth- and early-twentieth-century industrial outcomes are changing. For one, with a five-fold expansion of Tanzania's population projected by 2100, the geographically large but historically labor-scarce country will likely join the ranks of historically more densely populated Nigeria and Ethiopia, offering expansive domestic market access and a potential pathway to labor-intensive modern textile manufacturing over a century after the virtual disappearance of the country's handicraft traditions.<sup>7</sup> Of equal importance, as African populations continue to expand relative to land, an increasing share of the population is being released from agricultural labor tasks. Thus, the strong seasonal nature of handicraft industry (determined by the rhythm of agricultural schedules), which traditionally limited annual industrial output and may have dis-incentivized productivity growth, is progressively vanishing. At the same time, yarn input limitations, historically caused by dependence on raw cotton yields, have been increasingly mitigated through the proliferation of machine-produced yarn imports and, more recently, the adoption of synthetic thread. And, importantly, the *availability* of these inputs in regions distant from coastal ports has increased substantially with the expansion in mechanized transportation in Africa over the past century, as have opportunities for regional market integration. This is of particular importance for regions, like Tanzania, where comparatively dispersed settlement patterns moderated the scale of regional exchange up to the twentieth century.

Mechanized transportation, increasing input supply availability, and a booming population will not automatically generate industrial growth in sub-Saharan Africa. Crucially, just as the existence of centralized states and industry-stimulating pre-colonial institutions helped boost handicraft industries during the nineteenth century, the successful development of modern manufacturing will rely heavily on state policies that provide the necessary tools to underpin industrial expansion, including local access to affordable energy sources.<sup>8</sup> Furthermore, trade policies will require careful crafting to confront rising global competition. While I have argued that competition from imports did not destroy handicraft industries during the pre-colonial and colonial eras, the global market place has changed dramatically over the past half-century. With the twentieth-century rise in East Asian manufacturing dominance and global consumption, African markets are increasingly flooded with imported cloth, including vast quantities of cheap second-hand clothing (*mitumba*) discarded by consumers in developed countries. However, just as in preceding centuries, how these and future global processes impact local economies and industrial development will ultimately be guided by (currently shifting) local structural conditions and attendant local responses in the decades and centuries to come.

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<sup>7</sup> Nations, *World population prospects*, p. 4.

<sup>8</sup> Austin, Frankema, and Jerven, 'Patterns', p. 28.

## SUMMARY

The development of domestic cotton textile industries has served as a springboard to broader industrial and economic development in a number of world regions, from eighteenth-century England to twentieth-century East Asia. However, while sub-Saharan Africa has historically engaged in cotton textile production, these handicraft industries did not ultimately generate the kind of mechanized industrial expansion and development experienced in Europe and Asia. Rather, many of the region's domestic cloth industries fell into rapid decline by the early twentieth century, particularly in much of East Africa. The central question of this thesis is *when and why did handicraft cloth industries in East Africa decline?* To uncover the causes of industrial arrest, this study examines cases of deindustrialization in southern and central East Africa and then considers these findings in light of existing studies of comparatively more resilient textile industries in northern East and West Africa. Scholars have generally pointed to forces of globalization as the drivers of industrial decline, placing particular emphasis on purportedly devastating competition from machine-made imported cloth as regions like East Africa increasingly integrated into the global trading system. I argue, however, that undue weight has been placed on the overriding power of global forces to determine local production outcomes. Rather, the causes of deindustrialization lie with a number of local structural factors that *interacted* with time-dependent external forces to diminish industrial production possibilities.

Chapter 2 analyzes industrial decline in Malawi's Lower Shire Valley during the second half of the nineteenth century. I first illustrate that cloth imports did not cause industrial decline, for import levels would only rise significantly *after* deindustrialization had occurred. I then argue against the proposition that strong global terms of trade for tropical products motivated producers to reallocate labor from industry to cash-crop production. While industrial labor was indeed reallocated from industry to the cultivation of export-oriented sesame oilseeds, this labor transfer occurred on the tail of a significant decline in the terms of trade for oilseeds. Rather, the valley's deindustrialization and shift to cash-crop production was motivated by local factor endowment changes that affected the region's production possibilities. First, local labor supplies rapidly declined in the 1860s due to slave raiding and famine. At nearly the same time, local supplies of fertile land began to increase substantially as a result of local environmental change. Together, these developments dramatically altered the local ratio of land to labor. Within the context of starkly diminished labor supplies and increased fertile land, villagers chose to permanently abandon highly labor-intensive cloth production in favor of cash-crop cultivation.

Chapter 3 turns attention to the Tanzania-adjacent island of Zanzibar, which served as East Africa's principal global trading entrepôt through the nineteenth century. I argue that the scale and composition of foreign cloth imports into nineteenth-century East Africa were largely influenced by activity on Zanzibar and the mainland coast and coastal hinterland. Initially, a rise in imports of cloth into Zanzibar from around the mid-1830s was driven in large part by the competitive commercial practices of opposing foreign trading groups stationed on the island. Consequently, while cloth imports into Zanzibar persistently increased during this period, numerous reports indicate that local demand for imported cloth remained depressed. From the 1870s onward, however, import levels were increasingly conditioned by changing production and demand patterns on and near the coast. Beginning in the mid-1870s, the export value of goods produced on Zanzibar, the coast, and in the coastal hinterland rapidly increased – quickly surpassing exports of ivory derived from deep interior regions – which substantially enhanced the buying power of coastal and near-coast consumers, causing consumption of imports to increase apace. Much of the cloth consumed by coastal and coastal hinterland groups was comprised of low-cost Indian and English cloth, which could be readily consumed and discarded as coastal fashions rapidly changed. Even as cloth imports increased, however, production of cloth persisted in parts of coastal East Africa, particularly along the Benadir Coast, which received imported cloth in exchange for the region's hides and skins.

Chapter 4 then investigates the nature and scale of cloth imports into the interior of mainland Tanzania during the second half of the nineteenth century, when imported commodities – particularly cloth – were taken from Zanzibar to the interior to exchange for ivory. The total value of Zanzibar's exports of interior-derived ivory increased as ivory exports grew by quantity while ivory prices rose at Zanzibar. Terms of trade for East African ivory consequently improved relative to imported cloth. However, the benefits of these terms-of-trade improvements were not commensurately shared with the interior regions from which the ivory came. Due to high transportation and transaction costs, along with comparatively low quantities of imported cloth in interior regions, prices rose dramatically as imported cloth moved into the interior. Ivory prices, on the other hand, were very low in the interior but increased substantially as tusks neared the coast and Zanzibar, where they were subsequently sold at high rates to global buyers. As a result, even as East Africa's ivory exports boomed, and cloth imports into Zanzibar rose, imported cloth remained comparatively limited in the deep interior, where it was used as a valuable commodity currency through the century. I argue that the impact of cloth imports on interior textile industries was consequently much more limited than the competition-based deindustrialization historiography has suggested. Cloth production did decline among the Wanyamwezi, East Africa's most sought-after caravan porters. However, I argue that this was largely a consequence of large-scale withdrawal of male labor from the region as demand for porters increased during the second half of the century.

Chapter 5 examines industrial decline in Ufipa, situated in southwestern Tanzania's Rukwa region, where cotton cloth production continued to thrive through the nineteenth century, even as the region became integrated into the East African ivory trade as a mid-way stop for caravan traders seeking ivory stocks and provisions. The domestic textile industry would only begin to decline during the first decade of the twentieth century, with the imposition of German colonial rule and fiscal policies. In an effort to generate revenue and a wage labor force for coastal settler plantations and railway projects, the colonial administration imposed a head tax on adult males that would lead to a fundamental alteration of the labor supply in the previously non-monetized Rukwa region. Cash incomes could not be obtained in sufficient quantities at home due to a lack of mechanized transportation between the Rukwa region and the coast – thus limiting local cash-crop production opportunities – while few wage-labor opportunities were available in the area. Consequently, colonial tax policies generated a rapid withdrawal of male labor from the region, causing Ufipa's male-dominated textile industry to wane. Local demand for Ufipa's patterned and dyed domestic cloth – which suited local tastes more than the primarily unbleached cloth imported into East Africa up to the 1920s – persisted even as a mass absence of male labor significantly diminished industrial output. In the long run, however, an ongoing drain of young men from the region undermined the reproduction of cloth-making skills in Ufipa, causing the industry to ultimately fade away over the course of the first half of the twentieth century.

Chapter 6 places the preceding case studies of deindustrialization in Malawi and Tanzania in comparative perspective and examines why industries tended to decline in southern and central East Africa while cloth production persisted in much of northern East and West Africa – where per-capita cloth imports were significantly higher – well into the post-colonial twentieth century. The chapter begins by identifying salient underlying regional characteristics that affected the relative strength of textile industries in different regions of sub-Saharan Africa prior to the nineteenth century and then examines the development trajectories of textile industries as they confronted forces of globalization and colonization during the nineteenth and twentieth centuries. Comparative analysis reveals that resilient industries tended to arise and persist where textile traditions were adopted comparatively early, allowing industries and demand for domestic cloth to develop several centuries before global integration and colonization; in areas with relatively dense populations and access to comparatively large local, regional, and long-distance markets; where centralized states developed and pre-colonial institutions helped encourage industrial growth; where local endowments and geography favored income-enhancing cash-crop cultivation; and, lastly, where nineteenth- and twentieth-century colonial intervention and fiscal institutions were comparatively less disruptive to existing socio-economic organization.

Chapter 7 concludes by summarizing the main findings of this thesis and offering an elaborated model illustrating how local and external forces interacted in sub-Saharan Africa to influence labor allocation choices and industrial outcomes. Finally, I reflect on the implications of this research for recent debates on potential labor-intensive pathways to modern industrial development in sub-Saharan Africa.

## APPENDIXES

### APPENDIX 1

*Source list for Figure 1.3: Per-capita cloth imports into East and West Africa, 1850-1941 and Figure 6.1: Per-capita imports into East and West Africa, 1850-1900*

- (a) Aggregated nineteenth-century Eastern Africa data (1850-1900) comprised of exports from the principal suppliers of cloth to East Africa during the second half of the nineteenth century: Bombay, the United States, and the United Kingdom:

*United States share:* 1850-1852: shipping records from MH 23, MH 235, MSS 901, and MSS 24 series, PEM. 1857-1891: 'Arrival and Departure of American Vessels, Jan 1 1857 to June 29 1894', RG 84, Consular Posts, Zanzibar, British Africa, Volume 084, NACP. Additionally, single annual data points are derived from: Speer, 'Report on Zanzibar', 1862, RG 59, Volume 3509 (Book 4), NACP, p. 72; 'Trade of Zanzibar', p. 33 (year: 1881); F.M. Cheney, 'Trade Report on Zanzibar, June 30th 1883 – June 30th 1884', RG 59, Volume 3512 (Book 7), NACP (year 1884); Pratt, 'Zanzibar. Report of Consul Pratt.', p. 841 (year: 1887); Cave, 'Report for the year 1897', p. 5 (year: 1897); Cave, 'Report for the year 1898, p. 14 (year: 1898); *Commercial relations of the United States with foreign countries during the year 1900*, p. 141 (year: 1899).

*Bombay share:* Bombay trade reports, 1848-1900, BL. Additionally, Bombay yardage for 1861-1865 is calculated from total Bombay cloth export values to Zanzibar (reported in Sheriff, *Slaves*, p. 249-252) and corresponding English cloth prices derived from United Kingdom trade reports, 1860-1865, BL. English cloth was Bombay's principal cloth export to East Africa until the 1870s.

*United Kingdom share:* United Kingdom trade reports, 1857-1900, BL.

- (b) Aggregated nineteenth-century Western African data (1854-1900) comprised of British exports to West Africa: United Kingdom trade reports, 1857-1900, BL.
- (c) Country/colonial region-level data, 1890-1941 (Figure 1.3 only):

*Malawi:* British Central Africa Protectorate Blue Books, 1897-1905, and Nyasaland Protectorate Blue Books, 1908-1937, TNA.

*Tanzania:* German East Africa data (1890-1915): Tetzlaff, *Koloniale Entwicklung und Ausbeutung*, p. 293; British Tanganyika data (1920-1941): Tanganyika Territory Blue Books, 1920-1946, TNA.

*Italian Somaliland:* Robecchi-Bricchetti, *Somalia e Benadir*, pp. 84, 86; Chiesi, *La colonizzazione Europa nell'Est Africa*, p. 347.

*British West Africa:* Aggregated British West African colonial import data reported in *Statistical abstracts for the several British oversea dominions and protectorates*, 1850-1905, CBS.

- (d) Population data for per-capita calculation from Frankema-Jerven African Population Database 1850-1960, version 2.0.

## APPENDIX 2

### *Source list for Figure 3.4: Unit price per yard of unbleached sheeting, 1836-1900*

*Indian-produced cloth prices:* Bombay trade reports, 1848-1900, BL

*English cloth prices:* United Kingdom trade reports, 1853-1900, BL.

*American cloth prices:* Most annual observations are averaged from aggregated sales records at Zanzibar from the MH 23, MH 235, MSS 901, and MSS 24 series, PEM (1836-1852 data) and from averaged values and quantities of cargoes imported into Zanzibar derived from 'Arrival and Departure of American Vessels, Jan 1 1857 to June 29 1894', RG 84, Consular Posts, Zanzibar, British Africa, Volume 084, NACP (1865-1892 data). Additional annual prices come from: Sheriff, *Slaves*, p. 255 (year: 1863); 'Trade of Zanzibar', p. 33 (year: 1881); Cheney, 'Trade Report on Zanzibar, June 30th 1883 – June 30th 1884', RG 59, Consular Correspondence, 1785-1906, Despatches for Consular Officers, Volume 3512 (Book 7), NACP (year: 1884); and Pratt, 'Zanzibar. Report of consul Pratt.', p. 841 (year: 1887). In addition, the following annual observations rely on single sales prices reported in ships' papers or correspondences from American merchants and consuls:

1840: Based on shipping records of the *Cherokee* (Box 2, Folder 6, MH 23, PEM).

1851: William Jelly and Samuel Masury to Ephraim Emmerton, 19 July 1851, Box 23, MH 235, PEM.

1865: Based on consular records of the trade of the *Glide* ('Arrival and Departure', RG 84, vol. 084, NACP).

1866: Edward D. Ropes to John Bertram, 28 July 1866, Box 2, Folder 6, MSS 104, PEM.

1867: Edward D. Ropes to John Bertram, 14 January 1867, Box 2, Folder 6, MSS 104, PEM.

1870: Francis Webb to John Bertram, 23 August 1870, Box 3, Folder 3, MSS 104, PEM.

1875: Based on consular records of the trade of the *Essex* ('Arrival and Departure', RG 84, vol. 084, NACP).

1883: Ropes Emmerton Co. to James S. Williams, 11 April 1883, Box 42, Folder 3, MSS 103, PEM

1886: Ropes Emmerton Co. to Tharia Topan, 9 March 1886, Box 42, Folder 5, MSS 103, PEM.

1888: Ropes Emmerton Co. to Tharia Topan, 7 Feb 1888, Box 43, Folder 1, MSS 103, PEM.

## APPENDIX 3

*Source list for Figure 3.5: Coast-produced exports and ivory exports from East Africa, 1848-1900 and Figure 3.7: Zanzibar exports of hides/skins, rubber, and gum copal, 1836-1900*

*United States share:* shipping records from MH 23, MH 235, MSS 901, and MSS 24 series, PEM; 'Arrival and Departure of American Vessels, Jan 1 1857 to June 29 1894', RG 84, Consular Posts, Zanzibar, British Africa, Volume 084, NACP. Additionally, single annual data points are derived from: 'Trade of Zanzibar', p. 33 (year: 1880-1881); Cheney, 'Trade Report on Zanzibar, June 30<sup>th</sup> 1883 – June 30<sup>th</sup> 1884', RG 59, Consular Correspondence, 1785-1906, Despatches for Consular Officers, Volume 3512 (Book 7), NACP (year: 1883-1884); Pratt, 'Zanzibar. Report of Consul Pratt.', p. 841 (year: 1886-1887); Ropes, 'Zanzibar', p. 398 (year: 1890-1891); Jones, 'Zanzibar', p. 363 (year: 1891-1892); Dow, 'Zanzibar', p. 301 (year: 1893); Allen, 'Zanzibar', p. 286 (1894-1895); Mohun, 'Zanzibar', p. 354 (year: 1896-1897); 'Zanzibar', p. 294 (year: 1898); Sarle and Mansfield, 'Zanzibar', p. 276 (year: 1899).

*Bombay share:* Bombay trade reports, 1848-1900, BL. Additionally, ivory export data for 1848-1869 is derived from Sheriff, *Slaves*, pp. 249-252.

*United Kingdom share:* United Kingdom trade reports, 1855-1900, BL.



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**Completed Training and Supervision Plan**



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Name of the learning activity	Department/Institute	Year	ECTS*
<b>A) Project related competences</b>			
Posthumus training: My project in a nutshell seminar	N.W. Posthumus Institute	2013	2
Posthumus training: Work in progress seminar	N.W. Posthumus Institute	2013	6
Posthumus training: Research Design Course	N.W. Posthumus Institute	2014	8
Posthumus training: Individual Assessment	N.W. Posthumus Institute	2014	1
Posthumus training: PhD conference	N.W. Posthumus Institute	2015	1
Masterclass with Leigh Gardner at WUR	RHI group, Wageningen	2015	1
<b>B) General research related competences</b>			
Introduction course	WASS	2013	1
Research proposal	WASS	2013	4
<i>'Pre-colonial and colonial interior trade and production dynamics in northern and southern East Africa'</i>	ASAI Conference, Macerata	2014	1
<i>'Ecology, labor and production: tracing the decline of the Lower Shire Valley cloth industry, c. 1860-1890'</i>	World Economic History Congress, Kyoto	2015	1
<i>'Global trade, local markets: quantifying cloth imports into East Africa, 1800-1940'</i>	European Social Science History Conference, Valencia	2016	1
<b>C) Career related competences/personal development</b>			
Dutch language course: niveau 2	Babel Talen	2014	2
African Economic History Network Annual Meeting, organizing committee member	RHI group, Wageningen	2015	1
Visiting Fellow, Peabody Essex Museum, Phillips Library	Salem, Massachusetts	2016	6
Co-editor of <i>Frontiers in African Economic History</i> , blog of the AEHN	African Economic History Network	2017	2
RHI seminar organizer	RHI group, Wageningen	2017	2
Politics of Development (SDC 35806), lecturer	RHI and SDC groups, Wageningen	2017	1
<b>Total</b>			<b>41</b>

\*One credit according to ECTS is on average equivalent to 28 hours of study load

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## **COVER IMAGE**

Sketch by John Schonberg, 'Native loom at Manganya, East Central Africa.' (Alamy)

