Dear All,

Thank you very much for taking the time to read my paper.

This paper is based on archival and oral historical research conducted in Ghana during the summer of 2015. It is my first written foray into the topic that I will eventually focus on in my dissertation, very tentatively titled "Planting Trees, Tapping Ghanaians: Cultivating Rubber and Nationhood in Ghana, 1957 – Present."

My plan is to conduct research on this topic for 12 months beginning in January 2017, so please feel free to suggest questions and issues I might consider in the future. I am very open to any and all feedback, as this draft is very much a foundation for a larger work in progress.

Rather than provide an abstract or summary, I will let the content speak for itself.

Thank you! Keri PhD student History, Yale University

4/12/2016

# Tapping Ghanaians: Kwame Nkrumah's Rubber Scheme, 1957-66

For seven months in 1956, a consultant hired by the Gold Coast Industrial Development Corporation traveled throughout the Gold Coast investigating the possibilities for rubber production and manufacturing in the colony. His final report identified the rainy, forested areas in southwestern Gold Coast as the ideal setting for rubber tree cultivation. The consultant predicted that "the farmers will build up the rubber growing industry in the future as quickly as the cocoa industry was developed in the past."<sup>1</sup> After delineating the equipment, capital, and expertise the industry would require, the consultant concluded that "It is my firm opinion that a rubber processing company formed to operate along the lines suggested will stand every chance of success."<sup>2</sup>

A few months later, when the Gold Coast declared formal independence to become Ghana, Prime Minister Kwame Nkrumah imagined the new nation leading African economic development based on smallholder farming and bustling industrialization.<sup>3</sup> A rubber industry in the Western Region fit nicely with this vision. Not only would the production of the industrial raw material signal and support Ghana's modernization, it would serve to incorporate the peripheral western reaches of the country into the nation. Throughout the colonial era, the cassava-cultivating western districts were considered "backwards" relative to the cocoa-producing eastern and central areas of the colony.<sup>4</sup> The independent Ghanaian government therefore called upon citizens to launch a rubber agro-industry in the Western Region. By planting trees and manufacturing shoes and tires, Ghanaians were to produce a united African nation.

This paper aims to trace both the history and the *history of the future* of Ghana's rubber industry from 1957-1966. The ostensible historical narrative reads rather abjectly: the Ghanaian

<sup>&</sup>lt;sup>1</sup> Public Records and Archives Administration (PRAAD) - Accra, Record Group (RG) 7/1/1508, 'Rubber Processing in the Gold Coast, 1955-61.'

<sup>&</sup>lt;sup>2</sup> PRAAD-Accra RG 7/1/1508, 'Rubber Processing in the Gold Coast, 1955-61.'

<sup>&</sup>lt;sup>3</sup> Jeff Grischow and Holger Weiss, "Pan-Africanism, Socialism, and the Future: Development Planning in Ghana: 1951-66," in *The Struggle for the Long-Term in Transnational Science and Politics: Forging the Future*, edited by Jenny Andersson and Egle Rindzeviciute, 226.

<sup>&</sup>lt;sup>4</sup> PRAAD-Accra RG 7/1/1618, 'Agricultural Development Plan, 1956'; "Smallholder's Cultivation of Rubber in the Western Region of Ghana," 4; PRAAD-Accra RG 7/1/311 'US Interest in Rubber, 1958-59.'

government tried to aggressively develop a rubber industry after independence in 1957, but when the National Liberation Council took charge of the country in 1966, it perceived the industry as a botched enterprise and sold it to an American company. It is important to discern what precisely went wrong with Nkrumah's rubber project, but such a prescriptive inquiry constrains our understanding of this expectant time and the people living in it. <sup>5</sup> Rather, this study takes seriously the possibilities encapsulated in a *Hevea brasiliensis* seed as imagined by Ghanaian leaders and citizens, and from that premise asks: how were visions for post-colonial independence engaged and enacted on the ground at rubber farms and factories in Nkrumah's Ghana?

# PLANTING RUBBER, CULTIVATING NATIONHOOD

The development of a rubber farm is a demanding and sensitive process that cannot be rushed. When a farmer plants a rubber seedling, he must be prepared to wait up to seven years for the tree to reach latex-producing maturity. A farmer who cares well for his farm – by planting seedlings the correct space apart, regularly weeding and periodically applying fertilizer, and intercropping the trees with leguminous plants – will find that his trees reach hardy maturity with lower mortality rates. If a farm owner begins tapping his trees before they reach the proper size, he risks permanently stunting their latex-yielding potential. Tapping, furthermore, is a delicate process that involves using a sharp knife to cut away a thin strip of bark from the tree to induce latex to flow. If the tree is not cut deeply enough, latex production will be low, but if a tree is cut too deeply, the tree will be wounded, which will diminish its latex production over the long term. Only just the right amount of pressure applied by the tapper will allow the tree to prosper and produce the milky-white latex that can be processed and sold to manufacturing plants to be molded into higher-value tires, shoes, and more.

This is an instructive practice to keep in mind when considering processes of economic development and nation building, as farmers and states alike must contend with many challenges

<sup>&</sup>lt;sup>5</sup> My analysis follows the principle, as advocated by historian Frederick Cooper, that a central task for historians is to understand the logic, ethos, and sense of possibility alive in a historical moment, no matter the known aftermath. Only in so doing can a historian seriously grasp the texture of popular experiences and subjectivities in the past, the contingent character of everyday life, and the forces that shape imaginings of the future. See Frederick Cooper, "Possibility and Constraint: African Independence in Historical Perspective," *Journal of African History*, Volume 49, Number 2 (2008): 167-96.

when planting and planning for the future. A farm's success hinges upon a farmer's patient diligence as well as his sensible knack for exploiting his trees enough (for profits) but not too much (to ensure lasting output). Following independence in 1957, Nkrumah's independent government faced an analogous task, that is, to "tap" its citizens and natural resources in order to produce a modern and united African nation. But this metaphor falls short in that Ghanaian citizens were and are not passive trees. Thus this paper examines rubber plantations and tire factories in Ghana not only as sites where natural resources were worked into commodities, but as political spaces where people fashioned ideas of citizenship and sovereignty. Few studies have explored the ways that Ghanaians actually experienced living in the development state under Nkrumah.<sup>6</sup> One aim of this paper is to redress this erasure and explore the roles of subaltern actors – in particular farmers and laborers in the peripheral Western Region – in the processes of development and nation-making in Ghana.

Another aim of this paper is to shed light on Ghana's rubber industry's messy post-colonial beginnings in order to better understand why the National Liberation Council perceived it as a hopeless industry by 1966. Many studies of post-colonial development projects, as historian Priya Lal has pointed out, tend to reinforce tropes that pathologize Africa as a site of dysfunction, thereby serving to extend the "diagnosis of consistently failed or impossible development" indefinitely into the future.<sup>7</sup> To avoid doing so, it is imperative to identify the *specific* reasons for why Nkrumah's vision went awry in the years following independence. To date, rubber and its Ghanaian producers

<sup>&</sup>lt;sup>6</sup> Although historians, economists, and anthropologists have extensively studied other topics pertaining to agriculture and economic development in Ghana and the colonial Gold Coast, the rubber industry has remained mostly unstudied, likely due to its seeming insignificance as compared to the nation's keystone cash crop, cocoa. Few scholars have examined the history of Ghana's rubber industry, and those who have written on it focus mostly on the wild rubber trade at turn of the 20th century. See Inez Sutton, "Labor in Commercial Agriculture in Ghana in the Late Nineteenth and Early Twentieth Century" in The Journal of African History, Vol. 24, No. 4 (1843), 9 461-483; Raymond Dumett, "The Rubber Trade of the Gold Coast and Asante in the Nineteenth Century: African Innovation and Market Responsiveness" in The Journal of African History, Vol. 12, No. 1 (1971), 79-101; Kwame Arhin, "The Ashanti Rubber Trade with the Gold Coast in the 1890s," Africa: Journal of the International African Institute, Vol. 42, No. 1 (January 1972): 32-43; and J.F. Munro, "Monopolists and Speculators: British Investment in West African Rubber, 1905-1914," Journal of African History, Volume 22, Number 2 (1981): 263-278. Only economist Akilagpa Sawyerr took seriously the potential of Ghana's rubber industry, but he admitted that his article on the industry's post-colonial development was "highly, and unusually, provisional" and "based on yet incomplete information"; see Sawyerr, "Multinational Corporations and Development: The Case of the Rubber Industry in Ghana" in Law in the Political Economy of Public Enterprise: African Perspectives, edited by Yash Ghai, 267-294. New York, NY: International Legal Centre, 1977. Moreover, while several historians have studied development in Ghana under Nkrumah, this scholarship has largely been focused on Nkrumah and the leaders of the Convention People's Party (CPP), Pan-Africanism in the context of African decolonization and the Cold War, and the economic consequences of Nkrumah's policies and projects.

<sup>&</sup>lt;sup>7</sup> Priya Lal, *African Socialism and Postcolonial Tanzania: Between the Village and the World* (New York, NY: Cambridge University Press, 2015), 15.

have been elided in Ghana's written history by scholars and policymakers alike. The industry has thus been assigned to a trajectory of marginality and inconsequence.<sup>8</sup> Even today, this marginalization continues; according to leaders in Ghana's rubber industry, the government has done little to address obstacles facing rubber farmers today. Since the 1990s, farmers in the Western Region have been reviving the rubber industry, yet the government continues to dismiss the crop due to its seemingly inauspicious past.<sup>9</sup> By uncovering that overlooked and obscured past, this paper seeks also to better understand present-day possibilities for Ghanaian rubber farmers who are currently planting their futures in the Western Region.

# A CROP OF BOOMS AND BUSTS - RUBBER IN THE GOLD COAST

Both cocoa and plantation rubber (*Hevea brasiliensis*) seeds arrived to the Gold Coast within a few years of each other, in 1896 and 1893 respectively, yet the two crops hold extremely different positions in the written history of the Gold Coast and Ghana.<sup>10</sup> Why didn't rubber take off as cocoa did? At the turn of the century, botanists, colonial authorities, and foreign investors imagined a thriving future for rubber there. From 1883 to 1905, during the world's first rubber "boom,"<sup>11</sup> the leading rubber producer of all British colonies was the Gold Coast, where Africans tapped two wild rubber sources.<sup>12</sup> At the same time, the Department of Agriculture promoted the establishment of

<sup>&</sup>lt;sup>8</sup> Scholars and policymakers alike have been mesmerized by cocoa, historically seen as Ghana's premier cash crop.

<sup>&</sup>lt;sup>9</sup> Interview with Emmanual Owusu, Managing Director of the Rubber Outgrowers Plantation Project of Ghana Rubber Estates Limited, Apimenim, July 17, 2015.

<sup>&</sup>lt;sup>10</sup> Gareth Austin, *Labour, Land, and Capital in Ghana: From Slavery to Free Labour in Asante, 1807-1956* (Rochester, NY: University of Rochester Press, 2009), 52. How and when exactly cocoa seeds arrived in the Gold Coast has been contested by scholars, but most people agree that Tetteh Quarshie brought the seeds to the Gold Coast in the early to mid 1890s. <sup>11</sup>The first rubber boom took place during the 1880s and 90s following the following John Boyd Dunlop's "re-invention" of the

<sup>&</sup>lt;sup>11</sup>The first rubber boom took place during the 1880s and 90s following the following John Boyd Dunlop's "re-invention" of the pneumatic tire in 1888 (as Robert William Thomson who first invented the pneumatic tire in 1845, when there was little use for it prior to Gottlieb Daimler's invention of the lightweight internal combustion engine in 1884). Merchants hurried to tropical regions around the globe in search for rubber, which at that time was worth its weight in silver in British markets. See *Portrait of the Global Rubber Industry: Driving the Wheel of the World Economy* (Kuala Lumpur: International Rubber Research and Development Board, 2006), 34.

<sup>&</sup>lt;sup>12</sup> During this time, Gold Coast colonial authorities sought to regulate the "improvident natives" who were believed to be depleting the vines and trees at unsustainable rates. See Cuthbert Christy, *The African Rubber Industry and Funtumia Elastica* (London: John Bale, Sons & Danielsson, Ltd., 1911), 2 and W.H. Johnson, "Reports on Rubber in the Gold Coast and Sierra Leone," Colonial Reports— Miscellaneous, No. 28 (November 1904). Some historians have written on the history of the wild rubber trade in the Gold Coast at this time. See Inez Sutton, "Labor in Commercial Agriculture in Ghana in the Late 19th and Early 20th Century," *The Journal of African History*, Vol. 24, No. 4 (1983): 461-488; Raymond Dumett, "The Rubber Trade of the Gold Coast and Asante in the Nineteenth Century: African Innovation and Market Responsiveness," *The Journal of African History*, Vol. 12, No. 1 (1971): 79-101. Dummett argues that during this time, roads were improved due to demand by coastal merchants involved in the rubber trade, and that the involvement of migrants and wage laborers in the rubber trade generated a sense of individualism, therefore rubber was the foundation of rural capitalism.

rubber plantations by providing planting materials and tapping instructions to interested farmers and European investors.<sup>13</sup>

Yet even while botanists and farmers alike correctly identified that the forested western parts of the colony featured optimal ecological conditions for the production of rubber trees, numerous issues constrained its "take off."<sup>14</sup> Throughout the 1900s and 1910s, European traders believed Africans were adulterating their latex, thus Gold Coast rubber drew unstable prices that became increasingly unattractive to collectors when wild sources became scarcer.<sup>15</sup> Moreover, in the 1910s, colonies in Southeast Asia began to supply the world market with cheap, top-quality rubber. In Malaya in particular, British capitalists could exploit land and labor more easily than in the Gold Coast, where the expanding cocoa industry drove up these costs.<sup>16</sup> Although the world price of rubber rose during World War I, it fell below the cost of production soon after the conflict's end. Botanical stations and all but a few European planters in the Gold Coast effectively abandoned their rubber-related enterprises.<sup>17</sup> Thereafter, while Africans were rapidly expanding the colony's cocoa industry in the eastern and central areas, farmers in the west mostly resorted to subsistence cassava

<sup>&</sup>lt;sup>13</sup> Throughout the 1890s-1910s, the Department of Agriculture xperimented with a number of latex-producing species (including the foreign *Hevea brasiliensis* and other native varieties) at nine agricultural research stations throughout the colony in order to determine which would be most profitable for foreign investors and African cultivators, and also to learn the most effective production methods. During these experiments, the long-term environmental impacts of rubber cultivation were not explored; the researchers primarily sought to discover which was best fit for the economic climate of the Gold Coast. See PRAAD-Accra ADM 11/1/177 'Rubber Cultivation, 1910'; PRAAD-Accra ADM 11/1/181 'Exhibition Plans 1911'; PRAAD-Accra ADM 11/1/233 'Para Seed Supply 1910'; PRAAD-Accra ADM 11/1/398 'Para Cultivation Pamphlet 1912.'

<sup>&</sup>lt;sup>14</sup> See map in G.H. Eady, "Yields of *Hevea brasiliensis* on Experiment Stations, 1891-1929," *Department of Agriculture, Gold Coast,* Bulletin, No. 18 (1930): frontplate. Others have since studied the climactic and ecological suitability for rubber cultivation in the Western Region of Ghana. See Kwame Oppong-Anane, "Ghana Country Pasture/Forage Resource Profiles," Ministry of Food and Agriculture, last modified 2007, accessed December 5, 2014. He explains that with temperatures ranging from  $22^{\circ} - 34^{\circ}$  C (72 - 93° F), rainfall patterns between 1,700 - 2,000 mm (67 – 79") per year, and lightly acidic oxysol and gleysol soils, these regions are in fact ideal for *Hevea* cultivation.

<sup>&</sup>lt;sup>15</sup> Africans were suspected of adding water, chunks of cassava, potatoes, or rocks to their latex in order to increase its volume. PRAAD-Accra ADM 11/1/364 'Tapping Guidelines'; PRAAD-Accra ADM 11/1 'Rubber and Oil Palm Bye Laws, 1900'; PRAAD-Accra ADM 11/1/189 'Rubber Preparation for the European Market, 1908'; PRAAD-Accra ADM 11/1/1406 'Rubber- Proposed Rules for the Collection and Exportation Of, 1910.'

<sup>&</sup>lt;sup>16</sup> Portrait of the Global Rubber Industry, 60-61. For an analysis of the costs of land and labor in the Gold Coast during this time period, see Austin, Labour, Land, and Capital.

<sup>&</sup>lt;sup>17</sup> Eady, "Yields of *Hevea brasiliensis* on Experiment Stations 1890-1929." In Southeast Asia, large rubber companies pressured the British government to look into reviving rubber prices; it initiated the Stevenson Scheme (which entailed imposing a surtax on export of rubber above a certain quantity) that was extremely successful for several years until countries not committed to the plan increased their outputs and world prices again dropped (*Portrait of the Global Rubber Industry*, 79-80). In the Gold Coast, a small handful of European companies maintained their rubber plantations in the Gold Coast, including the Avreboo Rubber Company, Holland Estates, and the Offin River Gold Estates Ltd., but this topic is beyond the scope of this particular paper. Most farmers saw their future not in white, sticky latex, but in green and yellow cocoa pods (in the east), oil palms and coconuts (in the west), shea nuts (in the north), or other crops, depending on the locale's climate and soil properties and the accessibility of a profitable market for the goods.

cultivation, as the climate and soils there were too wet and sandy for cocoa or coffee.<sup>18</sup> This section of Ghana became known as one of the country's most underdeveloped sections, and some parts were even described as "black spots" and "backward areas."<sup>19</sup>

Later, in the early 1940s, the Gold Coast experienced yet another rubber boom when its value skyrocketed during the Second World War. The British government offered price bonuses for latex and rubber scraps and even reimbursed traders for transport costs.<sup>20</sup> Africans responded by tapping wild sources and plantations that had been abandoned since the early 1900s.<sup>21</sup> Nevertheless, even as farmers and investors glimpsed a bright future for rubber during WWII, they soon saw these hopes dashed when the Board of Trade in the United Kingdom announced it would no longer purchase rubber after the war's end. In the late 1940s and early 1950s, rubber farmers in the western Gold Coast could find virtually no commercial market for their product.<sup>22</sup> The British colonial government, moreover, discouraged the cultivation of the crop in the Gold Coast.<sup>23</sup> Even with ideal environmental conditions for rubber in the western parts of the colony, without an organized market the cash crop seemed to have little future there, and the area remained outside the scope of the colony's robust cocoa-led economic development.

<sup>&</sup>lt;sup>18</sup> Interview with James Duku, Ajumako, July 12, 2015; see also the United States Agency for International Development Mission to Ghana, "Smallholder's Cultivation of Rubber in the Western Region of Ghana," Tropical Horticulture technical report compiled by Harold A. Hansen, September 1967-1968, 4. It is worth nothing that although the reforestation of depleted soils throughout the Western Region was seen as an incidental perk of the scheme, there can be found no archival evidence suggesting that the Ministry of Agriculture explored the long-term environmental impacts of extensive rubber cultivation.

<sup>&</sup>lt;sup>19</sup> PRAAD-Accra RG 7/1/1618, 'Agricultural Development Plan, 1956'; "Smallholder's Cultivation of Rubber in the Western Region of Ghana," 4; PRAAD-Accra RG 7/1/311 'US Interest in Rubber, 1958-59.'

<sup>&</sup>lt;sup>20</sup> Accra-PRAAD ADM 6/112-113, Gold Coast Gazette, July 1944 and April 1945.

<sup>&</sup>lt;sup>21</sup> Accra-PRAAD CSO 8/10/33-34 'Rubber Industry in the Gold Coast, 1941-46.'

<sup>&</sup>lt;sup>22</sup> At that point, rubber farmers' pleas for support from the government reached deaf ears. Managers of one rubber plantation in Axim even wrote to Nkrumah in 1951 that "We are licensed rubber processors during the last Great War and have concentrated to start an African Enterprise [in cultivating and processing rubber] to meet our future Independence and abate unemployments," but even this nationalist appeal for aid proved futile. See PRAAD-Sekondi WRG 24/1/573 'Post-WW2 Plans," a letter from C Ainoo-Addison and James K. Odoom, managers of the West African Rubber Company, to Kwame Nkrumah, 5/13/1951. See also PRAAD-Accra CSO 8/1/303 'Memorandum Presented by the Pretsia Plantations, Ltd., 1943.'

<sup>&</sup>lt;sup>23</sup> Specifically, the Board of Trade would not purchase rubber after December 31, 1946. Accra-PRAAD RG 7/1/38, 'Rubber Industry, 1946-53.' During the late 1940s and early 1950s, the British colonial government in theory supported agricultural production, but in practice emphasized cocoa production above all else. See Accra-PRAAD RG 7/1/38, 'Rubber Industry, 1946-53. This inconsistency can only be understood by "thinking like an empire," to borrow Helen Tilley's term (see Helen Tilley, *Africa as a Living Laboratory: Empire, Development, and the Problem of Scientific Knowledge, 1870-1950* (Chicago: University of Chicago Press, 2011), 16-23). Britain's post-war economic recovery relied in part on its colonies' lucrativeness, so the imperial power desperately needed to bring the unstable world rubber market back under its control, as it had been before the United States' invention of synthetic rubber production during WWII. Thus, in an effort to stabilize the world market in rubber, British imperial policy favored British-run rubber plantations in Malaya, and discouraged its cultivation elsewhere. See Nicholas White, "The Frustrations of Development: British Business and the Late Colonial State in Malaya, 1945-57," *Journal of Southeast Asian Studies* 28 (March 1997): 103-119; Martin Rudner, "Malayan Rubber Policy: Development and Anti-Development during the 1950s," *Journal of Southeast Asian Studies*, Volume 7, Issue 2 (September 1956): 235-259; and *Portrait of the Global Rubber Industry: Driving the Wheel of the World Economy*, 89-92.

# **IMAGINED FUTURE II: A GIFT FOR RUBBER FARMERS**

After declaring formal independence in 1957, the Ghanaian government led by Prime Minister Kwame Nkrumah sought to make a united and modern nation, which would entail reigning in and developing the peripheral Western Region.<sup>24</sup> Nkrumah recruited West Indian development economist W. Arthur Lewis, who drafted Ghana's Second Development Plan to incorporate characteristics of both capitalism and communism and to prioritize agricultural development as a basis for industrialization. In 1959, the Convention People's Party unveiled the plan, underlying which was the principle that national sovereignty hinged upon economic self-sufficiency.<sup>25</sup>

The Second Development Plan included a program for the launch of a systematized and modern rubber industry. The government of Ghana initially considered welcoming American companies' private investments in rubber cultivation, as recommended by American consultants.<sup>26</sup> But the newly independent government instead designed an Africanized scheme that involved private, cooperative, and commercial rubber production.<sup>27</sup> A consultant for the Industrial Development Corporation had proposed this idea in 1956, and thereafter the idea gained traction among Ghana's development planners.<sup>28</sup> In 1959, it seemed that it would come to fruition.

In the plan, the government of Ghana allocated  $\pounds 300,000$  toward establishing a minimum of 25,000 acres under rubber by 1964. Farmers and cooperatives would be able to receive a subsidy of  $\pounds 30/acre(\pounds 5/year$  for six years) for up to fifty acres of rubber planted in a manner approved by the Agricultural Development Corporation (ADC).<sup>29</sup> Accordingly, the Ministry of Food and Agriculture

<sup>&</sup>lt;sup>24</sup> Although Nkrumah technically took charge of development planning in 1951, he was constrained by the colonial status of the Gold Coast. In 1951, Kwame Nkrumah was elected the Leader of Government Business. He inherited the colonial government's Ten Year Development Plan, which he telescoped into a five-year plan. See Grischow and Weiss, "Pan-Africanism, Socialism, and the Future: Development Planning in Ghana: 1951-66," 227.

<sup>&</sup>lt;sup>25</sup> The plan that the CPP unveiled in 1959 included three times the projected expenditures as Lewis originally intended. See Grischow and Weiss, "Pan-Africanism, Socialism, and the Future: Development Planning in Ghana: 1951-66," 228.

<sup>&</sup>lt;sup>26</sup> Theses consultants were from the U.S. International Cooperation Administration (ICA), which was the predecessor of the U.S. Agency for International Development.

<sup>&</sup>lt;sup>27</sup> PRAAD-Accra RG 7/1/311 'US Interest in Rubber, 1958-59.'

<sup>&</sup>lt;sup>28</sup> PRAAD-Accra RG 7/1/1508, 'Rubber Processing in the Gold Coast, 1955-61.'

<sup>&</sup>lt;sup>29</sup> PRAAD-Accra NP, *Daily Graphic*, September 5, 1959, page 5; PRAAD-Accra RG 7/1/1618, 'Agricultural Development Plan, 1956'; PRAAD-Sekondi WRG 24/1/573 'Rubber Industry, 1944-51.' Prior to this scheme, Ghana had approximately 5,000 acres of rubber controlled by European companies and another 3,500 acres of rubber owned by individual farmers, according to a survey conducted in 1959; see PRAAD-Accra RG 4/188 'Agricultural Plans 1959-61.'

carried out a land survey to determine where within the Western Region farmers could plant to earn the  $\pm 30/a$ cre subsidy.<sup>30</sup> It selected four sites where farmers would receive assistance.<sup>31</sup>

Rubber production methods were unfamiliar to most Ghanaians, so the plan to revive Ghana's rubber industry also included technical support for farmers and cooperatives. The government of Ghana collaborated with USAID to expand an agricultural research station at Aiyinase (in the Western Region) to accommodate a rubber research and development division. USAID posted to the station a veteran of the U.S. Department of Agriculture who had over a decade's experience working with rubber trees to advise on the growing, processing, grading, and marketing of rubber. Extension officers would travel throughout the Western Region to train people how to properly clear and prepare farm plots, peg and plant seedlings in straight rows, prune and maintain immature trees, and eventually tap mature trees for their latex. Meanwhile, the ADC would kindle interest in the agro-industry by planting five 100-acre demonstration plots. It also purchased several private plantations that, in addition to a 2,000-acre estate to be developed on a commercial basis in Abura, were to finance processing facilities and other infrastructure necessary for the industry's success.<sup>32</sup> Thus the government sought to empower people to take up the task of developing a rubber industry, just as "rural capitalists," to borrow economist Polly Hill's term, were known to have expanded the cocoa industry in the past.<sup>33</sup>

The station at Aiyinase was also intended to function as a rubber nursery to ensure that highquality planting material would be available to interested growers. Although any *Hevea brasiliensis* 

<sup>&</sup>lt;sup>30</sup> According to one elderly man who has lived in the village of Adiewoso in the Western Region his entire life, Nkrumah flew an airplane over the area to survey the land for its suitability for cash crops, Interview with Kweku Inketia, Adiewoso, July 22, 2015. Another informant claimed that it had not been an airplane, but a helicopter, Interview with Mr. Mensah, Essaman, July 24, 2015. <sup>31</sup> These sites were at Abra, Mando-Amenfi, Enchi, and Dompim, PRAAD-Accra RG 4.188 'Agriculture Plans, 1959-1961'; PRAAD-Sekondi WRG 24/1/171 'UGFC, 1959-65'; "Reviving Ghana's Rubber Industry: Government's Plan to Diversify One-Crop Economy," *African World* (October 1961). The involvement of the Workers' Brigade in the development of the rubber industry was relatively minimal.

<sup>&</sup>lt;sup>32</sup> See "Smallholder's Cultivation of Rubber in the Western Region of Ghana," 8. These demonstration plots were to be in Nsuaem, Nkroful, Axim, Simpa, and Bamiankoh. The private plantations included the 2,300-acre Pretsia Rubber Plantations Limited, plus the 1,900-acre Ettekrum Rubber Estate, the 4,000-acre Avreboo Rubber Company, and the 5,000-acre Dixcove Rubber Estate, which it would develop and co-own with the Danish firm R.T. Briscoe. See also Marvin Miracle and Ann Willcox Seidman, "State Farms in Ghana," Lend Tenure Paper no. 43 (Madison: University of Wisconsin , 1968), 9-10. With the exception of this paper and a bachelor's thesis written by Peter Osei-Kwame for the University of Ghana in 1969, very little has been written on the Agricultural Development Corporation or the State Farms Corporation.

<sup>&</sup>lt;sup>33</sup> Polly Hill, Studies in Rural Capitalism in West Africa (Cambridge: Cambridge University Press, 1970), 2.

seed can potentially grow into a latex-producing tree, not all result in the same crop.<sup>34</sup> Higheryielding and hardier clones had been bred by private plantations in Southeast Asia and at Firestone's Harbel Plantation in Liberia for decades; these engineered varietals could reach maturity faster, produce more latex per acre for more years, and withstand pests, disease, and winds.<sup>35</sup> To be competitive in the world market for natural rubber, Ghanaian rubber producers would need to cultivate only the most efficient clonal seedlings and stumps.<sup>36</sup> Thus, the rubber block at Aiyinase imported planting materials from Liberia, Malaya, and Indonesia.<sup>37</sup> This material was to be multiplied using sophisticated grafting procedures, which were taught to about 150 farmers, laborers, and nursery staff during several two-week training courses at Aiyinase.<sup>38</sup> By taking steps to ensure farmers' access to high quality materials and training, the Ministry of Agriculture seemed to be setting up an industry with much promise.

### **IMAGINED FUTURE II: SHIFTING IDEOLOGIES AND STATE FARMS**

Shortly after Nkrumah's regime announced the Second Development Plan in 1959, Ghana's approach to development began to change. In March 1960, Nkrumah publicized plans for a new constitution that would make Ghana a republic headed by a president with broad executive and legislative powers. Less than two months later, citizens of Ghana ratified the constitution and elected Nkrumah as president. During the next several months, meetings between Nkrumah, Nikita Khrushchev, and other Ghanaian and Soviet leaders secured the promise of Soviet aid for Ghana and

<sup>&</sup>lt;sup>34</sup> Special thanks to Abraham Aikins (Rubber Outgrowers Plantation Project), Frederick Duku (Rubber Outgrowers Plantation Project), Abdul Aziz (International Rubber Research and Development Board), Subra Maniam (Malaysian Rubber Board), and Zarawi Abdghani (Rubber Research Institute of Malaysia) for generously taking the time to explain to me the difference between different clones as well as the research and development that goes into engineering them.

<sup>&</sup>lt;sup>35</sup> "Smallholder's Cultivation of Rubber in the Western Region of Ghana," 25-27.

<sup>&</sup>lt;sup>36</sup> "Smallholder's Cultivation of Rubber in the Western Region of Ghana," 28. To this day, no rubber research and development takes place in Ghana. Moreover, the government of Ghana will not support the rubber industry in becoming a member of the International Rubber Research and Development Board, an international body that could provide Ghana with access to cutting edge research materials and updated clonal planting materials. Interview with Emmanuel Owusu, Managing Director of the Rubber Outgrowers Plantion Project of Ghana Rubber Estates Limited, Apimenim, July 17, 2015.

<sup>&</sup>lt;sup>37</sup> These planting materials were high-yielding budded stumps and seeds of nineteen different clones. This operation was more complicated than it sounds at first glance. According to Moses Bibi (who has lived in the town of Abura since 1959, when he was employed by R.T. Briscoe on the Dixcove Rubber Estates and then later by the State Farms Corporation), an airplane carried the planting material from its origin to Kotoko Airport in Accra, where cars were waiting for its arrival. Immediately, the budded stumps and seedlings were transplanted into portable bins filled with soil and then rushed to the Aiyinasi Research Station, a distance of about 300km. The stumps were then immediately planted and nourished to ensure the highest possible survival rates. Environmental historians must take very seriously how time constraints ecological processes.

<sup>&</sup>lt;sup>38</sup> PRAAD-Accra RG 4/188 'Agriculture Plans 1959-1961'; "Smallholder's Cultivation of Rubber in the Western Region of Ghana," 16.

signaled a break from Lewis' more gradual strategy for development.<sup>39</sup> In 1961, Nkrumah declared that scientific socialism in the Soviet model would allow Ghana to rapidly develop while steering clear of the shackles of neocolonialism. Accordingly, Nkrumah created the National Planning Commission to craft a new development plan that would prioritize the public ownership of the means of production and distribution.<sup>40</sup> Nkrumah's regime declared that Ghana's national prosperity would arise only from its citizens' hard work, discipline, and industrious commitment to the state's "big push" for socialist industrialization.

One component of Ghana's "big push" strategy was the Ghana State Farms Corporation (SFC), the formation of which began when a team of Soviet agricultural specialists arrived in Accra in September 1961.<sup>41</sup> For eighteen months, Ghana's National Planning Committee negotiated aid details with Soviet officials at the Russian embassy in Accra.<sup>42</sup> With technical assistance, credit loans, and modern equipment from the Soviet Union and other Eastern bloc countries, state farms were to be established in all regions of Ghana.<sup>43</sup> Additionally, management and control of all of Ghana's agricultural research stations, ADC projects, and private plantations became centralized under the new corporation. SFC had several stated aims: 1) to bolster the country's food security via animal husbandry and the production of staple foodstuffs, 2) to produce raw materials that would feed the country's industrialization program, 3) to curb urbanization by improving village life, and 4) to employ an expanding population.<sup>44</sup> The development of state farms began in early 1962.<sup>45</sup>

The Soviet Union was to assist in the establishment of the state rubber plantations according to an agreement approved by Nkrumah in January 1962. The exact type of assistance, however, was

<sup>43</sup> PRAAD-Accra 4.1.84 'Foreign Technical Assistance Russia.'

<sup>&</sup>lt;sup>39</sup> Grischow and Weiss, "Pan-Africanism, Socialism, and the Future: Development Planning in Ghana: 1951-66," 228.

<sup>&</sup>lt;sup>40</sup> Grischow and Weiss, "Pan-Africanism, Socialism, and the Future: Development Planning in Ghana: 1951-66," 229.

<sup>&</sup>lt;sup>41</sup> PRAAD-Accra, 4/1/84 'Foreign Technical Assistance Russia.'

<sup>&</sup>lt;sup>42</sup> PRAAD-Accra, 4/1/84 'Foreign Technical Assistance Russia.' These meetings covered management duties, training methodologies, specialists' contracts, financial liabilities, and budget specifics. The appointed Director of State Farms, Mr. Attah Mensah, and the Leader of the Soviet Agricultural Team, Mr. V. Karamyshev, at times disagreed on the nature of the relationship between Ghana and the Soviets. In particular, during one meeting Mensah expressed frustration that the Soviets were refusing to take part in the monitoring of SFC finances, to which Karamyshev responded, according to the meeting notes, "that the money belonged to Ghana and if her own people chose to defraud the country in that way, it was not the concern of the Soviets."

<sup>&</sup>lt;sup>44</sup> Peter Osei-Kwame, 'The Development of State Farms in Ghana'' (unpublished B.A. thesis, Department of Geography, University of Ghana, 1969), 17. In the archival materials, nothing suggests that the planning committee considered the environmental impacts of large-scale agricultural production; social and economic outcomes clearly trumped ecological considerations.

up for debate. The Soviet Union understood this contract to entail "clearing and uprooting jungle, preparation of soil for planting out rubber bearing trees, and supplying necessary agricultural machines." But Ghana's Ministry of Agriculture dictated that it did not need assistance in those tasks, and instead required help "in carrying out investigation aimed at increasing economic efficiency of the existing *Hevea* plantations, as well as in supplying *Hevea* seeds and seedlings."<sup>46</sup> The Soviet specialists insisted they did not travel to Ghana to grow rubber (as rubber does not grow in Russia, therefore no one had knowledge of this process, they explained) but rather to "assess the necessary amount of machinery that will be needed."<sup>47</sup> To the dismay of the Soviets, Ghana's Ministry of Agriculture refused to purchase tractors for the rubber state farms, and proceeded instead to clear the land by hand.<sup>48</sup> Although Nkrumah had committed Ghana to scientific socialism in the Soviet model, the West African nation was adapting this model to fit its own needs.

Nkrumah's plan for Ghana's rubber industry also featured a state-owned tire factory to be constructed with assistance from Czechoslovakia. In December 1961, representatives from Ghana's Ministry of Industries met with Czech officials to discuss plans for the project. They determined that the factory should be built in Bonsaso, a town outside Tarkwa in the heart of the Western Region's rubber-producing areas. There, the factory could easily access the raw material while further boosting employment rates in the region, where no industrial enterprises existed. Czechoslovakia's foreign trade corporation, Technoexpert, was to provide all machinery for the factory, engineers to manage its construction, training for Ghanaian staff upon its completion, and low-interest loans for repayment over the course of seven years.<sup>49</sup> They agreed that the construction should be completed such that tire production could begin by mid-1964, when the plantations would begin to produce rubber.<sup>50</sup>

<sup>&</sup>lt;sup>46</sup> PRAAD-Accra 4/1/99 'Development of Rubber' letter from A. Goloubkov of the USSR Embassy in the Republic of Ghana to L.R. Abavana, Minister of Agriculture of the Republic of Ghana, January 26, 1962.

<sup>&</sup>lt;sup>47</sup> PRAAD-Accra 4/1/9 'Development of Rubber' notes from meeting held February 1, 1962.

<sup>&</sup>lt;sup>48</sup> PRAAD-Accra 4/1/9 'Development of Rubber' notes from meeting held February 1, 1962. See also Miracle and Seidman, "State Farms in Ghana," 24.

<sup>&</sup>lt;sup>49</sup> PRAAD-Accra 7/1/1832 'Bonsaso Rubber Plant, Confidential, 1961-62.'

<sup>&</sup>lt;sup>50</sup> One economist, who evaluated Ghana's rubber project years later assessed that the state's investment in the integrated agro-industrial enterprise would have been amortized by as early as 1973. See Akilagpa, Sawyerr, "Multinational Corporations and Development: The

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# CITIZENS, TOO, ARE VISIONARIES

How did ordinary Ghanaians experience Nkrumah's ideological shift and his socialist vision for national and economic development? Rubber farms and factories in the Western Region provide a useful lens for peering into the quotidian realities of life in Nkrumah's development state.<sup>51</sup> This section explores the ways that Ghanaian citizens engaged with and enacted Nkrumah's plans for their nation's future. As the state sought to maximize the potential of its population and resources, citizens actively *allowed* themselves to be "tapped" in order to become national subjects and earn leverage to stake claims to the nation's future prosperity. In the process, people in the Western Region learned a new agricultural enterprise and concurrently crafted their own concept of citizenship.

# **Rubber Farmers – Material Bottlenecks and Thrifty Innovations**

Soon after the Convention People's Party announced its Second Development Plan in 1959, farmers in the Western Region began to stake their claims to being included in the rubber project.<sup>52</sup> Immediately following a *Daily Graphic* headline announcing "THE RUBBER FARMER TO GET GIFT" in its September 5, 1959 issue. One farmer wrote in a letter to the Ministry of Agriculture "I hereby entreat to appeal to you with every respect to consider me and grant me some loan to start the said Rubber Plantation which I am greatly desirous...I will endeavor to do the Plantation up to the standard that you will desire."<sup>53</sup> A man from Axim wrote, "I have firmly decided to make a rubber plantation. But most sorry I have not got enough money with which I should start the farm or plantation...Kindly show me the steps I should take to see the government for help."<sup>54</sup> Farms in this program ranged from one to 450 acres located in four extension areas in the Western Region.<sup>55</sup> It is difficult to determine, however, who actually participated in this project based on archival records. To develop a rubber farm, a person needed not only start-up capital and instruction, but also access to

Case of the Rubber Industry in Ghana" in *Law in the Political Economy of Public Enterprise: African Perspectives*, edited by Yash Ghai (New York, NY: International Legal Centre, 1977), 271.

<sup>&</sup>lt;sup>51</sup> See Lal's *African Socialism* for an analysis of Nyere's distinct strain of African socialism unfolding around the same time in East Africa.

<sup>&</sup>lt;sup>52</sup> People's interest in the project spiked immediately following a *Daily Graphic* headline announcing "THE RUBBER FARMER TO GET GIFT" in its September 5, 1959 issue.

<sup>&</sup>lt;sup>53</sup> PRAAD-Accra RG 4/1/39 'Loans to Farmers.' (1095)

<sup>&</sup>lt;sup>54</sup> PRAAD-Accra RG 4/1/39 'Loans to Farmers.' (Ackah.jpg)

<sup>&</sup>lt;sup>55</sup> These extension areas were around around Sekondi, Asankrawngwa-Manso, Tarkwa, and Wiawso.

land and ample labor that they could devote to a cash crop. One contemporaneous observer suspected that powerful individuals disguised their private holdings as cooperatives, which were believed to be more likely to receive subsidies from the government. If this was true, rubber was concentrated in the hands of the already-powerful, as the total acreage under rubber on small farms was about 5% the total acreage of larger estates.<sup>56</sup> By leaving the development of the rubber industry to the private sector, the government risked sacrificing equality for economic growth.

By the late 1950s, these rubber farmers could finally access a market for their product. Several Ghanaian and foreign investors sought out approval from the Industrial Development Corporation to establish manufacturing enterprises. One shoe company, Ghana Rubber Products Limited, purchased rubber directly from cooperatives, which used small-scale artisanal methods to process latex into ribbed smoked sheets.<sup>57</sup> But this supply chain was far from perfect. It did not take long for the shoe company's demand for rubber to surpass the amount the cooperatives could supply, so Ghana Rubber Products turned to local European-owned plantations. These plantations, however, rejected the shoe company's request to purchase rubber, as they were contracted by manufactures in Europe.<sup>58</sup> Despite these inefficiencies, the industry still showed promise, as it was only a matter of time before rubber planted by cooperatives and Ghanaian farmers came to maturity and could meet the demands of domestic manufactures. Meanwhile, two companies had plans to establish facilities to process farmers' crude latex into material that could be sold to manufactures.<sup>59</sup> A rubber agroindustry, led by private entrepreneurs, seemed to be on Ghana's horizon.

In the early 1960s, Nkrumah's shift toward scientific socialism resulted in major changes in the Western Region, where private rubber farmers had been banking on the government's financial

<sup>&</sup>lt;sup>56</sup> "Smallholder's Cultivation of Rubber in the Western Region of Ghana," 12-13. Small farms I am defining as 1-10 acres (~4% of total acreage) and larger estates as 40-450 aces (81%). These larger farms would have had to have been developed by powerful landowners or cooperatives.

<sup>&</sup>lt;sup>57</sup> PRAAD-Accra RG 7/1/220 'Ghana Rubber Products'; See also Miracle and Seidman, "State Farms in Ghana," 22.

<sup>&</sup>lt;sup>58</sup> PRAAD-Accra RG 7/1/220 'Ghana Rubber Products.' To add to this paradox, while European-owned plantations exported their rubber, processed rubber was being imported by a publicly-aided tire re-treading company, the Ghana Tyre Service Limited; see PRAAD-Accra RG 7/1/1575 'Ghana Tyre Service Limited.' This company was originally called the Gold Coast Tyre Service Limited, as plans for its foundation begin before independence in 1953.

<sup>&</sup>lt;sup>59</sup> PRAAD-Accra RG 7/1/220 'Ghana Rubber Products.' These processing facilities were the Ghana Rubber Industries Limited proposed by American investors and the Volta Rubber Company, proposed by Lebanese investors.

#### Tapping Ghanaians, 1957-66

and technical support. The Ministry of Agriculture disbanded the ADC and transferred its focus from its extension program to its large-scale commercial rubber plantations. Farmers and cooperatives soon found it extremely difficult to access any of the materials they needed to establish and support their rubber farms. The seed-multiplication unit at Aiyinase could not keep up with the demands of both private farmers and the state's plantations, resulting in a shortage of seedlings and budded stumps. This was despite the fact that USAID (which continued to provide aid to the station after Ghana tilted toward the Soviet Union) purchased hundreds of thousands of clonal seeds from Liberia to boost the nursery's supply. Furthermore, farmers did not receive the expected £5/acre/year government subsidy beyond the first installment. By the time the material bottleneck at Aiyinase had finally eased in 1964, many farmers had lost interest in the disappointing rubber project.<sup>60</sup>

Despite the lack of government support and modern materials, some farmers innovated thrifty techniques to plant and harvest rubber at low costs. For example, people who could not access seedlings or budded stumps from nurseries chose to scavenge for their own rubber seeds.<sup>61</sup> Those whose farms had already reached tappable maturity saved money by substituting coconut shells, bamboo, or old milk tins held up by sticks in place of ceramic cups conventionally strapped with wire to each tree for latex collection.<sup>62</sup> Inserted into trees' tapping panels were spouts that some farmers handcrafted from old roofing sheets or tin cans. To coagulate the liquid latex into more portable "cuplump" biscuits, farmers squeezed lime juice into the runny substance.<sup>63</sup> Finally, some farmers even built small private smokehouses, where they could locally process raw latex into ribbed smoked sheets to sell directly to manufacturers.<sup>64</sup> In so doing, Ghanaian citizens were taking the development of the rubber industry into their own hands. Citizens, too, were visionaries.

<sup>&</sup>lt;sup>60</sup> "Smallholder's Cultivation of Rubber in the Western Region of Ghana," 4-20.

<sup>&</sup>lt;sup>61</sup> "Smallholder's Cultivation of Rubber in the Western Region of Ghana," 10-14. Also, during an interview with Mr. Aikins (Manager of the Rubber Outgrowers Plantation Project of Ghana Rubber Estates Limied, Apimenim, October 2014), he explained that in the 2000s, when the Rubber Outgrowers Project was supporting farmers who were establishing new rubber farmers, during fieldwork he observed that many of the oldest rubber trees had grown not from imported clones but from unselected seeds. Those with a keen eye can determine the clone of a mature tree. Sometimes, nature itself can serve as an archive.

<sup>&</sup>lt;sup>62</sup> Interview at Avreboo (Elubo), July 24, 2015; Interview with Yaa Edu, Abura, July 22, 2015; Interview with Frederick Duku, Ajumako, October 2014. See also "Smallholder's Cultivation of Rubber in the Western Region of Ghana," 55-57.

<sup>&</sup>lt;sup>63</sup> Interview with Abraham Aikins, Apimenim, November 2013.

<sup>&</sup>lt;sup>64</sup> Interview with John Edya Blay, Enyano, July 22, 2015.

However, rubber farmers relying on resourcefulness alone would not have been able to compete with other global producers, such as Malayans who had many advantages over Ghanaian farmers. For example, farmers in Malaya had access to clonal seedlings that could produce three to four times more latex per acre than the varieties planted by Ghanaian farmers.<sup>65</sup> Ghanaian farmers who scavenged for seeds condemned themselves to penury, to paraphrase one USAID agent's description of the plight of Ghanaian rubber farmers in the 1960s.<sup>66</sup> Moreover, farmers in Malaya could access credit more easily than farmers in Ghana, most of whom could not afford to purchase fertilizer or other useful inputs.<sup>67</sup> Finally, while the Malayan industry was innovating cutting-edge processing technologies and investing in biochemical research on latex formation, Ghana still was relying on artisanal latex-processing houses. Although some foreign investors had expressed interest in constructing latex processing facilities in Ghana, these had not come to fruition.<sup>68</sup> As Nkrumah's development state focused its resources on large-scale projects, rubber farmers learned firsthand the very real tensions between citizens' autonomy and national sovereignty.

# Western Region Residents – Sacrifice and the Right to Subsistence

Most people residing in the Western Region did not attempt to grow rubber in the late 1950s, as it was an unfamiliar crop.<sup>69</sup> These people were affected by the government's rubber plans only once officials from the Ministry of Agriculture came to claim land. In some areas, this occurred as early as 1959, when ADC expropriated plots in order to establish nurseries and demonstration farms.<sup>70</sup> But it was during the SFC era that many more residents in the Western Region were

<sup>&</sup>lt;sup>65</sup> "Smallholder's Cultivation of Rubber in the Western Region of Ghana," 28. Farmers in Malaya were planting clones known as "RRIM-500 and RRIM-600, while Ghanaian farmers were planting unselected seedlings or obsolescent clones such as Tjir 1 and PB 86. Today, RRIM 600 series is typically considered obsolete by Malaysian rubber farmers, but it is commonly planted by rubber farmers in Ghana, where the government still does not fund research into the rubber industry despite its rapid expansion.

<sup>&</sup>lt;sup>66</sup> "Smallholder's Cultivation of Rubber in the Western Region of Ghana," 26.

<sup>&</sup>lt;sup>67</sup> For more on Malaya's smallholder rubber industry, see Martin Rudner, "Malayan Rubber Policy: Development and Anti-Development during the 1950s," *Journal of Southeast Asian Studies*, Volume 7, Issue 2 (September 1956): 235-259. As one USAID agent pointed out at the time, even if Ghanaian farmers had the money, they would face the challenge of obtaining instruction on how to use the chemicals without damaging the trees. Malayan farmers could get this advice via their government's premier extension service.

<sup>&</sup>lt;sup>68</sup> Why these processing facilities were never built is left obscure in the archival records. See PRAAD-Accra RG 7/1/220, 'Ghana Rubber Products, 1959-61'; see also "Smallholder's Cultivation of Rubber in the Western Region of Ghana," 23.

<sup>&</sup>lt;sup>69</sup> This sentiment is expressed by many people who remember the arrival of ADC and the State Farms Corporation. In one instance, I talked at length about this during an interview with James Duku, Ajumako, conducted in Fante and translated by Frederick Duku, July 12, 2015.

<sup>&</sup>lt;sup>70</sup> Interviews conducted in July 2015; in particular Moses Bibi, Mr. Mensah, Kweku Inketia, UI Bai, and Moses Andoe discussed this early time period.

impacted by the rubber initiative, which at that point expanded to include a 40,000-acre concession at Abura.<sup>71</sup> According to people still living in the area today, there were no negotiations over the land between local chiefs and Nkrumah's representatives.<sup>72</sup> One elderly man explained "The government of that time came in all of a sudden and then took the land without even a conversation."<sup>73</sup> Another recalled, "It was by force – either you like it or not, you have to obey."<sup>74</sup> Moreover, people in that part of the Western Region felt obliged to support Nkrumah, whose lineage (so people in the area claim) can be traced to the town of Nsuaem.<sup>75</sup> One man described the predicament that the Paramount Chief of Nsuaem, who controlled the stool lands throughout that area, faced:

Kwame Nkrumah, you know, he was the first president! He was a very fearful person! So when he said 'I have surveyed the land, this is what I want to establish,' there was no option. You see, Kwame Nkrumah was from Nsuaem. A man from here and the first president bringing a job? There was no choice.<sup>76</sup>

Although communities in the Western Region begrudged the imposition from above, they believed

they could do little to change the mind of the state. These citizens in the Western Region were

realizing Ghana may have liberated itself from British colonialism, but new authorities would

constrain their personal autonomy.<sup>77</sup>

People's whose lands were expropriated by SFC faced major difficulties, as most relied

solely on farming for their livelihoods. All families in the area were accustomed to eating the foods

that they grew on their farm, including cassava, yams, plantains, peanuts, fruits, and vegetables.<sup>78</sup>

Some people also planted coconut trees and oil palms to earn cash with which they could purchase

<sup>&</sup>lt;sup>71</sup> Ghana Rubber Estates Limited Master Plan; Miracle and Seidman, "State Farms in Ghana," 24. Also: interviews with Abraham Aikins, Apimenim, July 20, 2015, and with Nana Assa, Nsuaem, July 24, 2015. This concession stretched across land in the Ahanta West, Nzema East, and Tarkwa-Nsuaem districts.

<sup>&</sup>lt;sup>72</sup> During interviews, some people recalled that the government flew over the region in an airplane or a helicopter and mapped out the concession that the state would devote to the SFC Rubber Project. Kweku Inketia, Adiewoso, July 22, 2015 and Mr. Mensah, Essaman, July 24, 2015.

<sup>&</sup>lt;sup>73</sup> Interview with Mr. Mensah, Essaman, July 24, 2015. Mr. Mensah was about 20 years old when the State Farms Corporation began work on the Rubber Project.

<sup>&</sup>lt;sup>74</sup> Interview with James Duku, Ajumako, conducted in Fante and translated by Frederick Duku, July 12, 2015.

<sup>&</sup>lt;sup>75</sup> Interview with Kweku Inketia, conducted in Twi and translated by Moses Andoe, July 22, 2015. Many informants throughout the area believe that Kwame Nkrumah's mother's family comes from Nsuaem, and therefore the chiefs of that town were more willing to grant large land concessions to the CPP after independence.

<sup>&</sup>lt;sup>76</sup> Interview with Kweku Inketia, conducted in Twi and translated by Moses Andoe, July 22, 2015.

<sup>&</sup>lt;sup>77</sup> However, while interviews collected in 2015 suggest negative attitudes toward the rubber development plan among residents of the Western Region, this pessimism has likely intensified since that time. Informants recalled that although some people, in particular older generations, were wary of giving up their land, Nkrumah's project was also seen as a gift, as they hoped it would bring employment and progress to the area. (Interview with Mr. Mensah, Essaman, July 24, 2015.)

<sup>&</sup>lt;sup>78</sup> Interview with Moses Andoe, Ajumako, July 14, 2014.

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medicine, buy clothes, and pay their children's school fees. One man had cleared a swath of forest on which he planted a large coconut farm just before SFC confiscated the land; nearly six decades later, he still lamented the loss: "They scattered everything... It reduced the town's progress. All of a sudden, everything is destroyed."<sup>79</sup> Farm owners were given no assistance establishing new farms (if they could find land). Moreover, because individual farmers only had use-rights over the plots they cultivated (rather than property rights over the land), those who had invested their time and strength into clearing virgin and secondary forest did not receive any compensation.<sup>80</sup> In the interest of national economic growth, farmers were forced to sacrifice their own sovereignty and security.

Nevertheless, even as land in the Western Region was absorbed by the government, people there learned ways to stake claims to certain rights. Six men tried in vain to physically halt SFC agents who came to survey the land, but they were taken at gun-point to be imprisoned at the regional police station for several days.<sup>81</sup> Most people resorted to other tactics, such as appealing to the government to appreciate that subsistence crops, as fuel for hard work, was a fundamental building block to the nation's development. On this ground, residents of the Western Region asserted that they needed land near their villages on which they could grow food; according to one official report, "The farmers don't actually claim back [all of] their lands. They even acquiesce in the destruction of their farms by the Corporation for the wider interest of the nation."<sup>82</sup> Indeed, petitioners were merely requesting that the government set aside some land for the sake of subsistence farming. People were careful not to suggest they were trying to side-step the nation-making process: "We all want Ghana to develop and therefore do not object to the corporation taking our land in aid of our mother

<sup>&</sup>lt;sup>79</sup> Interview with James Duku, conducted in Fante and translated by Frederick Duku, Ajumako, July 12, 2015.

<sup>&</sup>lt;sup>80</sup> In some cases, moreover, SFC managers disregarded the boundaries of the concession by destroying farms that were supposed to still be under the control of resident farmers. This caused additional friction between the state and the local population. WRG 24/2/505 'State Farms,' Land Dispute record. This was also discussed during an interview with James Duku, conducted in Fante and translated by Frederick Duku, Ajumako, July 12, 2015.

In the very dramatic case of the village of Gyabumkrum, the residents did not merely face the loss of their farms, but also of their homes; the whole village was forced to shift up the road several kilometers, where they would need to construct new houses, with only aluminum sheets provided for their roofs. Moses Andoe and interviews with residents of Gyabumkrum II, July 2015.

<sup>&</sup>lt;sup>81</sup> Interview with Ama Aku, conducted in Fante and translated by Ruth Duku, July 23, 2015; Interview with Moses Andoe, Ajumako, July 14, 2015.

<sup>&</sup>lt;sup>82</sup> PRAAD-Sekondi 24/2/505 'State Farms 1966-69,' report by District Commissioner, J.E. Blay, 1966.

Ghana's property...But we hope the same maternal love will reach us to wipe our sorrowful tears."<sup>83</sup> Residents also petitioned to the government for reimbursement for the crops that SFC destroyed; the land itself was not theirs, but by tradition farmers did own what they planted.<sup>84</sup> In these ways, citizens deftly upheld the state's vision for Ghana's future, while also declaring that citizenship responsibilities went hand in hand with certain rights.

The chief of Bonsaso, where the tire factory was being constructed, engaged with Nkrumah's development state in the most self-serving ways of all. First, the chief, Nana Atakora Koi III, offered up a plot of land in Bonsaso "most willingly...free of charge to the state as my contribution towards the economic development of Ghana."<sup>85</sup> He made sure that the government knew precisely all that the large site had to offer, including level grounds, easy access to the Tarkwa-Takoradi road, proximity to the Bonsa River, and a ready work-force in nearby communities. As construction of the factory commenced, Atakora took it upon himself to voluntarily supervise the work to ensure that the equipment was being stored securely and that efficient laborers were paid fair wages on time (even if it meant paying them himself). Eventually, after several months working free of charge, the Ministry of Industries added Atakora to its payroll.<sup>86</sup> Whenever he consulted with ministry officials, moreover, Atakora made sure to remind them of his contributions to the project and to request

that as time goes on, due consideration be given to the members of my family as well as my relatives and descendants to come when awarding scholarships and who only want to seek employment at the factory...Yours in National Service, Nana Atakora Koi III.<sup>87</sup>

By keenly engaging with Nkrumah's nation-making project, the chief concurrently sought to forge a patron-client relationship for his own private interests.

<sup>&</sup>lt;sup>83</sup> PRAAD-Sekondi 24/2/505 'State Farms 1966-69,' petition to the Western Regional Office, 1966.

<sup>&</sup>lt;sup>84</sup> Many informants discussed this during interviews conducted in July 2015. See also PRAAD-Sekondi 24/2/505 'State Farms 1966-69,' petitions to the Western Regional Office. For more information on the issue of land and crop ownership, see Austin, *Labour, Land, and Capital in Ghana.* 

<sup>&</sup>lt;sup>85</sup> PRAAD-Accra 7/1/1832 'Bonsaso Rubber Plant, 1961-62," letter to the Ministry of Industries from Nana Atakora Koi III, July 1, 1962.

 <sup>&</sup>lt;sup>86</sup> PRAAD-Accra 7/1/1832 'Bonsaso Rubber Plant, 1961-62,' report by the Secretary of the Ministry of Industries, July 23, 1965.
<sup>87</sup> PRAAD-Accra 7/1/774 'Rubber Tyre Factory Bonsaso.' This sentiment was expressed numerous times in letters and reports sent by Atakora, alias George Stephen Oseeko Atakora, to the Ministry of Industries.

# Laborers – Manpower and Nation-Making

Many Ghanaian men and women from the Western Region and all throughout Ghana actively embraced the Rubber Project by applying to work for SFC. Young people in particular were especially enthusiastic due to the lack of other wage-paying job opportunities at that time.<sup>88</sup> Depending on the task – slashing, line-clearing, weeding, planting, etc. – laborers earned from 4 shillings and 10 pence to 7 shillings per day, seven days a week.<sup>89</sup> Supervisors, accountants, drivers, clinic technicians, and other more specialized roles earned higher salaries. Reportedly, 3,000 male laborers and 2,500 female laborers took up cutlasses and felling axes to clear away secondary and virgin forest where rubber plantations were to be established.<sup>90</sup> By 1964, SFC had planted nearly 10,000 acres of new rubber trees, with over 6,000 acres cleared and ready to be planted during the

next rainy season.<sup>91</sup> The area under rubber had doubled to 20,000 acres by 1966.<sup>92</sup> The Overall

Manager of the Rubber Project declared that

I am quite convinced that I could never have achieved the same result anywhere else in the world under the same conditions and circumstances. It is only because of the common sense of my people and their readiness to take advice and to work hard that all this could be done.<sup>93</sup>

Even without Soviet tractors and machinery, the SFC was industrializing the Western Region's

landscapes with discipline and "manpower!"94

But the employees driving the SFC Rubber Project's rapid progress faced difficult

conditions, both in terms of on-site hazards and extra-occupational issues. This partly arose from the

sheer scale of the project, which required not only substantial material inputs, but also well-trained

<sup>&</sup>lt;sup>88</sup> Interview with Kweku Inketia, conducted in Twi and translated by Moses Andoe, Adiewoso, July 22, 2015. For more on the Worker's Brigade, see Jeff Ahlman, "A New Type of Citizen: Youth, Gender, and Generation in the Ghanaian Builders Brigade," *Journal of African History* 53, no. 1 (2012): 87-105. Other than assisting in the expansion of the rubber block at Aiyinase, the Workers Brigade were not involved in the rubber project.

 <sup>&</sup>lt;sup>89</sup> Interview with Kweku Inketia, conducted in Twi and translated by Moses Andoe, Adiewoso, July 22, 2015; Interview with Moses Bibi, conducted in Twi and translated by Moses Andoe, Abura, July 21, 2015; Interview with Mr. Mensah, Essaman, July 24, 2015.
<sup>90</sup> PRAAD-Sekondi 24/2/505 'State Farms 1966-69,' report by R.H. van Drooge, Overall Manager of the Rubber Project of the State Farms Corporation from 1960-1966, June 12, 1066.

<sup>&</sup>lt;sup>91</sup> Miracle and Seidman, "State Farms in Ghana," 24.

<sup>&</sup>lt;sup>92</sup> PRAAD-Sekondi 24/2/505 'State Farms 1966-69,' report by R.H. van Drooge, Overall Manager of the Rubber Project of the State Farms Corporation from 1960-1966, June 12, 1966. SFC as a whole controlled a total of 105 farms covering 49,000 acres across all of Ghana and employed 18,800 Ghanaian men and women by 1965. See Marvin Miracle and Ann Willcox Seidman, "State Farms in Ghana," Lend Tenure Paper no. 43 (Madison: University of Wisconsin , 1968): 17.

<sup>&</sup>lt;sup>93</sup> PRAAD-Sekondi 24/2/505 'State Farms 1966-69,' report by R.H. van Drooge, Overall Manager of the Rubber Project of the State Farms Corporation from 1960-1966, June 12, 1966.

<sup>&</sup>lt;sup>94</sup> Interview with Moses Bibi, conducted in Twi and translated by Moses Andoe, Abura, July 21, 2015; Interview with Mr. Mensah, Essaman, July 24, 2015.

and responsible leadership ranks, both of which Ghana struggled to supply. The only two men engaged in the scheme who had experience of large-scale rubber cultivation were the Overall Manager, R.H. Van Drooge, and his Deputy C. Ainoo Addison, who had previously managed a rubber plantation at Avreboo.<sup>95</sup> SFC drew from local leadership, especially chiefs and older men, to serve as overseers; promotions to higher-paying roles typically had more to do with a person's social and political ties than with his knowledge or management skills.<sup>96</sup> Van Drooge wrote in one report that "While the plantation was expanding very fast, the training and education of the staff could not keep step with it."<sup>97</sup> Moreover, laborers who had migrated from other parts of Ghana did not have any experience working in the rainy, forested zone in that part of the country, which proved potentially deadly. On numerous occasions, newcomers died during forest felling and burning. One elderly man recalled a truck accident in which dozens of people died when a driver did not realize just how slippery a muddy slope could get in the rainy season.<sup>98</sup> Lacking trained personnel to orchestrate its hurried expansion, the rubber project proved unnecessarily hazardous.

The difficulty and danger of the work, however, was not the greatest concern for SFC employees, who became frustrated they were not being treated fairly for their national service. Foremost, the villages surrounding the rubber project could not accommodate the enormous influx of workers, because the Rubber Project had not constructed housing for its employees as it had planned to. As a result, migrant workers were paying high rents to local citizens for small rooms in overcrowded villages far away from their work sites.<sup>99</sup> Migration for economic reasons was not a new practice in Ghana, but moving to a new place still entailed inevitable difficulties. One man, when speaking about his gratitude for Nkrumah's launch of the Rubber Project in his own home

97 PRAAD-Sekondi WRG 24/2/505 'State Farms 1966-69.'

<sup>&</sup>lt;sup>95</sup> PRAAD-Sekondi WRG 24/2/505 'State Farms 1966-69.' Van Drooge requested that another Rubber Planted be hired to assist in the training of the SFC staff, but his request was denied. PRAAD-Sekondi WRG 24/1/573 'Post-WW2 Plans," a letter from C Ainoo-Addison and James K. Odoom, managers of the West African Rubber Company, to Kwame Nkrumah, 5/13/1951.

<sup>&</sup>lt;sup>96</sup> Interview with Nana Assa, Nsuaem, July 24, 2015, who explained that chiefs were often put on the payroll of the State Farms Corporation; while some in fact worked as overseers, many simply collected their pay each month without being involved in the project. See also PRAAD-Sekondi WRG 24/2/505 'State Farms 1966-69.'

<sup>&</sup>lt;sup>98</sup> Interview with Ama Aku, conducted in Fante and translated by Ruth Duku, July 23, 2015; Interview with Moses Andoe, Ajumako, July 14, 2015; Interview with Moses Andoe, Ajumako, July 14, 2015.

<sup>&</sup>lt;sup>99</sup> Migrant workers tended to be Gas, Krobos, Asantes, and Ewe. Residents who lived in the southwestern rubber-producing areas prior to SFC were Ahanta, Nzima, Wassa, and Fante. See the Ghana Rubber Estates Limited Master Report (2001).

town, explained: "To seek a job was not easy. When you travel to some place you don't know, you don't know anybody there, you don't have anything there."<sup>100</sup> Yet the government did nothing to ease the challenges these newcomers faced in assimilating to new locales.<sup>101</sup>

To make matters even more frustrating, levies and social security payments were deducted from workers' salaries each month, but the workers suspected these funds went into the pockets of corrupt officials, as they saw no improvements to their work or living spaces. SFC did not improve the standard of living in these communities, for example by constructing latrines, founding schools, or building market stalls – a far cry indeed from the plans to have a cinema and other "social facilities" attached to each state farm.<sup>102</sup> The SFC did build a company canteen, but it was regularly out of stock and always overpriced. Furthermore, although "Farm Committees" composed of managers and elected workers were supposed to meet each week to discuss their grievances and the project's progress, not all managers attended these meetings, consequently exacerbating workermanagement tensions. Ghanaian men and women had demonstrated their ability and willingness to work long, demanding days for the betterment of the nation, but the SFC did not seem to be taking steps to match the citizens' commitment to this cause.

Meanwhile, the construction of the tire factory, which was supposed to be manufacturing finished products by mid-1964, had barely commenced; only the site had been cleared at that point. By 1965, just a fraction of the machines purchased from the Czechs had reached Bonsaso, while other equipment was being held by customs in Takoradi, and still more remained in rented storage facilities on Czech soils. Rather than proceeding with the factory's construction, the supervisors in Bonsaso scrambled to build a shed in which all of the equipment could be protected. Due apparently to bureaucratic inefficiencies, including delays in securing adequate credit and import licenses, the industrial portion of Nkrumah's rubber project came to a screeching halt.<sup>103</sup>

<sup>&</sup>lt;sup>100</sup> Interview with Mr. Mensah, Essaman, July 24, 2015.

<sup>&</sup>lt;sup>101</sup> This continued to be a problem throughout the 1970s, 80s, 90s, and today, especially once land became increasingly scares as the rubber industry began to expand in the mid-1990s.

<sup>&</sup>lt;sup>102</sup> PRAAD-Accra, 4/1/84 'Foreign Technical Assistance Russia.'

4/12/2016

# THE NLC AND FIRESTONE

As Nkrumah's "big push" plan for development failed to deliver on its promises all across Ghana and political power became increasingly centralized under the one-party state, resistance to the Convention People's Party mounted. On February 23<sup>rd</sup>, 1966, a military coup led by the National Liberation Council (NLC) and assisted by the United States Central Intelligence Agency removed Nkrumahs' regime from power. Counter to Nkrumah's anti-neocolonialist policies, the NLC favored private multinational investment per the advice of the International Monetary Fund and the World Bank.<sup>104</sup> During 1966 and 1967, the NLC's Agricultural Committee recommended the abolition of SFC and the disposal of all 125 state farms, while the NLC's National Economic Committee offered up state factories to foreign companies in the West.<sup>105</sup> The NLC sought foremost to attract foreign capital and technical expertise that would bring higher levels of productivity to Ghana's agricultural and industrial sectors that had not been achieved under state control.

The fate of the SFC Rubber Project and Tyre Factory lay precariously in the hands of the new regime. A few months after the coup, however, in May 1966, nearly 3,000 SFC Rubber Project workers voiced their role in its future when they collectively declared that they would no longer accept unfair treatment. They asserted "*Ye n'koh adwuma ara da*" – "we will never go to work" – unless managers agreed to hand over the records that indicated how money regularly deducted from their salaries, supposedly to build workers' quarters, was actually being spent.<sup>106</sup> On the third day of the strike, tension escalated: workers shattered windows, office staff fled, and a police corporal arrived in a Land Rover to salvage the corporation's files. After dispelling the workers from the scene, the NLC officially halted all development of the plantations and rubber tire factory.<sup>107</sup>

In June 1966, the NLC advertised the entire enterprise to foreign companies. By mid-1967, the government of Ghana had narrowed down the bidders to Continental Tires of Germany as well as

<sup>&</sup>lt;sup>104</sup> For an analysis of this advice and for copies of the primary documents shared between the IMF and the government of Ghana, see Eboe Hutchful, *The IMF and Ghana: The Confidential Record. New Jersey: The Institute for African Alternatives, Zed Ltd.*, 1988. <sup>105</sup> Hutchful *The IMF and Ghana*, 29-30.

<sup>&</sup>lt;sup>106</sup> PRAAD-Sekondi WRG 24/2/505 'State Farms, 1966-1969'; Interview with Moses Andoe, Ajumako, July 14, 2015; Interview with Moses Bibi, conducted in Twi and translated by Moses Andoe, Abura, July 21, 2015.

the Goodyear Tire and Rubber Company and the Firestone Tire and Rubber Company, both of the United States.<sup>108</sup> The National Economic Committee chose to sell the majority of shares of the integrated agro-industrial enterprise to Firestone because, according to a report by the negotiating committee, "It seems to us that Firestone will be the quickest off the mark."<sup>109</sup> The hope that a rubber industry in the hands of Ghanaians could play a part in the nation's future was officially extinguished. Concessions to Firestone included its exemption from income taxes, customs duties, sales taxes, and property taxes for ten years, plus unrestricted license to control the selling price of its products, tires, over which they had a monopoly within Ghana.<sup>110</sup> Would Ghanaians, too, reap benefits from this American-owned enterprise, once imagined as a nation-building project?

# **CONCLUSION: TAPPING GHANAIANS**

Six decades ago, the possibilities for African decolonization and development seemed auspicious. Kwame Nkrumah and other African leaders recognized that African peoples faced certain constraints, but with planning, hard work, and discipline, they envisioned a prosperous future for the continent. Nkrumah in particular believed a united Africa could maintain independence from both the communist East and the capitalist West by ensuring the continent's economic self-sufficiency. During the time that Nkrumah led Ghana, his plans for how to go about achieving this goal shifted from entrusting economic development to industrious citizens, to jet-propelling national development with ambitious state-led projects. On paper, each iteration of Ghana's agro-industrial rubber scheme – first, led by private farmers, cooperatives, and industrialists, then managed by the state – held much promise. In either case, Nkrumah envisioned Ghanaians cultivating not just trees, but nationhood; factories would produce manufactured goods representing a modernized, self-sufficient economy. Ghanaians, moreover, embraced this vision. During the ADC-era they sought out planting materials

<sup>&</sup>lt;sup>108</sup> PRAAD-Accra RG 7/1/774 'Rubber Tyre Factory Bonsaso.'

<sup>&</sup>lt;sup>109</sup> PRAAD-Accra RG 7/1/774 'Rubber Tyre Factory Bonsaso.'

<sup>&</sup>lt;sup>110</sup> Akilagpa Sawyerr, "Multinational Corporations and Development: The Case of the Rubber Industry in Ghana" in *Law in the Political Economy of Public Enterprise: African Perspectives*, edited by Yash Ghai (New York, NY: International Legal Centre, 1977), 290.

and subsidies to develop their own farms, and later during the SFC-era they took up cutlasses to join in the nation-building state projects.

Although the ecological conditions of the rainy southwestern forests of Ghana provided the ideal setting for the cultivation of rubber, the industry's development did not unfold as imagined. In order to prosper, a rubber industry requires more than fertile soils and hard-working people. Farm owners, or the state, must have access to capital or credit to cover initial costs. A system must exist to organize and train laborers to plant, maintain, and tap rubber trees. Rubber farms, moreover, depend on off-farm infrastructure: a network of access roads, nurseries with high-quality planting materials, latex processing facilities, and manufacturing plants staffed by trained technicians. Perhaps even more challenging than ensuring these material components is designing and enforcing a legal system that enables many people – not just a powerful few – to benefit from the industry.

By aiming to achieve in one "big push" what other countries, like Malaysia, had built up over the course of several decades, leaders of Ghana overlooked that development takes *time*. Had the rubber industry's development been phased to unfold more gradually, resources would not have been stretched so thin. But instead, Nkrumah's government anchored the project to a target in the future, and in so doing government planners prioritized the final outcome over the process of getting there. The government's aggressive efforts to tap Ghana's citizens and resources in order to reach its ambitious targets were unsustainable. The state failed to strike the delicate balance between both pressuring and providing for its population. Tapping too soon or cutting too deep will kill the tree.

In the process, however, ordinary Ghanaians enacted nation-building in a range of provident ways. Influential individuals disguised private plantations as cooperatives to obtain subsidies; rubber farmers facing credit and capital shortages innovated thrifty technologies; subsistence farmers and landowners sought the state's favor in return for sacrificing their property; and young men and women applied for wage-earning jobs in state enterprises. Even while Ghanaians under Nkrumah's regime intuited the incongruity of nation-making and liberation, they participated in state projects so that they might preserve some degree of personal sovereignty and security through them by

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becoming national subjects. Thus by clearing land, planting rubber, and letting themselves be "tapped," Ghanaians were actively affirming their responsibilities to the nation and concurrently staking their claim to a fair share of the nation's forecasted economic prosperity. At the very heart of the concept of citizenship, as manufactured by ordinary Ghanaians in the years following independence, was the promise of a brighter future.

# Bibliography

"Ghana is Free Forever: Kwame Nkrumah's Speech at Independence, March 6, 1957," BBC World Service,

http://www.bbc.co.uk/worldservice/focusonafrica/news/story/2007/02/070129\_ghana50\_inde pendence\_speech.shtml, accessed April 3, 2016.

- Ahlman, Jeffrey. "A New Type of Citizen: Youth, Gender, and Generation in the Ghanaian Builders Brigade," *Journal of African History* 53, no. 1 (2012): 87-105.
- Amanor, Kojo and Janine Ubink, eds. *Contesting Land and Custom in Ghana: State, Chief, and the Citizen.* Chicago, IL: The University of Chicago Press, 2009.
- Arhin, Kwame. "The Ashanti Rubber Trade with the Gold Coast in the 1890s," *Africa: Journal of the International African Institute*, Vol. 42, No. 1 (January 1972): 32-43.
- Austin, Gareth. Labour, Land, and Capital in Ghana: From Slavery to Free Labour in Asante, 1807-1956. Rochester, NY: University of Rochester Press, 2009.
- Bowen, Merle. *The State Against the Peasantry: Rural Struggles in Colonial and Postcolonial Mozambique*. Richmond, VA: University of Virginia Press, 2000.
- Cooper, Frederick and Randall Packard, eds. International Development and the Social Sciences: Essays on the History and Politics of Knowledge. Berkeley, CA: University of California Press, 1998.
- Cooper, Frederick. "Possibility and Constraint: African Independence in Historical Perspective." *Journal of African History*. Volume 49, Number 2 (2008): 167-96.
- Dumett, Raymond. "The Rubber Trade of the Gold Coast and Asante in the Nineteenth Century: African Innovation and Market Responsiveness." *Journal of African History*, Vol. 12, No. 1 (1971): 79-101.
- Eady, G.H. "Yields of *Hevea brasiliensis* on Experiment Stations, 1891-1929." Department of Agriculture, *Gold Coast Bulletin*, No. 18 (1930):
- Grischow, Jeff and Holger Weiss. "Pan-Africanism, Socialism, and the Future: Development Planning in Ghana: 1951-66," in *The Struggle for the Long-Term in Transnational Science and Politics: Forging the Future*, ed. by Jenny Andersson and Egle Rindzeviciute.
- Hill, Polly. *Studies in Rural Capitalism in West Africa*. Cambridge: Cambridge University Press, 1970.
- Hutchful, Eboe. *The IMF and Ghana: The Confidential Record*. New Jersey: The Institute for African Alternatives, Zed Ltd., 1988.
- Hyden, Goran. *Beyond Ujamaa in Tanzania: Underdevelopment and an Uncaptured Peasantry.* London: Heinemann Educational Books, Ltd., 1980.

- Krause, Monika. "Recombining Micro/Macro: The Grammar of Theoretical Innovation," *European Journal of Social Theory*, Volume 16, Number 2 (2013): 139-52.
- Lal, Priya. *African Socialism and Postcolonial Tanzania: Between the Village and the World*. New York, NY: Cambridge University Press, 2015.
- Li, Anshan. British Rule and Rural Protest in Southern Ghana. New York, NY: Peter Lang, 2002.
- Miracle, Marvin and Ann Willcox Seidman. "State Farms in Ghana." Lend Tenure Paper no. 43. Madison: University of Wisconsin , 1968.
- Mitchell, Timothy. *Rule of Experts: Egypt, Techno-Politics, Modernity*. Berkeley, CA: University of California Press, 2002.
- Munro, J.F., "Monopolists and Speculators: British Investment in West African Rubber, 1905-1914," *Journal of African History*, Volume 22, Number 2 (1981): 263-278.
- Oppong-Anane, Kwame. "Ghana Country Pasture/Forage Resource Profiles." *Ministry of Food and Agriculture*, last modified 2007, accessed December 5, 2014
- Osei-Kwame, Peter. "The Development of State Farms in Ghana." Unpublished B.A. thesis, Department of Geography, University of Ghana, 1969.
- *Portrait of the Global Rubber Industry: Driving the Wheel of the World Economy.* Kuala Lumpur: International Rubber Research and Development Board, 2006.
- Rudner, Martin. "Malayan Rubber Policy: Development and Anti-Development during the 1950s." Journal of Southeast Asian Studies, Volume 7, Issue 2 (September 1956): 235-259.
- Sawyerr, Akilagpa. "Multinational Corporations and Development: The Case of the Rubber Industry in Ghana" in *Law in the Political Economy of Public Enterprise: African Perspectives*, edited by Yash Ghai, 267-294. New York, NY: International Legal Centre, 1977.
- Tilley, Helen. Africa as a Living Laboratory: Empire, Development, and the Problem of Scientific Knowledge, 1870-1950. Chicago: University of Chicago Press, 2011.
- United States Agency for International Development Mission to Ghana. "Smallholder's Cultivation of Rubber in the Western Region of Ghana." Tropical Horticulture Technical Report compiled by Harold A. Hansen. September 1968.
- White, Nicholas. "The Frustrations of Development: British Business and the Late Colonial State in Malaya, 1945-57." Journal of Southeast Asian Studies