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THE BATTLE FOR RUBBER IN BENIN

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ABSTRACT. At the start of the Second World War, British policies restricted rubber planting in Nigeria's Benin region. After Japan occupied Southeast Asia, Britain encouraged maximum production of rubber in Benin. Late in the war, officials struggled with the planting boom that had occurred. The war was a period of both continuity and change. Producers gained experience and capital. Forestry policies restricting planting survived, and output quality continued to occupy officials after the war. The colonial state was hindered by a lack of knowledge and resources, and by its pursuit of conflicting objectives in giving incentives to both producers and traders.

1. INTRODUCTION

The Second World War brought economic upheaval to sub-Saharan Africa. The Allied drive for rubber production in Nigeria's Benin region was no exception. Before 1942, the Colonial Office worried Nigerian rubber undermined British interests in its other rubber-producing colonies, and discouraged planting. After the Japanese occupation of Southeast Asia, the "battle for rubber" began, and Britain sought maximum production of wild and plantation rubber in Benin. Once it was clear the war would be won, the government fought to contain the unexpected boom in wartime planting. In this paper, I provide a narrative of rubber production in Benin during the Second World War.

Benin's wartime rubber production is a window into two issues. First, the importance of the Second World War for African economies is not settled. Many colonies faced government controls, scarce imports, inflation, forced labour, and conscription.² The war initiated the "second colonial occupation" of greater intervention in African economies (Killingray and Rathbone, 1986; Meredith, 1986). There is, however, no consensus on whether the war was a watershed. While Lonsdale (1986) claims the war altered the balances of economic and political power in Kenya, Anderson and Throup (1985) trace these changes to earlier trends. Martin (1989) situates the war in a longer African depression. Recent work, then, identifies both continuity and change. The Malawian agricultural extension service, for example, revised its strategies and scale after the war, but not its aims and policies (Green, 2009).

In Benin, the war brought continuity and change. Direct restrictions on tree planting were undermined. Firms became familiar with rubber, and continued the trade afterwards. Farmers gained experience and the position of smallholders was solidified. Conversely, forest reservation had hindered planting before the war and remained

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² See Killingray and Rathbone (1986), UNESCO (1985) and *The Journal of African History*, Volume 26, Issue 04, 1985.

afterwards. African smallholders produced the low-quality grades that were most profitable, and the Nigerian government could not alter their behaviour during or after the war.

Second, this episode sheds light on the limits of the colonial state. Lacking resources and blinded by prejudices and misinformation, colonial governments relied on local elites (Berry, 1993; Phillips, 1989). This made economic change risky (Meredith, 1975). Projects failed due to inadequate preparation and overconfidence (Hogendorn and Scott, 1981). Colonial states were hobbled by pursuit of conflicting objectives. The goals of raising living standards, securing raw materials, and supplying a market for manufactures often clashed (Meredith, 1975). Colonial Office responses to economic problems were piecemeal. The war heightened these difficulties. Economic isolation and government controls created interest groups that sought to retain wartime rents (Findlay and O'Rourke, 2007). These challenges of economic management echo difficulties faced by other wartime economies (Broadberry and Harrison, 2005; Offer, 1989), by British rubber promotion elsewhere (Bauer, 1948; Hurstfield, 1953), and by Soviet planners (Spoor, 1993; Pomfret, 2002).

In Benin, the state lacked knowledge and struggled to provide incentives to both producers and traders. Many interventions harmed producers, and the state found its decrees resisted or opportunistically used. The state contended with conflicting interest groups. I use archival sources to produce a "thick description" (Geertz, 1973) of their motivations. The *Colonial Office*, initially concerned Nigerian rubber would harm other colonies, pivoted to focus on maximum production after the loss of Southeast Asia. The *Government of Nigeria* pursued contradictory aims of improved living standards in Nigeria and raw materials for Britain. Specific departments had divergent objectives; the *Forestry Department's* mandate to preserve forest resources was inconsistent with the *Agriculture Department's* promotion of African agriculture. *African smallholders* and *labourers* pursued their own interests while *expatriate trading firms* and *rubber estates* focused on profits. My description is chronological. This makes the narrative intelligible and allows me to highlight processes of continuity and change, while drawing attention to the challenges faced by the state at each point.

2. BACKGROUND AND SOURCES

The Benin and Warri Provinces of colonial Nigeria dominated smallholder rubber production after the war. This region contains the former Kingdom of Benin and the western Niger Delta. During the war, the government encouraged production of timber, rubber, rice, fruits, cocoa and vegetables (Usuanlele, 2003, p. 152-179). My sources are records from the National Archives of the United Kingdom (NAUK) and the National Archives of Nigeria in Ibadan (NAI). I also rely on records from the Oba's Palace in Benin City (OPA) and semi-structured interviews.³

Rubber in Benin came mostly from two sources. First, wild rubber from the native *Funtumia elastica* was usually exploited by mobile gangs of tappers. *Funtumia* occurred sparsely enough that it might take several days to gather one pound of rubber

³ 27 interviews were conducted by Joseph Ayodokun and myself during August 2008. The remainder were conducted by Monday Egharevba and Amen Uyigie between September 2008 and April 2009 using my questionnaires.

(Ofonagoro, 1979, p. 223). *Funtumia* could only be tapped a few times per year.⁴ Second, planted rubber came mostly the *Hevea brasiliensis*. This was introduced from Brazil in 1895 (Anschel, 1965, p. 49). *Hevea* surpassed *Funtumia* in plantations after 1914 due to its higher yield, better wound response, and more rapid growth. *Hevea* matured in seven years. Smallholdings were often tapped daily after the war (Blanckenburg, 1963, p. 21), excepting a “wintering” period during which trees could not be tapped. Rubber was collected by cutting grooves into the bark and allowing the latex to flow into a container such as a snail shell. This latex was then coagulated, rolled into thin ribbed sheets, and smoked. Apart from these “ribbed smoked sheets,” Nigerian rubber was generally lump or crepe. Lower-quality lump was less labour-intensive, produced by simply cleaning the coagulated latex. Lumps and poor-quality sheet could be re-milled in order to produce crepe rubber.

3. AMBIVALENCE AND RESTRICTION, 1937-42

Ambivalence

The Colonial Office was initially concerned with whether African production could undermine quantity restrictions imposed by the International Rubber Regulation Agreement, hurting other rubber-producing colonies. In 1940, the Colonial Office remarked on Nigeria’s “striking” increase in rubber exports, and asked the Nigerian government for a report on planting.⁵ Officials felt Nigeria was typical of colonies outside the agreement, “naturally parasitic on the scheme.”⁶

The Colonial Office had additional concerns. Firms such as the British Bata Shoe Company (Bata) and the United Africa Company had leased African holdings for tapping.⁷ These leases circumvented Britain’s policy of preventing non-Nigerians from obtaining permanent interests in land.⁸ This, officials feared, could undermine the control exercised by local chiefs who were essential to indirect rule (Phillips, 1989). Bata began buying hides, cotton and rubber in Nigeria during the 1930s, and its leases amounted to some 50,000 trees by 1940 (Hlavkova, 2007). The Colonial Office had heard that the United Africa Company wished to lease all African rubber in the country.⁹ Several of Nigeria’s “large number of small and widely scattered” African plantations had been leased just before the war. Some 11,000 trees in the Eastern Provinces and probably more in the Western Provinces had been let out.¹⁰

By contrast, the Nigerian Agricultural Department did not wish to harm the industry, due to revenue concerns and the depressed state of trade. The Government claimed the industry was “of substantial value to the African planter,” as the price for palm produce had remained depressed through the 1930s.¹¹ The Agricultural Department believed rubber slowed the destruction of forest cover, converted un-cleared bush into valuable

⁴ NAUK, CO 852 515 7: Commodities Rubber Nigeria: 19 May 1943: Comments on Recommendations made by RM, March 1943 by The Custodian of Enemy Property, R.B. Longe; also BP 5 1915: Report on the Tapping Operations on the Communal Rubber Plantations for 1914.

⁵ CO 852 320 9: War Trade. Commodities - Rubber, Nigeria (WTCRN). 12 June, 1940, Officer Administering the Government (OTG) to Dolobran.

⁶ CO 852 320 9: WTCRN, unsigned minute, 29 July, 1940.

⁷ Nominally British, Bata was a Czech company.

⁸ CO 852 320 9: WTCRN. 12 June, 1940, OTG to Dolobran.

⁹ CO 852 320 9: WTCRN. 12 June, 1940, OTG to Dolobran.

¹⁰ CO 852 320 9: WTCRN. 12 June, 1940, OTG to Dolobran.

¹¹ CO 852 320 9: WTCRN. 12 June, 1940, OTG to Dolobran.

growth, and could stand a high export duty.¹² It was difficult to explain to producers why palm oil was promoted despite low prices, while rubber was ignored. This case was strengthened by the loss of Axis export markets. Agricultural Department policy was “neither to encourage nor to discourage rubber production but to give advice and assistance to farmers when asked.”¹³ This included instruction in laying out plots, tapping and preparation, provision of planting material, and allowing some planting in forest reserves. The Government of Nigeria supported this position, and the Colonial Office agreed.

Restriction

Despite this stance, coordination was imperfect across government departments, and two policies actively discouraged planting. First, forest reservation set land off limits to planting and was selectively and corruptly enforced by local agents such as Forest Guards. Similar reserves in other British colonies were meant to favour the colonial timber industry and benefitted the state through royalties and preservation of strategic raw materials. Reserves covered half to two thirds of Benin Division on the eve of the war (Shokpeka and Nwaokocha, 2009, p. 4; Usuanlele and von Hellerman, 2009; Usuanlele, 2003, p. 112-145). These interfered with planters who, under “customary” rules, could plant anywhere in Benin. For example, one farmer wrote in 1945 for a stay of execution on an order to destroy his rubber in the Okomu Forest Reserve. His conviction for farming illegally had been upheld by the District Officer, even though his trees were twelve years old, and the District Officer himself recognized that forestry authorities knew of the planting and should have taken action earlier.¹⁴

These restrictions also checked the growth of large holdings by powerful interests. In 1921, the Commissioner of Forests refused an application from the Oba (the traditional ruler and head of the Native Authority) to extend his rubber plantations in the Ogba and Ologbo Forest Reserves, on the grounds that further clearing of trees would restrict water flow into the Ogba River.¹⁵ The United Africa Company, similarly, found that the government would not consider a rubber plantation in Sapoba Forest Reserve in 1937. The District Officer felt that, since the Oba held the land on behalf of the people of Benin, it would be a “gross breach of trust” to lease it to a firm for a rubber plantation.¹⁶

Because of the state’s limited capacity, enforcement was delegated and weakly supervised, creating opportunities for corruption. The allegation made against one colonial employee in 1940 illustrates this.¹⁷ A timber contractor accused a Forest Guard, of aiding a man accused of illegally farming in the Ohosa Reserve to escape to Benin City and evade prosecution. Similarly, a petitioner complained in 1941 that a Native Authority agricultural assistant had come to the village of Idale and “corruptly demanded” and received money from the rubber planters “in the name of the Government”.¹⁸ These issues were not ended by the war. Today, grants of land in forest

¹² CO 852 320 9: WTCRN. 12 June, 1940, OTG to Dolobran.

¹³ CO 852 320 9: WTCRN. 12 June, 1940, OTG to Dolobran.

¹⁴ NAI, BD 24 Vol 1: Benin Native Administration Forestry Prosecutions: 13 April, 1945: Letter to Resident.

¹⁵ NAI, BP 10 1921 Oba's Rubber Plantation in Ogba Forest Reserve.

¹⁶ BD 680: United Africa Company Ltd: 26 April, 1937: DO to Resident.

¹⁷ NAI, Ben Dist 6 BD 142 Usen Native Court and District Affairs; 2 Feb, 1940: Oronsaye to DO.

¹⁸ Ben Dist 1 BD 28 Vol 11 Oba's Court Appeals, 1941, Daniel Ijirigho to DO

reserves are not replanted as required by policy, and farmers see forestry staff as lazy and corrupt (von Hellermann, 2007).

The second policy limiting planting was the Permanent Crops Order, passed in 1937. The Agricultural Department, fearing tree crops were locking up land needed for food crops, pushed the Native Authority to take this action (Rowling, 1948, p. 6). Futher, the Oba opposed the appropriation of communal lands for private plantations (Usuanlele, 2003, p. 146-7). Under the order, no one was to plant any tree without the permission of the Village Council.¹⁹ Applicants required signatures from the *odionwere* (chief) and Oba.

At first, petitions were received objecting to the order, mostly in response to what the District Officer believed was “false propaganda” emanating from planters’ associations that the Permanent Crops Order was a scheme to gather information that would be used to collect taxes. Once this was quashed, the order became popular.²⁰ In the first few months of its operation, hundreds of applications were received and approved, with the permits being treated as titles by the farmers (Usuanlele, 2003, p. 107).

Enforcement was delegated out of necessity, and so the order was unevenly enforced. It was used mostly against non-villagers, especially those living in Benin City. Few local planters had bothered to obtain a permit, and planting by these men went on unrestricted (Rowling, 1948, p. 6). In 1941, complaints of discrimination from urban residents were received.²¹ The District Officer recognized these had a basis in fact, but that enforcement would require a costly and possibly corrupt staff of inspectors.²² At a meeting in 1940, the Commissioner of Forests noted that permits under the Permanent Crops Order had been issued covering land enclosed in Forest Reserves. Recipients were, in some cases, prosecuted.²³ By 1941, a backlog of applications was apparent.²⁴ The Permanent Crops Order in Benin did not, like forest reservation, survive the war. Forest reservation was in the interests of timber companies whose goals did not change. The Permanent Crops Order was an attempt to guard smaller farmers against privatisation of communal lands. Their response to these fears, however, was to appropriate land for themselves (Usuanlele, 1988, p. 249-254). The pressures that came with the war made the contradictions in the Permanent Crops Order too heavy to bear.

4. MAXIMUM PRODUCTION, 1942-44

The drive for rubber production

Japanese conquests in Southeast Asia had accounted for more than 80% of global rubber production before the war.²⁵ Natural rubber from Africa, Latin America, and South Asia became essential to the Allied war effort. Coercion increased along the supply chain (Clarence-Smith, 2009a,b). Export controls directed rubber towards the war effort and maintained sterling balances. The Rubber Control Board made all

¹⁹ BP 1470 Vol 2: Permanent Crops in the Benin Division (PCBD): 21 Oct, 1940: Circular from DO, Benin.

²⁰ BP 1470 Vol 2: PCBD: Memo by DO.

²¹ BP 1470 Vol 2: PCBD, Minute (n.d. - 1941): GCW to Resident.

²² BP 1470 Vol 2: PCBD: Permanent Crops Order Benin Division (Memo by DO).

²³ BP 1470 Vol 2: PCBD: Notes of Meeting Held in Resident's Office on 6 July 1940

²⁴ BP 1470 Vol 2: PCBD: 30 April, 1941: DO to Resident.

²⁵ International Rubber Study Group (2000).

purchases through the London rubber market. John Holt & Co. was, for example, unable to acquire tyres from Firestone's South African branch unless they supplied an equivalent quantity of unmanufactured rubber.²⁶ Thomopoulos, a firm owned by Greek expatriates, was similarly refused a license to export 100 tons of rubber to South Africa.²⁷

Nigeria was called upon early in 1942 to achieve "maximum output of rubber both plantation and wild."²⁸ Three days after a telegram to this effect was received, circulars were issued by the Agriculture and Forestry Departments. Two weeks later, another circular was sent with instructions on finding and preparing wild rubber. Several others followed over the course of 1942-43.²⁹ These departments offered instruction to officers and to Native Authorities, whose employees trained locals in production. Three inspectors of produce and twenty five produce examiners in the Western Provinces were trained in the preparation of Wild Rubber in April 1942, and similar training was conducted at Benin and Aba.³⁰ Some of the European staff of the Agricultural Department devoted more than half their time to rubber at first, and many African staff were fully employed in rubber.³¹ By May, wild rubber was sold at the local buying stations, or "canteens."³²

Projections for the 1943-44 season anticipated that roughly 22% of Nigerian production would come from the formerly German "Cameroons Plantations", 20% from the United Africa Company's Pamol holdings at the Jamieson River in Benin and near Calabar, 1% from the J.A. Thomas estate at Sapele and 27% from the smallholders concentrated in Benin, Warri, and Owerri.³³ The remainder would come from wild rubber – 20% *Funtumia* produced in the Western Provinces and 13% vine rubber from the middle belt, Cross River, and Cameroons.³⁴ Exports for the period 1937-1947 are given in Table 1 and Figure 1. Export statistics show that wild rubber made up 25% of Nigerian exports in 1942, 29% in 1943 and 11% in 1944 before falling below 2% at the end of the war.³⁵

Later in 1942, the Forestry Department took over the drive for wild rubber, leaving the Agricultural Department responsible for plantation rubber.³⁶ This required reviving an industry abandoned decades earlier, of which only a few old inhabitants had experience, and for which written records were sparse.³⁷ The Forestry Department established buying organizations and erected smoke houses.³⁸ Fees and licenses for production of wild rubber were waived. In mid-1943, seven European Forest Officers and most of the African Forestry staff were almost entirely occupied by wild rubber, and

²⁶ CO 852/451/6: Commodities, Rubber, West Africa (CRWA), 17 March 1942: Acting Chairman Burns to SOSC.

²⁷ CO 852/451/6: CRWA, 27 Feb 1942: OTG to SOSC. The firm was owned by the brothers Sterios and Aristotelis.

²⁸ CO 583/258/16 Agricultural Department, Nigeria, Annual Report 1942.

²⁹ CO 852/451/7: CRWA, West African RMR on Nigeria and British Cameroons (RMR).

³⁰ CO 583/258/16: Agricultural Department Reports, Annual Report: Produce inspection for the period 1 April 1942 to 31 March 1943.

³¹ CO 852/451/7: CRWA, 17 April 1943: Agricultural Department, Ibadan to Tempany.

³² CO 852/451/7: RMR.

³³ CO 852/451/7: RMR.

³⁴ CO 852/605/3: Hevea Memo.

³⁵ CO 647/55-61: Trade reports.

³⁶ CO 852/451/7: RMR.

³⁷ CO 852/451/7: CRWA, 17 April 1943: Agricultural Department, Ibadan to Tempany.

³⁸ CO 657/55: Annual Reports, Annual report on the forest administration for 1942.

forty six others had been engaged as rubber demonstrators and propagandists.³⁹ School teachers were instructed to guide children in collecting rubber during their holidays.⁴⁰ One consequence was destruction of Nigeria's wild rubber. By the end of 1944, wild rubber output was declining.⁴¹ The 1945 report of the Agricultural Department admitted that "trees were worn out and vines destroyed. But the object was achieved, wild rubber being produced when the shortage of rubber was most acute."

Rubber took priority over other Agricultural Department Work.⁴² There were hundreds of small plantations to deal with, some no bigger than a garden.⁴³ By May 1942, the Agricultural Department believed tapping on these *Hevea* farms was reaching full capacity.⁴⁴ In July, the Agricultural Department began to survey *Hevea* plantings in Benin Province.⁴⁵ The government encouraged tapping on Sundays, and shortening the annual rest period that workers used to visit their families.⁴⁶ Girls were trained by the Agricultural Department to assist smallholders in collecting latex, picking scraps, and other tasks.⁴⁷

Native Authorities (local governments), including the Benin Native Authority, assisted in buying. Lorries toured outlying villages each month. Native Authorities also trained rubber graders, organized tapping, established processing stations, supplied tapping knives, rollers, climbing ropes, and other equipment, and built smokehouses.⁴⁸ A "Rubber Challenge" was organized for districts to compete in production.⁴⁹

Africans' experiences

Though the terms of trade for most Nigerians fell, rubber producers fared better; import prices between 1940 and 1944 were 80% higher than they had been from 1935 to 1939 (Martin, 1989, p. 90), while the price of RSS 1 sheet in London rose 97% over the same interval (International Rubber Study Group, 2000). Even so, Africans found the battle for rubber intrusive. Production efforts conflicted with other wartime policies that raised labour costs. Farm owners and communities with wild trees were called upon to lose money tapping their resources or risk seeing their property confiscated. Residents (senior Provincial officers) were enabled in 1942 to order the exploitation of trees or vines that were not being tapped.⁵⁰ Owners were given two weeks in which to show cause why their rubber should not be turned over to others for tapping. Agricultural staff reported farmers who refused to tap trees; about 200 warnings were issued to farmers in 1943 (Shokpeka and Nwaokocha, 2009, p. 11). Compensation was to be paid only if the authority saw fit.

³⁹ CO 852/451/7: RMR.

⁴⁰ CO 852/451/7: RMR.

⁴¹ CO 852/605/3: Rubber. Nigeria. 21 Dec 1944: Richards to SOSC

⁴² CO 852/451/7: CRWA, 17 April 1943: Agricultural Department, Ibadan to Tempany.

⁴³ CO 852/451/7: RMR.

⁴⁴ CO 852/451/7: CRWA, 17 April 1943: Agricultural Department, Ibadan to Tempany.

⁴⁵ CO 852/451/7: CRWA, 17 April 1943: Agricultural Department, Ibadan to Tempany.

⁴⁶ NAI, ID 744: 21 Oct, 1942: Sheffield to Resident

⁴⁷ ID 744: memo on "Neglected Plantations"

⁴⁸ CO 852/451/7: CRWA, Memorandum on West African Rubber Prepared for the Information of the West African Mission (MOWAR).

⁴⁹ ID 744: 3 Nov, 1943: DO Owo to DO Ishan

⁵⁰ ID 744: No. 33 of 1944: Regulations Made under the Emergency Powers (Defence) Acts, 1939 and 1940.

For smallholders, these notices came as a shock. One owner complained that the person who reported his rubber was untapped did so maliciously.⁵¹ Another wrote that he was tapping his rubber, but was told that the three young boys he employed were insufficient, when eight to ten men would be needed for full production.⁵² Others complained that their plantations had been turned over to alternative tappers with no notice given.⁵³ Wild rubber was treated similarly. In 1942, the people of Egoro were given permission to exploit untapped *Funtumia* on the Kukuruku side of the district boundary.⁵⁴ Similarly, the Ekpoma people were given permission to tap rubber in the Erra district, and the Uzen clan was given similar rights in Jagbe.⁵⁵

Africans resisted. Individuals served with notice would begin tapping, only to soon abandon it.⁵⁶ At Ujogoa, farmers refused to show their plantations to production assistants. Assistants not accompanied by policemen lacked authority.⁵⁷ Labour shortages explain why farmers left their rubber untapped. Many men had left for the army or for large estates around Benin, Sapele and Sapoba. With labour diverted to food production after the failure of the yam crop, farmers in Esan in 1943 were not able to obtain labour at 10s per month, the wage they stated they could pay.⁵⁸

Further, producers faced monopolistic buyers who often cheated them. Ex-scale prices were routinely ignored, and administrative officers and forestry staff did little to protect producers.⁵⁹ Because up-country buyers feared reprisal from their parent companies if rubber was de-graded further down the supply chain, the firms most active in the wild rubber trade were those with only a few offices and free from fear of their superiors. Others offered prices one or two grades below what was actually bought.⁶⁰ The Elders of Ekpoma, in Esan, complained that the United Africa Company clerk there had offered a price below the official one and turned them out, refusing 200 sheets of rubber.⁶¹ He was later found weighing small parcels on scales designed for larger amounts, and “calmly” informed the District Officer that he rounded weights down to the nearest whole pound.⁶² Several producers refused to sell to local representatives of the commercial firms unless an administrative officer was present.⁶³ Middlemen, knowing they would face deductions at the buying centres, took these out of the prices they paid producers.⁶⁴ Larger planters coped by combining into organizations, directly importing equipment, and directly exporting rubber (Usuanlele, 2003, p. 162-3).

Producers faced outright scams and a rising cost of living. The “Rubber Health Maintenance Co” in 1944 fraudulently took money from plantation owners.

⁵¹ NAI, Ben Prof 1 BP 2287: Rubber Farms Taken Over by the Government for Alternative Tapping (RFTO). 8 Jan, 1943: Obasadesuwa (?) to Resident.

⁵² Ben Prof 1 BP 2287: RFTO. 14 Dec, 1942: Chief Obazogbon to Resident and 17 Dec, 1942: Resident to Chief Obazogbon.}

⁵³ Ben Prof 1 BP 2287: RFTO. n.d. Chief Osula to Resident.

⁵⁴ ID 744: 21 Aug, 1942: DO Ishan to DO Kukuruku and 21 Aug, 1942: DO Kukuruku to Agricultural Officer Ishan.

⁵⁵ ID 744: 3 Dec, 1942: DO Ishan to DO Kukuruku.

⁵⁶ Ben Prof 1 BP 2287: RFTO. 13 Mar 1944: Agricultural Officer to Resident.

⁵⁷ ID 744: 8 May, 1944: Agricultural Officer to DO Ishan.

⁵⁸ ID 744: 25 May, 1943: Letter to DO Ishan.

⁵⁹ CO 852/451/7: RMR.

⁶⁰ CO 852/451/7: RMR.

⁶¹ ID 744: 24 June, 1942: Elders of Ekpoma to DO Ishan

⁶² ID 744: 3 Aug, 1942: DO Ishan to District Manager, UAC Umunede

⁶³ ID 744: 18 Aug, 1942: DO Ishan to Resident

⁶⁴ CO 852/451/7: RMR.

Representatives of the company issued notices that they had the right to inspect and treat plantations, threatening farmers that if they did not permit their plantations to be treated they would be prosecuted.⁶⁵ Costs of living and nominal wages had risen during the war (Usuanlele, 2003, p. 153). There was a shortage of supplies such as formic acid and wire gauze used to prepare latex.⁶⁶ Smallholders' demands for equipment were not treated favourably. When asking for assistance in acquiring knives and gauze, they were told that locally produced knives were excellent, and that latex could be adequately strained using raphia in a perforated tin.⁶⁷ Farmers who asked for price increases were scolded that their cost of production was no more than 4d per lb, that "they were among the very few people to whom the war had brought abnormal profits," and that they were the only rubber planters in the empire not subject to excess profits tax. They were warned not to press for a revision that might go against them.⁶⁸ Farmers complained that tappers and transport were scarce and that their views were not forwarded beyond the production office.⁶⁹

The war prompted *Hevea* planting, despite only slight government encouragement.⁷⁰ While officials believed this was an ill-informed price response, pressures towards land appropriation intensified during the war (Usuanlele, 2003, p. 163). By 1948, some 25% of Benin Division was under rubber (Usuanlele, 2003, p. 161) in holdings ranging from "a few trees planted at random" to several hundred acres.⁷¹ The state confronted new planting in 1942. While officials supposed a large area of rubber in Malaya would be destroyed, they thought it was too early to consider long term projections.⁷² The Resident of Warri Province did not believe an acute land shortage was likely, but the possibility should be kept in mind. The people themselves were, in his view, mostly uninterested in the question.⁷³ Other officials worried synthetic rubber would pose a threat after the war, or that labour spent planting was diverted from production.⁷⁴ The matter was dropped without a decision.

Challenges for the government

The state began the war unsure what could be expected for Nigerian rubber production. Both pre-war exports and early twentieth century figures were used as guides.⁷⁵ Surveys were initiated to determine the whereabouts of untapped trees. The Agricultural Department investigated stocks of coagulants and equipment. In 1943, T.J. Cumming and W. Richards were sent to West Africa as an expert "Rubber Mission" to investigate production.⁷⁶ The Government of Nigeria was instructed that rubber of "any shape or form" was wanted, even rubber that washed up on the coast.⁷⁷

⁶⁵ Ben Prof 1, BP 1273, Vol II: RIBP. 28 June, 1944: Asemota (for Rubber Health Maintenance Co.) to Chief Commissioner and 21 Sept, 1944: Resident to DOs, Kukuruku, Ishan and Asaba.

⁶⁶ ID 744: 19 Oct, 1943: Agricultural Officer to DO Ishan

⁶⁷ CO 852/451/7: RMR.

⁶⁸ CO 852/451/7: RMR.

⁶⁹ Ben Prof 1, BP 2174: Rubber Purchase, Benin Province. 13 March, 1943: Production Officer to ADA

⁷⁰ CO 852/605/3: Hevea Memo

⁷¹ CO 852/605/3: Hevea Memo

⁷² CO 852/451/6: CRWA, 6 Feb, 1942: Bourdillon to Levine

⁷³ NAI, CSO 26 39243 Control of Rubber Planting: 13 Jan, 1942: SWP to Chief Secretary

⁷⁴ CO 852/451/7: CRWA, Memo by Caine: 18 August 1942

⁷⁵ CO 852/451/6: CRWA, 1 July, 1942: Letter to Innes

⁷⁶ NAUK, AVIA 22/260: Rubber Mission to West Africa, 14 Oct, 1942: Elkington to Shillito.

⁷⁷ CO 852/451/7: CRWA, 29 October, 1942: Telegram from Governor of Nigeria.

Investigations were launched into the suitability of several untested species for rubber production.⁷⁸

The government had to satisfy the conflicting incentives of expatriate trading firms and African producers. An early challenge was establishing a system of inspection and grading. Initially, unofficial grading was carried out at the request of firms. In July 1942, new grades and prices were drawn up.⁷⁹ These were adopted on a trial basis after consultation with representatives of the territories in Africa.⁸⁰ The Association of West African Merchants complained that local buyers could not follow these grades, since no simple accurate tests for adulteration or moisture were available.⁸¹ Several shipments had been downgraded in the UK. Local agents were generally disgruntled by mid-1943.⁸² They did not trust their UK representatives or the Rubber Trade Association in London to make specifications that were comprehensible in West Africa.⁸³

The Governor proposed a simplified system that collapsed several grades together, allowing deductions for adulteration and moisture.⁸⁴ This recognized the limited skills of colonial staff and local agents of trading firms. Similar suggestions were made by Daarnhouwer and Company and the Association of West African Merchants.⁸⁵ The Rubber Control feared that these simplifications would lead wild rubber to be purchased at the lowest price, discouraging production. Multiple grades based on adulteration and moisture content had been intended to discourage adulteration and ensure producers received compensation related to f.o.b. prices.⁸⁶ The Ministry of Supply adopted an alternative proposal, under which shippers were relieved of responsibility for discrepancies between the contracted quality and what arrived in the UK, though those consistently shipping below the contracted grade could be removed from the list of approved shippers.⁸⁷ By July, the grading scheme in Nigeria had been simplified, though not to the degree desired by the Governor.

The remoteness of rubber production and coordination problems within the Colonial Office made changes difficult. The Rubber Mission found many up-country buyers were unaware of the Rubber Control's quality guarantee in 1943. Others were suspicious of its powers to take action against shippers.⁸⁸ In July, Colonial Office representatives met with the Association of West African Merchants to discuss the possibility of inspection by the Produce Inspection Department, a second grading at the ports, and bulked shipping. Negotiations collapsed when the Rubber Control stated it would not accept the second grading as final.⁸⁹ The compromise that emerged in 1942

⁷⁸ CO 852/451/6: CRWA, 8 June 1942: Memo from the Secretary, Nigeria Supply Board and CO 852/451/6: CRWA, 11 April, 1942: Mackie to Tempany, and Draft Letter 1 May 1942: SOSC to Governor of Nigeria.

⁷⁹ CO 583/258/16: Agricultural Department Reports, Annual Report: Produce inspection for the period 1 April 1942 to 31 March 1943.

⁸⁰ CO 852/451/6: CRWA; Draft Telegram for Governor of Nigeria, 30/6/42

⁸¹ CO 852/451/6: CRWA; Draft Telegram for Governor of Nigeria, 30/6/42

⁸² CO 852/451/7: RMR.

⁸³ CO 852/451/7: RMR.

⁸⁴ CO 852/451/6: CRWA; 24 June 1942: Telegram 857: OTG to SOSC

⁸⁵ CO 852/451/7: CRWA. 25 Aug 1942: Letter from Daarnhouwer and Company Ltd and 7 July, 1942: Stevens to Deputy Controller, Ministry of Supply.

⁸⁶ CO 852/451/6: CRWA, 30 June, 1942: Pierson to Figg

⁸⁷ CO 852/451/6: CRWA; Draft Telegram for Governor of Nigeria, 30/6/42

⁸⁸ CO 852/451/7: RMR.

⁸⁹ CO 852/451/7: CRWA, 23, July, 1943: Memo by Jacks.; also, 30 Jul 1943: Draft Telegram to the Governor of Nigeria (also CO 852/451/7).

remained until the end of the war. Government Produce inspection began on October 1, 1943.⁹⁰

Trading firms were initially unfamiliar with rubber and wary to become involved in it.⁹¹ Their inexperience helps explain the absence of a system of firm-enforced quality grades like that in Malaya (Huff, 1993). Unanticipated losses in weight meant that firms were “buying their experience.”⁹² Further, import controls raised costs. In October 1942, Bata complained that the differential between the ex-scale and f.o.b. prices was not sufficient to meet expenses. They claimed that packing, overhead, transport, bank expenses and depreciation cost them 1.52d per lb, while the difference between the f.o.b. price net of duty and the ex-scale price was only 2d. Employees at the company’s Nigerian stations were demanding a cost of living allowance that would cause Bata to lose money on rubber.⁹³

The government and the Rubber Mission were not convinced the trading firms were innocent. The government believed shipments were often delayed for local agents to await instructions from their head offices. The United Africa Company, for example, temporarily suspended shipments in July 1942.⁹⁴ The Rubber Mission accused firms of giving little attention to supply board notices and failing to consult Forest Officers for advice.⁹⁵ In January 1943, Paterson Zochonis had ceased buying, owing to the loss made on their first shipment, while C.F.A.O. refused to purchase certain grades.⁹⁶ Several firms had ceased buying at many of their canteens in 1943.⁹⁷

Where firms could save money by producing low quality rubber, they did. Many shipments arrived below the contracted grade. Shippers demanded maximum prices for cases shipped without a declared grade. Other cases were shipped as flake, on which no export duty was charged, only for shippers to demand higher prices when these were found to contain sheet on arrival.⁹⁸ One official proposed removing the duty on rubber as an “obvious solution,” but was ignored.⁹⁹ Officials chastised clerks in Esan for refusing to buy certain types of rubber in 1944.¹⁰⁰

Ensuring participation by African producers also proved difficult. Pamphlets written in English were unsuited to illiterate or non-English producers and Forestry staff.¹⁰¹ High prices were not sufficient – “incentive goods” had to be made available for Africans to buy. In 1942, the government sought to obtain a variety of these under Lend/Lease, mostly household goods and hardware.¹⁰² In Esan, gunpowder was an incentive good.¹⁰³ The Rubber Mission worried that higher rubber prices enabled producers to live by working less, raised prices of scarce luxuries, and encouraged producers to hoard

⁹⁰ CO 657/53: Annual Reports. Agricultural Department Report, 1943.

⁹¹ CO 852/451/7: RMR.

⁹² CO 852/451/7: CRWA, 29 April, 1943: Minute by Mr. Beaumont on the Nigerian Rubber Report.

⁹³ CO 852/451/7: CRWA, 29 October, 1942: Telegram to Governors, Gold Coast and Nigeria.

⁹⁴ CO 852/451/7: CRWA. 9 July 1942: OATG to SOSC

⁹⁵ CO 852/451/7: RMR.

⁹⁶ CSO 26/14451/S13 VOL 2: Rubber Prices. 25 Jan, 1943: Resident Ijebu to Director of Wild Rubber Production

⁹⁷ CO 852/451/7: CRWA, 29 April, 1943: Minute by Mr. Beaumont on the Nigerian Rubber Report and CO 852/451/7: RMR.

⁹⁸ CO 852/451/7: CRWA, MOWAR.

⁹⁹ CO 852/451/7: CRWA, Note of a meeting held in the conference room at the Colonial office Dover House on 1/10/42 to consider the production and export of Rubber from Nigeria.

¹⁰⁰ ID 744: 14 Aug, 1944: Inspector of Produce to Prov Forest Officer Ishan

¹⁰¹ ID 744: 5 Aug, 1942: DO Ishan to Conservator of Forests

¹⁰² CO 852/451/7: CRWA, Action by Minister and Governor.

¹⁰³ ID 744: 14 Aug, 1943: DO Ishan to Onogie and Council, Ewatto and Ekpon

rubber in anticipation of higher future prices.¹⁰⁴ After subsidies in remote areas had been a “complete failure,” these fears appeared confirmed.¹⁰⁵ Officials debated whether further price increases would raise production.¹⁰⁶ In 1942, the duty on rubber was raised to 2d per lb. The United Africa Company believed this particularly discouraged Africans, whose product fetched lower prices per lb.¹⁰⁷

The quality of rubber produced by Africans was seen as a problem by the government. The proportion of high grade rubber fell throughout the war.¹⁰⁸ Africans added resinous latex to their rubbers that could not be detected outside a laboratory.¹⁰⁹ Shipments arrived in the UK containing pieces of wood or palm kernels.¹¹⁰ Much of the rubber arrived tacky, and articles made from it perished quickly. For *Funtumia*, this was because of overheating during preparation and the practice of drying rubber in the sun.¹¹¹ The Rubber Mission was impressed by smallholders’ “unnecessary large proportion” of low grade rubber.¹¹² While capable of higher grades, farmers were satisfied with the profits from lower quality rubber. The Mission saw coagulated latex rolled into balls and dried over a fire on a permeable platform exposed to the sun. This became tacky, would not dry properly, and could lose half its caoutchouc content before reaching the UK.¹¹³ Tree scrap was thrown in the same container as bark shavings and sold for whatever price it could fetch. The mission found one farmer with an idle rolling machine in his store; the effort needed to improve quality was not worth the better price.¹¹⁴

Buyers did not help. Bata graded one or two grades *above* what was offered to them.¹¹⁵ This was a policy pursued in other countries before the war to increase market share. During the war, it undermined the supply of usable material. It created rumours of corruption, as other firms suspected Bata had a preferential relationship with the Rubber Control.¹¹⁶ Though inspection was introduced in 1943, there were no regulations banning adulteration until 1945. The Bata agent at Benin purchased un-exportable rubber with the intention of creping it at Sapele. He surrendered 37 tons after it proved impossible to process.¹¹⁷

At buying centres, agents placed rubber on sheets of corrugated iron in the sun in order to reduce moisture. This made it tacky.¹¹⁸ In 1944, a Bata buyer near Ekpoma was storing “considerable quantities” of steadily-deteriorating lump rubber on an earthen floor, while Thomopoulos’ agent was holding a large amount of sheet that was growing mouldy.¹¹⁹ Rubber packed in hessian became tacky, adhered to its packaging, and was

¹⁰⁴ CO 852/451/7: RMR.

¹⁰⁵ CO 852/515/8: Production, Rubber, Nigeria Part I. 21, Sept 1943: OTG to SOSC

¹⁰⁶ CO 852/515/8: Production, Rubber, Nigeria Part I. e.g. 10 Nov 1943: Peirson to Bromley

¹⁰⁷ CO 852/451/6: CRWA, 17 Jan, 1942: Garson to Figg, enclosed report on “Rubber Producing Territories not Party to the IRRA”.

¹⁰⁸ CO 657/53: Annual Reports. Agricultural Department Report, 1943 and CO 657/55: Annual Reports, Agricultural Department, 1945.

¹⁰⁹ CO 852/451/6: CRWA; Note on A Meeting Held at the Colonial Office on Wed 10th June 1942

¹¹⁰ CO 852/451/7: CRWA, MOWAR.

¹¹¹ CO 852/451/7: CRWA, MOWAR.

¹¹² CO 852/451/7: RMR.

¹¹³ CO 852/451/7: RMR.

¹¹⁴ CO 852/451/7: RMR.

¹¹⁵ CO 852/451/7: RMR.

¹¹⁶ CO 852/451/7: RMR.

¹¹⁷ CO 852/605/5: 15 May 1946: Governor of Nigeria to SOSC

¹¹⁸ CO 852/451/7: RMR.

¹¹⁹ Ben Prof 1, BP 2174: Rubber Purchase, Benin Province. 22 Sept, 1944: Young to Director of Supplies

difficult to clean. Talcum powder for dusting was not available.¹²⁰ Ground snail shells used as a substitute harmed the rubber.¹²¹ The sole European representative of Thomopulos in the Benin and Warri provinces defended a bad shipment on the grounds that it was impossible for him to personally supervise the buying stations, so that it was left to the company's African employees.¹²²

Although rubber could be creped to remove moisture and refuse, there were only two creping plants available in West Africa.¹²³ Even this small capacity was not fully used. The creping batteries owned by Pamol and Thomas at Sapele were only worked two to four hours a day on the off-grade rubber produced on those plantations. It was not profitable for the firms to crepe bought rubber at the scheduled prices. In the summer of 1942, Thomas had lost £372 creping 36.82 tons it purchased.¹²⁴ By July 1944, Pamol's creping battery was obsolete and Thomas' broke down frequently.¹²⁵ In 1946, the rollers were glass smooth and succeeded only in embedding dirt more firmly in the crepe after repeated passes.¹²⁶

The estate sector

Apart from former German holdings in the Cameroons, estates in Nigeria were mostly in Benin and Warri.¹²⁷ These were the properties of Pamol Ltd, the J.A. Thomas Estate, and the plantation of I.T. Palmer.¹²⁸ Thomas and Palmer were both Africans. These varied markedly in size; the Rubber Commission anticipated that Pamol would produce nearly 1,500 tons of rubber over the 1943-44 season, while Thomas would produce only 80.¹²⁹ Production increased smoothly on these. By October 1942, intensification presented few problems, and growers were "going all out."¹³⁰ Palmer faced the most difficulty. A "worn out property," tapping cuts were made wherever bark remained.¹³¹ Other estates were exempt from grading, while Palmer was intentionally excluded after the manager was dismissed and took legal action against the company.¹³² After the war, management remained "chaotic" due to a personal feud among the directors, labourers had left without due notice, and workers at Sapoba went on strike after non-payment of wages.¹³³

Estates struggled to maintain labour supplies during and after the war. The war brought a new period of labour agitation; employers believed workers had only

¹²⁰ CO 852/451/7: CRWA, MOWAR

¹²¹ CO 852/451/7: CRWA, MOWAR.

¹²² CO 583/605/4: Rubber, Nigeria. 5 January 1945: Governor to SOSC

¹²³ CO 852/451/7: CRWA, Note of a meeting held in the conference room at the Colonial office Dover House on 1/10/42 to consider the production and export of Rubber from Nigeria.

¹²⁴ CO 852/451/7: RMR.

¹²⁵ CO 852/605/3: Rubber, Nigeria. 27 July 1944: Governor to SOSC.

¹²⁶ CO 852/605/5: 15 May 1946: Governor of Nigeria to SOSC

¹²⁷ I follow the primary sources and refer to larger rubber holdings as "estates." No limit of 100 acres was used to distinguish "estates" in Benin, though European holdings classified as "estates" here were above this size.

¹²⁸ CO 852/451/7: RMR.

¹²⁹ CO 852/451/7: RMR.

¹³⁰ CO 852/451/7: CRWA, Note of a meeting held in the conference room at the Colonial office Dover House on 1/10/42 to consider the production and export of Rubber from Nigeria.

¹³¹ CO 852/451/7: RMR.

¹³² CO 852/515/8: Production, Rubber, Nigeria Part I. 12 Oct, 1943: OATG to SOSC

¹³³ NAI, WP 260 IT Palmer estate, 16 Sept, 1947: Assistant DO to Resident Warri and and 11 Sept, 1947: Letter to Commissioner of Labour, Lagos

developed grievances after the industry became important to the war.¹³⁴ Workers on the United Africa Company's Jamieson River estate staged a two day strike in January 1944. They demanded a cost of living increase and a war bonus, in part because they erroneously believed workers at Sapele had received similar increases.¹³⁵ A meeting with the manager resolved this temporarily, but in February workers' delegates asked that money no longer be withheld as surety for tapping utensils.¹³⁶ In May, an additional strike was launched and seven workers were tried under the Defence Regulations.¹³⁷

In 1944, the government launched an inquiry into conditions on African plantations. These were "so notorious" that many workers from Esan and Kwale were unwilling to accept employment except in Government or European concerns, necessitating recruitment from Iboland, Umuahia, and more distant areas.¹³⁸ Typically, employees on African plantations worked from April until February, returning home during the period when the trees could not be tapped.¹³⁹ Generally, they were only paid "ration money" until the end of the year. A worker who left early surrendered all arrears. The Labour Officer objected that estates could thus dictate terms, worsen living conditions, and take advantage of illiterate labourers who had could not record the amount owed them.¹⁴⁰ Though he believed workers' hours were reasonable, their wage of 3½d per day was "ridiculous." African planters feared the government would impose minimum wages. Set too high, these would make rubber unprofitable. Labourers would not be motivated, they argued, unless they were paid by results. Further, desertions were already frequent, and changes would make it easier for other employers to entice deserters rather than recruiting workers themselves.¹⁴¹

These problems survived the end of the war. In 1946, the United Africa Company's Jamieson River estate was grossly overcrowded.¹⁴² At Palmer's Sapoba estate, the main camp was overfull, susceptible to rain, in disrepair, with a single usable pit latrine and poor kitchens.¹⁴³ At Palmer's Kwale estate, workers lived in mud houses, and the dispensary assistant was a former gardener without training. Workers were discontent over their cost of living allowance.¹⁴⁴ Many labourers left rubber for timber after price controls were removed in 1946.¹⁴⁵

When 67 workers were let go from the United Africa Company in November 1948, they demanded repatriation and leave pay. The manager asked for police protection.¹⁴⁶ After a strike of the roughly 190 workers at Palmer's Kwale estate, an inspector reported on the conditions there. Tappers worked some 46.5 hours a week, while the factory boys put in 70 hour weeks.¹⁴⁷ Wives had been employed at 7d-8d per day for

¹³⁴ Ben Prof 1, BP 1273, Vol II: Rubber Industry Benin Province (RIBP): Report by JCG Allen enclosed in 14 April, 1944: Commissioner of Labour to Secretary, Southern Provinces (Allen Report).

¹³⁵ BP 2093: Messrs United Africa Company Limited: Jamieson Rubber Estate: General Correspondence (UACJREGC). 16 Jan, 1942: Ag Resident to SWP

¹³⁶ BP 2093: UACJREGC. 10 March, 1942: Cowan to Resident

¹³⁷ BP 2093: UACJREGC. 28 May, 1942: Letter to Resident

¹³⁸ Ben Prof 1, BP 1273, Vol II: RIBP: Allen Report.

¹³⁹ Ben Prof 1, BP 1273, Vol II: RIBP: Allen Report.

¹⁴⁰ Ben Prof 1, BP 1273, Vol II: RIBP: Allen Report.

¹⁴¹ Ben Prof 1, BP 1273, Vol II: RIBP: Allen Report.

¹⁴² BP 1656: Inspection of Plantations Labour Advisory Boards (IPLAB). 23 Dec, 1948: Ag Labour Officer to Resident

¹⁴³ BP 1656: IPLAB. 23 Dec, 1948: Ag Labour Officer to Resident

¹⁴⁴ BP 1656: IPLAB. 23 Dec, 1948: Ag Labour Officer to Resident

¹⁴⁵ BP 1656: IPLAB. 15 Jan, 1948: Letter to Resident

¹⁴⁶ BP 2093: UACJREGC. 9 Dec, 1948: Labour Officer to Commissioner of Labour

¹⁴⁷ BP 1656: IPLAB. 18 March, 1948: Letter to Commissioner of Lab

farm work, but were dropped as this was unprofitable. Many workers were juveniles under the care of elder employees. Absenteeism was high, as workers were torn between the estate and their own farms during peak seasons. No overtime was paid. Labour was fined “almost recklessly.” The nursery school had been closed, and the nearest market was seven miles away. With no reserve fund, labour was often paid late after the rubber was sold.

5. THE END OF THE WAR, 1945-48

The return to a free market

At the end of the war, the state lacked resources to smoothly manage the return to a “free market.” Despite the opening of the Far East, it was forecast in December 1945 that demand would continue to exceed supply. The exception was low-grade rubber, and the Colonial Office sought to end its collection as rapidly as possible.¹⁴⁸ The Board of Trade discontinued rubber purchases at the end of 1946. Private trade was restored on January 1, 1947. This operated under exchange control, ostensibly to curb speculation. By 1948, a decline in Nigerian production had begun.¹⁴⁹ In August 1947, the export duty was removed to alleviate the worst hardship for producers, and import duties on some inputs to rubber production were waived.¹⁵⁰

The system of grading again became a challenge. Firms such as Bata had shown that a trade in low-grade rubber could be profitable, undermining attempts to improve quality.¹⁵¹ Shippers were informed that, after the clearance of stocks held on March 15, 1946, several low quality grades would no longer be exportable.¹⁵² The Board of Trade wanted Nigeria to operate according to Rubber Marketing Association grades. The Governor did not believe it would be possible to train the African personnel of the Produce Inspection Department to recognize the small differences between these categories, especially as Nigerian rubber was produced by a multiplicity of smallholders, varying in quality and appearance “not only from sheet to sheet but often as between one part of a single sheet and another.”¹⁵³ He proposed a simplified system for Nigeria that was meant to continue the wartime system.¹⁵⁴ Though the Association of West African Merchants opposed continued grading by African inspectors that they believed was not credible in England,¹⁵⁵ the Governor prevailed, and government inspection and grading continued.¹⁵⁶

Other issues complicated the post-war transition. Only three days notification were given for the cancellation of price schedules, leaving firms unable to buy until the new prices were known.¹⁵⁷ Wild rubber subsidies were cancelled with no prior notice.¹⁵⁸

¹⁴⁸ CO 583/605/4: Rubber, Nigeria. 18 Dec 1945: SOSC to OATG

¹⁴⁹ CO 657 62 Annual Reports, Annual Report for the Commerce and Industries Department 1947-48. CO 852/605/3: Rubber, Nigeria. Extract from a semi-official letter of 20 December, 1943: Creasy to Carstairs.

¹⁵⁰ CO 657 62 Annual Reports, Annual Report for the Commerce and Industries Department 1947-48.

¹⁵¹ CO 852/605/5: 15 May 1946: Governor of Nigeria to SOSC and Ben Prof 1, BP 1273, Vol II: RIBP. 30 May, 1946: Letter to Secretary, Western Provinces

¹⁵² CO 852/605/5: 15 May 1946: Governor of Nigeria to SOSC

¹⁵³ CO 852/605/5: 15 May 1946: Governor of Nigeria to SOSC

¹⁵⁴ CO 852/605/5: 19 Aug 1946: Governor to SOSC

¹⁵⁵ CO 852/605/5: 10 June 1945: SOSC to Governor Nigeria

¹⁵⁶ Ben Prof 1, BP 1273, Vol II: RIBP. 18 June, 1947: Ag SWP to Resident

¹⁵⁷ Ben Prof 1, BP 2174: Rubber Purchase, Benin Province. Nov 29, 1946: DO to Resident

¹⁵⁸ CO 583/605/4: Rubber, Nigeria. 10 Feb 1945: Balfour to Oliver

During 1946, “Bata Nationalised Industries,” Bata’s nationalized Czechoslovakian former affiliate, sent two representatives to Nigeria. They attempted to entice employees away from Bata, take over expiring plantation leases, and acquire stocks at inflated prices.¹⁵⁹ Because formic acid was scarce, it was nearly impossible for smallholders to produce high-grade rubber in early 1947.¹⁶⁰ The United Africa Company, after using its stocks for its own plantations, had no acid to sell to others.¹⁶¹

Order in Council 26 of 1946 imposed a minimum wage of 10d per day for trained workers on rubber plantations. This was not binding on European estates, which paid 1s to 1s 3d per day.¹⁶² In December 1946, African planters complained that they could not pay this, asking for a suspension of the order until prices improved. Unlike European firms, they were unable to supplement their incomes through profits on imports. Most officials were unsympathetic, proposing short grace periods,¹⁶³ arguing that the minimum wage would weed out the most inefficient firms,¹⁶⁴ or that it only imposed a light burden.¹⁶⁵ Enforcement, however, was suspended throughout 1947 and 1948 as the supply of acid did not improve.¹⁶⁶ By September of that year, it was clear the order would be impossible to enforce except on larger estates.¹⁶⁷

In September 1945, the Agricultural Officer recognized that production work was not improving quality and proposed these activities be ended.¹⁶⁸ In October, almost the entire rubber staff was dismissed, with four assistants retained until the end of the year to distribute sieves and acid.¹⁶⁹ As smallholders became increasingly predominant, quality continued to decline.¹⁷⁰ They possessed limited knowledge, had little machinery, used “dirty methods of production” and frequently let out their plantations to others.¹⁷¹ Correspondence on these interdependent difficulties of low wages, low prices, and low quality continued into the early 1950s.¹⁷²

Planting and restrictions

Throughout 1944, the Colonial Office re-considered planting restrictions. Officials feared land was planted to rubber at the expense of food crops, and that the industry could not survive international competition.¹⁷³ Even before the war, global capacity had exceeded consumption, and synthetic rubber would make competition particularly

¹⁵⁹ CO 852/605/5: 5 July 1946: Tusa to Riddell

¹⁶⁰ Ben Prof 1, BP 1273, Vol II: RIBP. Extract from Labour Department file No 167/320/07 (dated 19/1/1947)

¹⁶¹ Ben Prof 1, BP 1273, Vol II: RIBP. 15 May, 1947: Acting DO to Resident

¹⁶² Ben Prof 1, BP 1273, Vol II: RIBP. 2 Jan, 1947: Acting Labour Officer to Resident

¹⁶³ Ben Prof 1, BP 1273, Vol II: RIBP. 6 Jan, 1947: DO to Resident and 31 Dec, 1946: DO to Resident

¹⁶⁴ Ben Prof 1, BP 1273, Vol II: RIBP. 2 Jan, 1947: Acting Labour Officer to Resident

¹⁶⁵ Ben Prof 1, BP 1273, Vol II: RIBP. 10 Jan, 1947: Resident to SWP and 24 Jan, 1947: Commissioner of Labour to SWP

¹⁶⁶ Ben Prof 1, BP 1273, Vol II: RIBP. 26 Feb 1947: SWP to Resident and 20 May, 1947: Acting Resident to SWP

¹⁶⁷ Ben Prof 1, BP 1273, Vol II: RIBP. 12 September, 1948: Labour Officer to Commissioner of Labour

¹⁶⁸ Ben Prof 1, BP 1273, Vol II: RIBP. 27 Sept, 1945: Agricultural Officer to Residents Warri and Benin

¹⁶⁹ Ben Prof 1, BP 1273, Vol II: RIBP. 10 Oct, 1945: Agricultural Officer to Residents Warri and Benin

¹⁷⁰ Ben Prof 1, BP 1273, Vol II: RIBP. 2 Aug, 1946: Resident Benin to SWP

¹⁷¹ Ben Prof 1, BP 1273, Vol II: RIBP. 12 September, 1948: Labour Officer to Commissioner of Labour

¹⁷² Ben Prof 1, BP 1273, Vol II: RIBP. Jan 26, 1950: Petition by owners of rubber plantations in Benin City to Chairman, Labour Advisory Board

¹⁷³ CO 852/605/3: Rubber. Nigeria. Memorandum by Colonial Office – The Prospects for rubber planting in Nigeria, March 1944 (Prospects Memo).

severe. The Colonial Office did not believe in complete prohibition, but was willing to consider allowing planting only in certain areas.¹⁷⁴

The Agricultural Department, similarly, believed price fluctuations and the lack of an internal market made rubber unsuitable for Nigeria.¹⁷⁵ Others within the Ministry of Supply worried labour and training costs would be the greatest problems.¹⁷⁶ The Agricultural Department opposed legislative restrictions on planting. The only precedent was the Permanent Crops Order, which had “not been particularly successful”.¹⁷⁷ Before the war, producers had been willing to export so long as ex-scale prices were not below 3d per lb, and so they might weather post-war competition.¹⁷⁸ The policy that emerged was gradual price reduction and propaganda discouraging planting.¹⁷⁹ The government diverted its efforts, unsuccessfully, to improving quality.

In Benin, the balance eventually fell against revival of the Permanent Crops Order. In 1943, the Oba and Council forbade all planting after the end of the 1943 season. The District Officer sent a memo to all councils telling them that “this restriction of rubber planting is for your own good, in a few years' time the price of rubber will again be very low, and if you have used all your farm-land for rubber you will have neither money nor food ... Tap all the rubber you can now, and save some of the money to make palm plantations after the war.”¹⁸⁰ The ban was lifted in 1944 (Usuanlele, 2003). The end of the war and food shortages in 1945 and 1948 re-opened discussion (Shokpeka and Nwaokocha, 2009). Planters continued to resist these restrictions, for example by concealing young trees.¹⁸¹ In 1946, the Agricultural Officer noted the difficulties in enforcing restrictions when extension staff combined duties of “policeman” and “farmer's friend.” He suggested that a uniformed corps of inspectors be created.¹⁸² Four of the thirteen agricultural inspectors were converted to inspectors of permanent crops.¹⁸³ The government also considered using the Permanent Crops Order to appropriate illegally-planted land in order to test the effect of rubber on later food yields. This was never undertaken, due to concerns about fairness and legality, and because agricultural assistants were not prepared for data collection.¹⁸⁴ By 1948, the Permanent Crops Order was a dead letter (Rowling, 1948). In 1951, no information on the Permanent Crop Inspectors had been received since 1949, and there was no evidence that attempts were being made to enforce the order.¹⁸⁵

In Warri, new regulations were implemented based on the Permanent Crops Order in Benin. In 1944, the Senior Resident expressed alarm about the area planted to rubber.¹⁸⁶ The Aboh and Kwale Native Authorities had made rules prohibiting planting permanent crops without their permission, reserving the best yam-growing land for

¹⁷⁴ CO 852/605/3: Prospects Memo.

¹⁷⁵ CO 852/605/3: Rubber. Nigeria. 16 Feb, 1943. Memo by the Assistant Director, Agricultural Department: “The Necessity for a Hevea Rubber Policy for Nigeria” (Hevea Memo)

¹⁷⁶ CO 852/605/3: Rubber. Nigeria. 8 March 1944: Ministry of Supply to Carstairs

¹⁷⁷ CO 852/605/3: Hevea Memo

¹⁷⁸ CO 852/605/3: Hevea Memo

¹⁷⁹ Ben Prof 1, BP 1273, Vol II: RIBP. 4 Nov, 1945: Chief Secretary to Governor and Secretary, Western Provinces (SWP)

¹⁸⁰ BP 1470 Vol 2: PCBD: 16 Oct, 1943: DO to All Councils Benin Division.

¹⁸¹ Interview No. 6.

¹⁸² BP 1470 Vol 2: PCBD: 1 June, 1946: Agricultural Officer to Resident.

¹⁸³ BP 1470 Vol 2: PCBD: 22 June, 1946: DO to Resident and 17 Sept, 1946: DO to Resident.

¹⁸⁴ BP 1470 Vol 2: PCBD: 31 July, 1948: SWP to Resident and 17 July, 1950: Resident to Secretary, Western Provinces.

¹⁸⁵ BP 1470 Vol 2: PCBD: 2 Aug, 1951: Resident to DO.

¹⁸⁶ NAI, WP 149 rubber production: 24 Nov, 1944: Memo by Senior Resident Warri.

food crops. The Itsekiri Native Authority had made a similar rule. Other restrictions were put in place after the war in Ora, in the Ika clans, and at Ogwashi-Uku (Rowling, 1948, p. 19-33).

Like restrictions before the war, these were opportunistically enforced. While Aboh and Kwale had passed the first restrictions, they did not enforce them until a food shortage scared them into pursuing convictions in the second half of the year.¹⁸⁷ The District Officer for Aboh reported in 1946 that “very large numbers of people” had planted “enormous quantities of rubber (for a fee paid to the Okparuku etc), without any reference to the District Officer.”¹⁸⁸ Inadequate staff made it impossible to keep the position in check. In Kwale, the District Court resisted prosecution of illegal planters, arranging that cases be adjourned until the District Officer went on leave.¹⁸⁹ The District Officer guessed that ten times as many individuals as had received permits had been planting surreptitiously, hiding their plantations by leaving bush between them and any major path or stream.¹⁹⁰ When a count of rubber plantations was extended to reserved areas, it was taken by planters as if it were registration. One inspector was driven out by a planter in the prohibited area at Abedei on the grounds that the government had ordered all land to be planted with rubber, and that he was trespassing on the planter’s private land. The District Officer in Kwale, like his counterpart in Aboh, also advocated a full ban on further planting.

Agents of the Forestry Department were, as before the war, accused of corruption.¹⁹¹ H.I. Aikhionbare, a permanent crops inspector in Benin, was suspended in 1947 until the police investigation of charges of extortion and official corruption were made known.¹⁹² In 1945, an inspector in the Warri Province was charged with accepting a bribe. Though he “got away with it” when called before the authorities, he was relieved of duty, admitting he had been let off lightly.¹⁹³ Africans continued to resist by bribing inspectors or planting in secret.¹⁹⁴

6. CONCLUSION

The Korean War created a spike in global rubber prices. Trees planted before 1945 reached maturity around the same time, and the post-war decline in Nigerian rubber exports was reversed. The industry peaked in the 1970s. Conditions for this boom had been set during the war; farmers and trading companies had gained experience, restrictive legislation had fallen into disuse, and much of the stock of trees had been planted during this period. The rubber industry in Benin is a window into wartime processes of continuity and change, and into the weaknesses of the colonial state. Initially, the Colonial Office was concerned that Nigerian rubber undermined its interests in Malaya. The Agricultural Department argued instead, due to revenue needs and the failings of its other initiatives, that no positive policies of restriction should be considered. Competing interests and a lack of coordination, however, meant that policies towards permanent crops and forestry hindered the development of rubber.

¹⁸⁷ NAI, WP 149 rubber production: 3 June, 1946: Resident Warri to Senior DO Urhobo.

¹⁸⁸ NAI, WP 149 rubber production: 6 May, 1945: DO Aboh to Resident Warri.}

¹⁸⁹ NAI, WP 149 rubber production: 26/4/45: NA Agricultural Assistant to DO Kwale.

¹⁹⁰ NAI, WP 149 rubber production: 31 May, 1945: DO (Kwale?) to Resident Warri.

¹⁹¹ NAI, WP 149 rubber production: 27 June, 1945: Agricultural Officer to DO Kwale.

¹⁹² BP 1470 Vol 2: PCBD: 11 June, 1947: Acting DO to Resident.

¹⁹³ NAI, WP 149 rubber production: 27 June, 1945: Agricultural Officer to DO Kwale, 10 Aug, 1945: Resident Warri to DO Aboh, and 30 Aug, 1945: DO Aboh to Resident Warri

¹⁹⁴ Interview No. 4.

After the loss of southeast Asia, the Agriculture and Forestry Departments campaigned for maximum production. Producers were compelled, scammed, and exploited, but gained experience and a stock of capital for future use. Firms distrusted a trade they knew little about, initially lost money, struggled for labour, and chafed against grades, prices, and quality standards. Many of these difficulties survived the uneasy transition from war into the years that followed.

REFERENCES

- Anderson, D. and Throup, D. (1985) "Africans and agricultural production in colonial Kenya: The myth of the war as a watershed" *Journal of African History* 26(4) 327-346.
- Anschel, K. R. (1965). *Economic aspects of peasant rubber production in Midwestern Nigeria*. Ph.D. Thesis, Michigan State University. Dept. of Agricultural Economics.
- Bauer, P. (1948) *The Rubber Industry: A Study in Competition and Monopoly*. London: Longmans, Green and Co.
- Berry, S. (1992) "Hegemony on a shoestring: Indirect rule and access to agricultural land" *Africa* 62(3):327-355
- Blanckenburg, P. (1963). *Rubber farming in Benin area, a study of some socio-economic factors influencing rubber production*. Nigerian Institute of Social and Economic Research. Ibadan.
- Broadberry, S. N. and Harrison M. (2005) *The economics of World War I* Cambridge University Press
- Clarence-Smith, William G. (2009a) "Grands et petits planteurs dans la production de caoutchouc en Afrique, c.1920-c.1970" *Working Paper: School of Oriental and African Studies*
- Clarence-Smith, William G. (2009b) "The battle for rubber in the Second World War: Cooperation and Resistance" *Working Paper: School of Oriental and African Studies*
- Findlay, R. and O'Rourke, K.H. (2007) *Power and plenty: trade, war, and the world economy in the second millennium* Cambridge University Press
- Gadgil, M. and Guha, R. (1993) *This fissured land: an ecological history of India*. University of California Press.
- Geertz, C. (1973) *The interpretation of cultures: Selected essays by Clifford Geertz*. Basic Books.
- Green, E. (2009) "A lasting story: Conservation and agricultural extension services in Colonial Malawi" *Journal of African History* 50:247-67.
- Hlavkova, V. (2007) "Establishing Bata Subsidiary Branches in Africa in the 1920s and the 1930s," in *Proceedings from the Fifth International Conference Shoe in History, Zlin, 15th to 17th October 2007*, pp. 155-159
- Hogendorn, J.S. and Scott, K.M. (1981) "The East African Groundnut Scheme: Lessons of a Large-Scale Agricultural Failure" *African Economic History* 10:81-115.
- Huff, W.G. (1993) "The Development of the Rubber Market in Pre-World War II Singapore", *Journal of South East Asian Studies* 24(2):285-306
- Hurstfield, J. (1953) *The control of raw materials* London: HMSO.
- International Rubber Study Group (2000). *World Rubber Statistics Historic Handbook*. London: International Rubber Study Group.
- Killingray, D. and Rathbone, R. (eds.) (1986) *Africa and the Second World War*. Macmillan
- Lonsdale, J. (1986) "Depression and war in transformation in Kenya" in Killingray, D. and Rathbone, R. (eds.) *Africa and the Second World War*. Macmillan

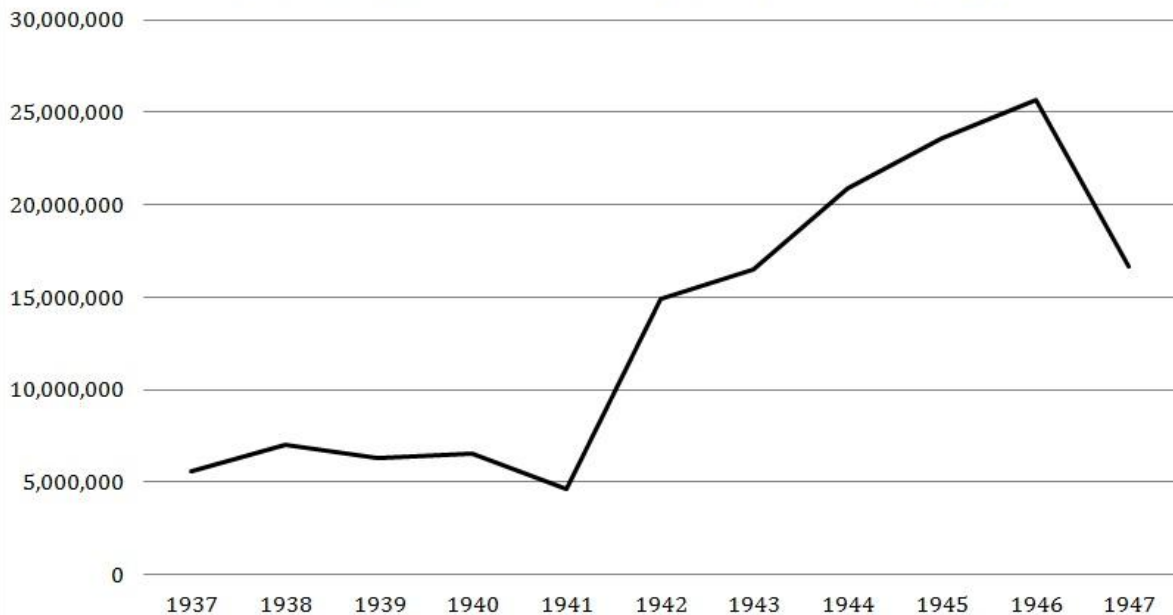
- Martin, S. M. (1989) *The long depression: West African export producers and the world economy, 1914-1945* in Ian Brown (ed.) *The economies of Africa and Asia in the Inter-war depression*, Routledge, New York, pp. 74-94.
- Meredith, D. (1975) "The British Government and Colonial Economic Policy, 1919-39" *The Economic History Review* 28(3):484-499.
- Meredith, D. (1986) "State controlled marketing and economic 'development': The case of West African produce during the Second World War," *Economic History Review* 39(1): 77-91.
- Offer, A. (1989) *The First World War: An Agrarian Interpretation* Oxford University Press.
- Phillips, A. (1989) *The enigma of colonialism: British policy in West Africa*. Currey
- Pomfret, R. (2002) "State-directed diffusion of technology: The mechanization of cotton harvesting in Soviet Central Asia" *Journal of Economic History* 62(1):170-188.
- Rowling, C. W. (1948). *Notes on Land Tenure in the Benin, Kukuruku, Ishan and Asaba Divisions of Benin Province*. Lagos: Government Printers.
- Shokpeka, S. A. and O. A. Nwaokocha (2009) British Colonial Economic Policy in Nigeria, the Example of Benin Province 1914 - 1954, *Journal of Human Ecology*, 28(1): 57-66
- Spoor, M. (1993) "Transition to market economies in former Soviet Central Asia: Dependency, cotton, and water" *The European Journal of Development Research* 5(2):142-158.
- UNESCO, (1985) Africa and the Second World War: Report and papers of the symposium organized by UNESCO at Benghazi, Libyan Arab Jamahiriya, from 10 to 13 November 1980
- Usuanlele, U. (1988). *State and class in Benin Division 1897-1959: A history of colonial domination and class formation*. MA thesis, Ahmadu Bello University, Zaria.
- Usuanlele, U. (2003). *Colonialism and the Environment: the Deforestation of the Rainforest of Benin and Ishan Divisions, 1897-1960*. Ph.D. thesis, University of Ibadan.
- von Hellermann, P. (2007). Things fall apart? management, environment, and *taungya* farming in Edo state, southern Nigeria. *Africa*, 77(3):371.
- von Hellermann, P. and Usuanlele, U. (2009). The owner of the land: The Benin Obas and colonial forest reservation in the Benin Division, Southern Nigeria. *The Journal of African History*, 50(02):223-246.

Table 1. Nigerian rubber exports by port

	Western Delta			Eastern Delta		Eastern Provinces and Cameroons			Total	
	Lagos	Sapele	Warri	Burutu	Port Harcourt	Opobo	Calabar	Victoria		Tiko
lbs										
1937	32,877	2,441,500	132,911	659,822	0	0	752,474	279,245	1,284,212	5,583,041
1938	1,032,836	2,383,413	59,077	399,733	444,013	40,071	1,000,608	480,355	1,182,866	7,022,972
1939	778,501	2,188,184	15,570	759,693	347,328	62,411	1,026,006	314,505	834,303	6,326,501
1940	312,092	3,487,046	44,644	393,865	445,922	20,035	812,146	801,974	184,162	6,501,886
1941	1,939,422	1,307,462	156,429	22,600	455,798	0	361,401	181,416	178,683	4,603,211
1942	7,574,300	1,881,505	602,581	2,848	908,337	0	1,031,969	2,526,316	407,456	14,935,312
1943	8,920,728	902,093	783,842	0	958,952	0	1,614,232	3,319,310	0	16,499,157
1944	11,189,644	2,276,510	357,259	112,767	677,674	0	2,053,404	4,237,686	0	20,904,944
1945	13,275,261	2,381,089	622,231	67,575	678,798	0	1,918,757	4,617,728	0	23,561,439
1946	16,433,798	904,596	828,897	419,482	579,378	0	2,277,464	4,196,093	0	25,639,708
1947	4,543,768	5,268,599	277,517	26,102	121,224	0	3,218,046	2,894,720	327,680	16,677,656
£										
1937	740	55,700	2,328	17,227	0	0	10,250	4,293	31,173	121,711
1938	15,208	51,767	1,149	10,460	10,118	556	13,627	7,808	25,102	135,795
1939	17,912	41,089	382	18,139	10,135	1,080	14,917	5,792	18,662	128,108
1940	14,429	156,486	2,253	20,885	17,946	552	17,147	29,291	5,962	264,951
1941	126,145	61,266	10,214	1,523	23,246	0	8,440	7,112	7,268	245,214
1942	348,993	92,556	23,289	194	36,894	0	33,624	111,500	16,447	663,497
1943	421,136	49,197	33,794	0	43,157	0	85,468	161,554	0	794,306
1944	571,207	118,639	23,027	9,576	32,344	0	111,739	203,106	0	1,069,638
1945	706,343	123,834	28,638	5,679	33,262	0	102,585	219,866	0	1,220,207
1946	934,196	48,118	40,046	33,202	28,300	0	121,222	198,711	0	1,403,795
1947	223,279	195,638	10,187	2,330	6,037	0	99,056	125,192	15,185	676,904

Sources: NAUK, CO 647/55-61: Trade reports. Totals for 1932-36 are from NAUK, CO 852 320 9: War Trade. Commodities- Rubber, Nigeria. 12 June, 1940, Officer Administering the Government (OTG) to Dolobran gives the total for 1937 as 5,763,983.

Figure 1. Nigerian Rubber Exports, 1937-47 (lbs)



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