United States Rubber Company in Southeast Asia, 1910-1942

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Model of Welfare Capitalism? The
United States Rubber Company in
Southeast Asia, 1910–1942

SHAKILA YACOB

Welfare capitalism, the management ethos adopted by American business leaders in the early twentieth century, emphasizes the role of business rather than trade unions or government in taking care of its workers. This article focuses on the reasons why the United States Rubber Company (USRC), one of the four largest U.S. rubber manufacturers, promoted welfare capitalism at its rubber plantations on the east coast of Sumatra and Malaya between 1910 and 1942. In addition, this study assesses the development of USRC’s system of welfare in the areas of housing, profit sharing, pension plans, health care, and recreation. This article argues that USRC’s intention was not to forestall unionization (the intention of U.S.-based companies in adopting welfare capitalism), as union formation in Southeast Asia during that period was very unlikely, but to overcome labor shortages and high turnover rates and to ensure labor stability. With reduced labor costs, the availability of financial resources allowed for technical innovations and R & D, which ultimately would lead to increased productivity.

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The mainstream view among labor historians suggests that welfare capitalism (or corporate welfarism), reached its peak in the 1920s and began to decline during the Depression in the 1930s. The rise of big business in the United States required a new approach to labor relations leading to a combination of innovative management and welfare capitalism. This was partly to increase productivity and output quality by reducing factory labor turnover. But welfare provisions were also intended to deter unionism and secure company loyalty. Thus, progressive employers in the United States provided housing, healthcare, pension, and shared profits in the hope of creating a loyal, productive, and dependable workforce.

Welfare capitalism was not a uniquely American phenomenon. Indeed these paternalistic practices had their origins in the welfare capitalist systems developed in nineteenth-century Western Europe. In the United Kingdom, employers such as Lever Brothers and Cadbury embraced welfare capitalism practices. However, there was a tendency in Germany, France, England, and other parts of Europe as well as the Scandinavian countries, for the state (i.e. the government) to provide welfare benefits since the late nineteenth century, while in the United States, in contrast, large firms used welfare capitalism to prevent the development of a welfare state and minimize government intervention.


4. In the United States there were noted delays in adopting similar state welfare programs, as Daniel Rodgers contends that while transatlantic exchange of ideas occurred, American social reformers failed to transplant European programs. He argues that in the face of fierce opposition from the private sector, it was only
In the decades following the Great Depression, most Americans had begun to support some degree of state intervention in the economy, and Colin Gordon suggests that most businesses were glad to turn over the responsibilities of providing welfare benefits to the federal government because of financial constraints. However, Sanford M. Jacoby provides evidence of the endurance of welfare capitalism among American firms despite the government introduction of welfare benefits and the financial constraints imposed by the Depression. Some employers maintained their paternalistic practices well into the twentieth century, albeit with a modified approach. For the USRC, even after World War II these practices continued at its subsidiaries in the two largest plantation colonies in Asia, namely, the Dutch East Indies (DEI) (the largest plantation colony in the world) and Malaya. This article argues that while USRC introduced welfare capitalism to offset unionism in its home country of the United States, in contrast, the company’s plantation subsidiaries in the DEI and Malaya introduced welfare capitalism to ensure labor stability in the quest for greater efficiency. Unions were not the issue. The colonial states of the DEI and Malaya both supported corporate hegemony and barred trade unions until after World War II. Despite this rather different set of motivations, USRC’s plantation subsidiaries closely followed the initiatives of their parent company in the United States when employing welfare capitalism programs. Although at its Southeast Asian rubber plantations these programs were similar to those of other European and U.S. plantation companies worldwide, USRC’s
differed in at least one respect by setting new standards of labor relations. No other large rubber producer implemented these policies as early and on such a large scale as USRC.

These paternalistic practices of welfare capitalism, this article asserts, were mutually complementary to both employers and employees. Although paternalism can create dependency, the employees of USRC’s subsidiaries in Southeast Asia, being mainly unskilled workers, benefited from improved working conditions and a much higher standard of medical attention compared with the health provisions of other existing rubber plantations. In fact USRC’s employees on the estates generally enjoyed much better conditions than other rubber estate workers, and in return the company was able to address labor shortages primarily by reducing turnover rates. This, in turn, reduced costs associated with training new workers, ensuring more continuity in the workforce and enabling greater investment in R & D. Investment in R & D allowed for new technical innovations to increase yield and reduce the size of the required labor, while a stable workforce meant it was easier to implement technical improvements.

USRC was a relative latecomer on the rubber plantation scene in Southeast Asia, yet within a short time outshone rubber pioneer firms in the field, mainly in the areas of R & D. Overall, the adoption and elaboration of welfare capitalism and the subsequent technical improvements by USRC made a qualitative impact not only on its plantation subsidiaries’ performance but also on the DEI and Malayan rubber industries.

The United States Rubber Company in Southeast Asia, 1910–1942

USRC began as a consolidation of nine footwear manufacturers in 1892 and entered tire production in 1905. By World War I, USRC had emerged as one of the four largest U.S. rubber manufacturers, along with Goodyear, Firestone, and Goodrich. Among the “big four,” USRC was the first and largest firm to integrate backwards into rubber plantations. With this backward integration, USRC evolved into a multinational company. Although not the first American multinational in the Southeast Asian rubber growing industry, USRC was the largest and its Sumatran investment one of the largest American-owned rubber plantations worldwide in the early twentieth century.
In the 1900s USRC adopted a policy of meeting its own crude rubber needs by acquiring extensive land concessions in northern Brazil, then the world’s largest rubber exporter. However, this cross-border investment failed in 1903 because of labor problems, leaf blight disease, and high government taxes. The editor of *The Straits Times* (Singapore) noted that:

> The Americans would have preferred to work on their own continent. That is only natural, and it is also creditable to the large patriotism which is embraced by what we call the Monroe Doctrine. But there are enormous difficulties of labor and transport.  

USRC instead worked to secure crude rubber supplies for its manufacturing purposes by establishing purchasing offices. This was achieved by the formation of its subsidiary, the General Rubber Company (GRC) in 1904. GRC set up purchasing offices in the rubber markets of Para and Manaos in Brazil and also in London and Liverpool.

The sharp increase in Brazilian rubber prices and new production opportunities in Sumatra led USRC to cross the globe in search of new rubber supplies. The rubber industry entered a phenomenal boom period between 1909 and 1910, with the growing demand for rubber in America largely due to the tripling of motor vehicles sales—from 65,000 in 1908 to 187,000 in 1910. However, rubber prices tended to fluctuate dramatically. By 1909, the price for rubber rose rapidly to $2 compared to $1.25 per pound in 1907. In December 1909, USRC’s Board of Directors appointed Edgar B. Davis as vice president in charge of plantation and allocated $1.5 million for initial expenses to acquire rubber plantations in Southeast Asia. USRC’s preferred strategy was to acquire established firms, which came with the advantageous assets of cleared land, a working organization, and an existing labor force. In 1910, Davis purchased 88,000 acres of an old tobacco plantation in Sumatra for $700,000.

The subsidiary Hollandsche-Amerikaansche Plantage Maatschappij, or Holland American Plantation Company (HAPM), was established in 1911. This subsidiary was managed by GRC until 1917 when

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another subsidiary of General Rubber, United States Rubber Plantations (USRPI), was formed with a capital of $10 million preferred stock and $20 million common stock, and it took over the management of the plantations and the operating subsidiaries. USRC was satisfied with its investment, stating that the cost of production in Southeast Asia, mainly because of the cheap labor, was one-third of the cost in Brazil.

The arrival though, of American foreign direct investment (FDI) on the East Coast of Sumatra soon earned the region the title, “The Dollar Land of Deli.” The Dollar Land of Deli became the center of “a highly sophisticated organization of corporate capital” and a coercive form of labor control, which allowed it to “emerge as one of the most lucrative ventures of the western colonial empires.” Within fifty years, this East Sumatran economy of rubber, palm oil, tobacco, tea, and sisal accounted for one-third of DEI export earnings and at the same time provided the raw material needed for European and American industrial expansion. USRC, as the largest American rubber plantation owner in the world, was the first such U.S. interest on the east coast of Sumatra, followed by Hawaiian Sumatran Plantations Ltd. in 1916 and Goodyear in 1917.

Large American rubber firms also sought supplies of rubber in Malaya. They first came to the region when rubber shortages in the United States were exacerbated by failed investments in rubber in places closer to home, such as northern Brazil. Malaya offered access to adequate and cheaper sources of supply. Firestone appointed agents in 1916 to look for opportunities to invest in Malayan rubber

14. “But what was Deli? In any case more than a name for the gigantic plantation belt on Sumatra’s east Coast...In Deli everything had to be imported, employees as well as the coolies. The staff came directly from Europe, the coolies from Java. Deli was a conglomerate of white settlements with Chinese and Javanese coolies encircling it. But they were all foreigners, no one had roots.” Ann Laura Stoler, Capitalism and Confrontation in Sumatra’s Plantation Belt, 1870–1979 (Ann Arbor, Mich., 1985), 14.
15. Ibid.
16. The Malayan rubber industry attracted several U.S. rubber firms to Malaya. In 1905, an American rubber company, the Malacca Rubber Company, was established, and by 1911 it became one of the largest producers in Malaya. Two American rubber companies in Malaya, The Pahang Rubber Company Ltd. (Pahang) and Tanjung Olak Rubber Plantation Company (Johore), were established in 1906 and 1907, respectively. There were no political or legal factors that blocked American rubber investments prior to World War I.
In September 1916, USRC sent Edgar B. Davis and Stuart Hotchkiss to meet the High Commissioner of the Federated Malay States. They wanted to ascertain the government’s stand on their wish to acquire rubber plantations. However, a wartime measure imposed by the British government blocked these large American rubber manufacturing concerns from investing in the Malayan rubber industry. The Rubber Lands (Restriction) Enactment lasted for less than 2 years and was repealed on 3 Sep. 1919. It was then that USRC was eventually able to invest in the Malayan rubber industry, although the timing was also partly due to the diminishing advantages in Sumatra in labor, duties, and taxation since 1910 when compared to Malaya. Therefore, for USRC, “there would be an element of safety” if they were to invest in Malaya.

In 1919, USRC approached the local governments of Johore, Pahang, Perak, and Kedah for concessions of 50,000 acres. In Pahang, the firm spent $45,752 on a survey of rubber investment opportunities. This greenfield investment plan was, however, abandoned when USRC decided to acquire existing rubber plantations in the Malay states. In the same year, USRC acquired 13,000 acres in Kedah for rubber plantations. By 1923, its Malayan properties consisted of 22,000 acres, with 10,000 acres planted and 1,500 acres in production. In July 1925, 6,300 acres, known as the Harvard Estates, were purchased in Kedah, Malaya. USRPI ran these estates under a subsidiary.

18. The Rubber Lands (Restriction) Enactment effective 25 July 1917 in the Federated Malay States and with similar legislation in the Straits Settlements and Unfederated Malay States stated that “No alienations over 50 acres were permissible except to British nationals, subjects of the Malay rulers, corporations registered in the United Kingdom, Dominions or locally in Malaya, and persons resident in the Peninsula for at least seven years and intending to so continue.” John H. Drabble, Rubber in Malaya, 1876–1922, The Genesis of the Industry (Kuala Lumpur, Malaysia, 1973), 136.
19. The year 1870 marked a watershed in Dutch colonial administration. An open door policy was implemented after several years of state monopoly on agricultural production to encourage FDI. In the early twentieth century Sumatra attracted considerable foreign investment in the rubber industry as rubber firms in the FMS had to pay higher land rents and premium because of popular demand for land in the boom years as well as a 21/2 percent ad valorem duty on the gross value of rubber. See, “Sumatra and British Malaya,” The Planter 11 (Aug. 1921), 51; and Drabble, Rubber in Malaya, 24.
known as the Malayan-American Plantations Ltd. (MAP), which was incorporated into the Federated Malay States (FMS) in 1920.

These acquisitions and the cost of their development were financed by the income from USRC plantations in Sumatra, which by 1919 had the largest rubber plantations in the world. USRC’s holdings in Sumatra in 1922 totaled 88,659 acres, while in the Malay states the company owned 22,226 acres. With a total acreage exceeding 110,000 under its control, USRC supplied 20 percent of its rubber needs from its own plantations in 1922.22

By 1926, USRC, through its subsidiaries, owned more than 104,000 acres in Sumatra and 30,000 acres in Malaya, representing an investment of $29.7 million, an expansion on 124,000 acres, and investment of $25 million in 1925. The parent company had invested $18 million; the balance of $11.7 million came from earnings from the plantation companies. There were more than 7 million rubber trees planted on 83,000 acres in Sumatra and Malaya by USRC, and 23 million pounds of rubber were produced in 1926 compared to 20 million in 1925. By 1927, USRC owned 135,053 acres in both Sumatra and Malaya (see figure 1). By December 31, 1927, the total investment was $33,113,238, equivalent to $381 per planted acre.23

In the late 1920s, USRC’s plantation venture was more profitable than the parent company and these profits kept the parent company afloat. In 1926 and 1927, USRPI declared dividends of $6 million and $4 million respectively to the parent company. A total of $8 million was transferred from USRPI profits in 1927, sufficient to finance the parent company’s operations until December 1928 through short-term bank loans.24 The financial statement of USRC in 1927 proves the profitability of this venture, when profits from the plantation were able to eliminate a deficit of several million dollars and turn a loss on the total yearly business of the company into a substantial profit. Following the worldwide depression from 1929 and into the 1930s, however, rubber prices plummeted and the supply of natural rubber exceeded demand.

The biggest rubber producing countries introduced the International Rubber Regulation Agreement (IRRA) in 1934 to regulate rubber exports and to maintain the price of rubber.25 On January 6, 1934,

25. This five-year restriction plan was signed in London on April 28, 1934 by representatives of the countries producing about 98 percent of the world
Lucius D. Tompkins, who was on the Executive Committee of USRC, attacked the inclusion of his firm’s plantations in Malaya and Sumatra in the restriction of IRRA, as they would be subjected to higher costs for crude rubber than their competitor Firestone, who was outside the restriction of IRRA. The restrictions reduced USRPI’s rubber shipments from 50,872,000 pounds in 1934 to 40,004,000 in 1935 and its profits from $1.73 million in 1934 to $0.96 million in 1935. However, higher prices for rubber did enable USRPI to show a net profit of $1.9 million for 1936. In 1937 enhanced export quotas set by IRRA allowed a 39 percent increase in poundage of rubber shipped by the firm’s plantations. With increased shipments and higher prices throughout most of the year, USRPI’s net profits increased to $4.6 million that year.

supply: Britain, DEI, India, Burma, French Indochina, North Borneo, Sarawak, and Thailand. This scheme allocated quotas to each country based on average exports for the years 1929 to 1932, and planting of new areas were restricted.

Table 1  United States Rubber Plantations: Production and Average Yield Per Acre in Sumatra and Malaya, 1937–1941

<table>
<thead>
<tr>
<th>Year</th>
<th>Acreage Owned</th>
<th>Acres Tapped</th>
<th>Production (in lbs.)</th>
<th>Average Yield Per Acre (lbs.)</th>
<th>Total Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1937</td>
<td>135,000</td>
<td>89,075</td>
<td>58,072,000</td>
<td>652</td>
<td>17,059</td>
</tr>
<tr>
<td>1938</td>
<td>132,000</td>
<td>57,530</td>
<td>37,428,000</td>
<td>653</td>
<td>13,160</td>
</tr>
<tr>
<td>1939</td>
<td>132,000</td>
<td>77,700</td>
<td>53,501,000</td>
<td>689</td>
<td>n.a.</td>
</tr>
<tr>
<td>1940</td>
<td>132,000</td>
<td>87,903</td>
<td>65,157,000</td>
<td>741</td>
<td>n.a.</td>
</tr>
<tr>
<td>1941</td>
<td>131,000</td>
<td>n.a.</td>
<td>57,000,000</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>


In the five years (1937 to 1941) preceding the Japanese occupation, the plantations in Sumatra and Malaya continued to produce 20 percent of USRC’s crude rubber requirements.28 During these years significant progress was made in increasing yields and production rose from 37.4 million pounds in 1938 to 57 million pounds in 1941, the last year USRC received crude rubber shipments from its plantations prior to the war. Average yields per acre increased significantly during this period, as shown in table 1, from 652 pounds per acre in 1937 to 741 pounds per acre in 1940, a new record.

The preceding paragraphs and the data in table 1 outline the progress of USRC’s rubber plantations in Southeast Asia prior to World War II. Despite being a latecomer, USRC managed to increase yields and production. However, although important in supporting the parent firm’s continued existence in the mid-1920s, USRC’s production still only managed to supply 20 percent of the company’s requirement. This would soon change. Good labor relations in estate management allowed for reduced labor costs and low turnover rates, which, in turn, provided significant financial resources for technological innovations and R & D investments on the USRC’s Asian plantations.

Labor Developments in Southeast Asia, 1910–1942

In the plantations of Southeast Asia there were several stages in the development of the labor market. The plantations moved from slavery to indenture, then to a quasi indenture system via labor contractors, and finally the 1930s depression-era repatriation (when

migrant workers were expelled to their ancestors’ home countries despite often having been in the country in which they were working).

As rubber became an increasingly lucrative crop in the late nineteenth century, FDI levels in both Malaya and the DEI rose. As a result, both colonial states took steps to promote the growth of their local rubber industries by patronizing western enterprises, granting liberal land concessions, and facilitating the use of cheap labor.29

As seen throughout most of Asia, Africa, and the Pacific in the late nineteenth century until the early twentieth century, the indenture system of labor recruitment was the norm. These indentured workers contributed immensely to the colonial plantation economies.30 During that period, laborers in the Sumatra plantation belts were brought in from Java and China. However, in Malaya, as in most of the colonial plantation world and noted by David Northrup, the main source of labor supply came from India, followed by China and DEI (mainly Java).31 As highlighted by annual Labor Reports at the time, indigenous Malays were not particularly attracted to the waged employment and strict work procedures offered at rubber estates


30. The indentured labor system replaced slavery, which was abolished in the British territories in 1833–34. In the DEI, slavery was completely abolished by 1860. The indentured labor system refers to a recruiting process in which a laborer entered into contract with the employer within a stipulated period to work off the debts that were incurred during the journey from his home country. For the Chinese, this indenture system of labor recruitment was known as the credit ticket system. For a detailed discussion on the different recruitment process of the Chinese and Indian laborers under the indenture system see, Leong Yee Fong, Labour and Trade Unionism in Colonial Malaya. A Study of the Socio-economic and Political Bases of the Malayan Labour Movement, 1930–1957 (Penang, Malaysia, 1999), 8–12. See also, P. Ramasamy, Plantation Labour, Unions, Capital, and the State in Peninsular Malaysia (Kuala Lumpur, Malaysia, 1994), 21–3, and Stoler, Capitalism and Confrontation, 28.

as they owned land. As a result, Tamil Indian workers constituted 70 percent of the plantation workforce peaking at 181,000 laborers in 1929 (compared with 68,000 Chinese). Tamil workers offered cheaper labor and were deemed by planters to be much easier to manage though generally less healthy than the Chinese and the small Javanese labor force. Furthermore, Chinese labor was generally directed toward Chinese employers while Indian labor was recruited for European-owned plantations. Recruiting Javanese workers was costly, as it involved getting written permission from the Dutch authorities through the Dutch Consul General in Penang or Singapore and then hiring a professional labor recruitment firm.

In 1910, the indenture system of labor recruitment was abolished in Malaya. This was as a result of the serious abuse associated with the system whereby laborers were customarily exploited, ill-treated, and cheated by their employers. After 1910, the recruitment of laborers was carried out by native recruiters (usually by the “headman”). However, this new system of recruitment was really just a variant of the indentured system. It is important to note that the indentured system and its later variant greatly contributed to an expanding immigrant population. Although in theory workers were free to leave their employment with a month’s notice, in practice laborers did not have much choice but to stay on the plantations because of the subsistence wage and the tight state control.

34. Fong, Labour and Trade Unionism, 11.
36. Jomo Kwame Sundram, A Question of Class: Capital, the State and Uneven Development in Malaya (Singapore, 1988), 188. See also, Ravindra Jain, South Indians on the Plantation Frontier (New Haven, Conn., 1970) and Peter Rimmer and Lisa Allens, eds., The Underside of Malaysian History: History Pullers, Planters and Prostitutes (Singapore, 1990). By 1920, European planters employed Chinese laborers through Chinese contractors. These contractors took charge of the Chinese laborers paying their wages, and also provided their housing, provisions, and food. Thus, Chinese laborers worked under these contractors and not European planters and again were open to abuse by unscrupulous employers. Unlike the Chinese laborers, Indians were employed directly by the European plantations. The recruitment of Indian labor came under the Kangany system. A former overseer (a Kangany), would recruit workers from his village in South India getting them to sign an agreement to repay the advanced costs of passage. The worker sold to the planter was bound to the employer until his debt was cleared.
In the DEI, indentured labor, as outlined by the Dutch authorities in Batavia under the 1880 Coolie Ordinance, was legally abolished in 1911, but was not enforced for two decades. The ill treatment of laborers on the Deli plantations was well known and Chinese immigrants dreaded to work on these estates. The indentured system clearly was still in use in 1925 in Sumatra, as noted by H. Stuart Hotchkiss, a staff member of USRC. He hoped that, in the interest of both laborers and planters, the existing system in Sumatra would continue without legislative intervention. Hotchkiss was of the opinion that the indentured system allowed for far more benefits for workers because of the permanent nature of the contract compared with the transitory nature of free labor. However, Hotchkiss’s comment that estate managers in Malaya were generally not willing to invest heavily in permanent projects for sanitation suggests that a further motivation for retaining the indentured system was to keep labor costs to a minimum.

There are various conflicting interpretations and historiographical debates in the context of freedom and dependence, costs and benefits, of indentured labor in the plantation and mining economies of the colonial world. This article however takes the view that the use measures instituted in the Labor Codes of 1923 restricted the movements of laborers and were more beneficial to the employers. Workers were punished for desertion and fined for misconduct and needed the permission of the Controller of Labour to leave the plantation. “Labour Conditions in British Malaya” (Geneva, 1927), National Archives, Kuala Lumpur, Malaysia.

38. Yen Ching-Hwang notes that: “The coolies of Deli in North Sumatra were ranked as the worst treated group among the Chinese in the Dutch East Indies. Their miseries were widely known in the overseas Chinese communities in Southeast Asia.” Yen Ching-Hwang, Coolies and Mandarins: China’s Protection of Overseas Chinese during the Late Ch’ing Period (1851–1911) (Singapore, 1985), 160–1; Jan Breman, Taming the Coolie Beast: Plantation Society and the Colonial Order in Southeast Asia (Singapore, 1994).

39. H. Stuart Hotchkiss was one of the United States rubber officials sent out in 1907 and again in 1909 to survey the possibilities of rubber production in the “Middle East” (a term used by the Americans for the region known today as Southeast Asia). He came from one of the family of rubber pioneers in New England and was at that time a young engineer attached to GRC.


of such indentured labor in rubber plantations in Southeast Asia was not mutually beneficial to both employers and workers, due to the failure of employers to look into the welfare of the “coolies” or rubber workers, thus resulting in discontent, ill health, and low productivity. There ensued a series of strikes and revolts. In Southeast Asia, indentured laborers were crippled by tropical diseases and malnutrition because of poor sanitation. Therefore, the hidden costs of getting these contractual workers fit for work in the plantations probably amounted to almost the same cost of hiring free labor (discussed later).

By the mid-1920s, because of the increasing numbers of free laborers, state investigation and intervention, as well as an increasing number of growing labor unrest and protests, marked improvements were made in the estate working conditions, but the laborers’ working conditions were still far from desirable. The rubber slump from 1921–1922, the Stevenson restriction scheme (1922–1928), followed by the falling prices in the mid-1920s and the Depression made estate managers reluctant to invest in their employees’ welfare. The focus on short-term gains from low labor costs proved a limited strategy, and eventually conflicted with the needs of a successful rubber venture.

In Malaya, for the greater part of the colonial period, there was a lack of labor organization for several reasons. Firstly, their association with a particular clan, distinct regional origins, and speech group differences meant that the Chinese labor force was greatly divided. Similarly separated by ethnic and linguistic differences, the Indian laborers were further divided by caste differences. Secondly, the separate systems of labor administration for the Indian and Chinese laborers led to a different system of employment, method of payment, and wage rates. These divisions not only prohibited a uniform voice in demanding improvements in labor conditions, but also “generated

42. The Government of India followed closely the developments of Indian laborers in Malaya. The Labour Code of 1912, for example, was a result of pressure from the Government of India and also the metropolitan government. The Labour Code of 1912 allowed for the appointment of a Controller of Labour who was given the authority to inspect the workplace and oversee the enforcement of the stated provision which included working agreements, standard working hours, housing, hospital, medical care, and health and sanitary care. With the passing of the government of India’s Indian Emigration Act of 1922, the provisions of the 1912 Labour Code was enlarged and a resident agent became the guardian of Indian labor. In contrast, since 1877, Chinese laborers were placed under the jurisdiction of the Chinese Protectorate. J. Norman Parmer, Colonial Labor Policy and Administration: A History of Labor in the Rubber Plantation Industry in Malaya, c. 1910–1941 (New York, 1960), 114–5; Fong, Labour and Trade Unionism, 10–16.
different levels of labor consciousnesses." A third factor was due to
the colonial authorities’ emphasis on attracting FDI into the Malayan
rubber industry and the necessity to ensure an adequate supply of
cheap labor. Such a pro-business stance was also "fostered by the
proximity of social relations between administrators and planters in
the exclusive social clubs." In addition, the interests of the rubber
companies were represented by influential organizations such as the
Planters Association of Malaya and the Rubber Growers Association,
which allowed them to exert their influence on labor policies through
the local or metropolitan authorities. Most of these rubber firms
were mainly interested in high-quality production, cheap labor, and
systems that best suited their production needs. Furthermore, the
illiterate and heterogeneous immigrant laborers did not have the
means to organize themselves in their pursuit of better working
conditions.

While some studies, such as Vincent J.H. Houben and J. Thomas
Lindblad’s, argue that the colonial state acted as an intermediary
between the private corporations and the laborers, thereby facilitating
the flow of labor supply and instituting good labor practices, others,
such as Jan Breman, Colin Gordon, and Ann Laura Stoler, have
asserted that the state had consistently supported and participated in
the coercion and subordination of the laborers. Both probably have
some credence. The colonial state in the DEI and Malaya did make
attempts at different times to institute good labor policies, but these
half-hearted attempts failed to penalize errant employers. Thus, the
fact remains that there was more coercion than mediation.

Since the late nineteenth century, there had been sporadic and
uncoordinated labor protests against economic and social conditions
in plantations in Malaya and Sumatra. In Malaya, increased incidence
of labor protests against harsh treatment and bad living conditions
took place in the 1910s, but the general prosperity of the 1920s led to
a decline in such agitation. In contrast, labor unrest on the Sumatra’s
East Coast continued into the 1920s, registering a drop only in the
1930s. As elsewhere around the world, the Depression years of

43. Fong, Labour and Trade Unionism, 16.
44. Ibid., 14.
45. Vincent J.H. Houben et al., Labour in Colonial Indonesia: A Study of Labour
Relations in the Outer Islands, c.1900–1940 (Wiesbaden, Germany, 1999); Breman,
Taming the Coolie Beast; Gordon, “Towards a Model of Asian Plantation Systems”;
Stoler, Capitalism and Confrontation.
46. Labor agitation manifested in the form of assaults on supervisory personnel,
mainly whites. The 1915 penal code and subsequent amendments until the 1920s
(which banned any form of collective action and labor protests) designed to
1929 and the 1930s had a devastating effect on the various industries, leading to massive unemployment. In Malaya and the DEI, the bulk of the unemployed came from the plantations and mines. To reduce the surplus of labor in the tin and rubber industries, Chinese and Indian laborers were, at times, forcefully repatriated to their home countries. In Malaya, Indian estate labor declined from 206,000 in 1929 to 104,000 in 1932.47

Just as the colonial government in Malaya, the Dutch government in Deli supported the move by planters to repatriate dismissed laborers to Java. Between 1930 and 1934, more than 50 percent of the workforce was laid off, reducing the numbers to 160,000 from 336,000.48 G.C. Allen and A.G. Donnithorne note that despite the Depression being financially ruinous, it was instrumental in transforming the rubber industry in the DEI as firms shifted to modern techniques of production, which in turn increased labor productivity.49

In Malaya, not until the late 1930s was there a concerted effort among Chinese and Indian laborers to establish a labor movement. Chinese and Indian laborers lacked expertise and experience and often deferred to “organized groups,” who tended to maximize their grievances and mobilize the laborers in Malaya in order to further their own political agendas. Among these organized groups were the Malayan Communist Party (MCP) and the Central Indian Association of Malaya (CIAM). The MCP’s labor arm, the Malayan General Labour Union, an umbrella organization that coordinated the activities of the various labor branches set up in Singapore and the Malay states, used the various labor problems such as low wages, wage reduction, repatriation, and problems of unemployment to agitate (mainly) Chinese laborers and to further their left wing political agendas. These General Labour Unions were illegal organizations and the MCP’s attempts to register these unions were rejected by the colonial authorities when they were found to be communist-inspired. Unlike the MCP’s success in mobilizing Chinese laborers, they failed to gain sympathy with Indian laborers.

The formation of CIAM, a political organization, in September 1936, paved the way for Indian laborers to become more organized themselves. CIAM, knowing fully well the colonial government’s stand on trade unions, instead encouraged the formation of associations among the Indian laborers. Consequently, between the years 1939 to 1941, the Klang District Association, United Kuala Langat Indian Association, Batu Arang Labour Association, and Johore Indian Labourer’s Association among others, sprouted up in districts and towns where European-owned estates were located.

Growing labor militancy was reflected in the spate of strikes and other incidents of unrest that broke out between 1934 and 1941. By August 1940, strikes in “essential industries” (tin and rubber) were banned and compulsory arbitration was introduced to resolve industrial disputes. Trade union legislation was implemented in only June 1941 and the long delay “showed that the government was not prepared to... legalize the existence of the de facto unions,” but instead supported individual estate labor unions formed under the supervision of the estate management. The formation of trade unions was instituted only in the colonial labor policy post-World War II after the Japanese Occupation (1942–1945). Similarly in the DEI, the colonial state did not officially recognize any unionization until post-Independence and then “forced the unions—in the name of nationalism—to assume responsibility for a well-disciplined and productive labor force.”

In summary, between 1910 and 1941, there were no “officially recognized” labor organizations in the DEI and Malaya. In Malaya, apart from the divisions between and within the different ethnic groups of immigrant laborers, the all-controlling nature of the indentured system of labor, and state patronage effectively blocked lab...
opportunities for labor to organize. Similarly, in the DEI, the strong legal barriers made union formation difficult, although estate workers were able to “constitute a social force in their own right by threatening—with potential and actual violence—the industry’s profits and in turn by directly affecting corporate labor policies and the strategies of labor control.”

Although there were no official or legally recognized labor unions in Malaya and the DEI, disruptive action by the workers, generally unorganized and spontaneous, did force USRC to introduce change in its working practices. Labor unrest was undoubtedly a motivating factor for introducing welfare capitalism policies as an attempt to placate workers and discourage them from becoming organized.

Welfare Capitalism: USRC’s Way

USRC’s welfare programs included labor, healthcare, and recreational practices, which helped maintain a more efficient and loyal workforce, both at the managerial and laborer level, on its plantations in North Sumatra as well as Malaya. These programs sought to decrease high labor turnover rates and encourage workers to adopt safe and sanitary living habits, in an effort to reach the company’s greater goal of increased productivity and efficiency and, ultimately, higher profits. The combination of a well-satisfied supervisory personnel and the reduction of turnover in unskilled labor, as free workers substituted indentured laborers, were the ultimate goals to encourage higher productivity.

In a labor-intensive industry such as rubber, there is a need to maintain an efficient labor force including both skilled and nonskilled workers. Rubber firms in Asia primarily relied on European skilled workers because of the lack of skilled workers among the indigenous and immigrant labor force. Similar to the practices of British firms in Malaya, top managerial positions at USRC were held by expatriates, either recruited locally or from their home countries (they were mostly British in Malaya and Dutch in the DEI rather than American). There was never any effort to give management training to either the

54. Ibid., 55.
55. For details on the human resource policies and procedures of British firms in Malaya and elsewhere see Geoffrey Jones, Merchants to Multinationals: British Trading Companies in the Nineteenth and Twentieth Centuries (Oxford, U.K., 2000), chap. 7.
indigenous population or the immigrant laborers. Only clerical staff was recruited from the Indian immigrants, with very few Chinese.

European skilled workers were locally scarce because of the high demand from the large number of western rubber firms. Most skilled workers were brought in from their home countries. For example, during World War I, the British commercial and government interests protested against the entry of American rubber firms, arguing that their entry would compound the existing problems in the labor market of the rubber industry. The Rubber and Tin Exports Committee (RTEC) highlighted labor issues, stating that the American entry might entice British assistants from present employers with the promise of higher salaries. According to Lord Balfour of Burleigh, the Chairman of the RTEC, “labor snatching” or “crimping” incidents in Sumatra showed the tendency of American corporations to take unfair advantage of British rivals. This allegation was then refuted by the British Vice Consulate in Medan, Sumatra.

In response to these issues, USRC successfully recruited and retained the services of these experts who became long-term employees and in turn contributed towards the managerial and scientific efficiency of USRC’s plantations.

56. Owing to the First World War, there was a lack of young British planters because those available in Malaya were recruited by the army. Because of the scarcity of young British planters, American capitalists might offer any terms to secure the services of experienced men. “General Rubber Company of USA,” Dec. 12, 1916, CO 273/452, No.59749, National Archives, Kuala Lumpur, Malaysia.

57. “Land Grant to Mr. Ch.M. Naested,” April 19, 1917, CO 273/459, No. 27642, National Archives, Kuala Lumpur, Malaysia; The British Vice Consulate in Medan, reported there was no local evidence of strained relations between British and American planting organizations with regard to unfair methods in respect of labor. The “crimping” (snatching) of time-expired laborers had never happened. According to him, the Hollandsch-American Plantage Maatschapiij, as a member of the Planters Association of the East Coast of Sumatra (AVROS), which was under the strict control of the DEI government, was allowed to import labor from Java. At that time, there was no American interest in establishing a recruiting organization in Java; therefore, there was no danger of American and British interests coming into conflict. “American Interference with Labours of British Planters,” Aug. 2, 1917, CO 273/462, No. 38833, National Archives, Kuala Lumpur, Malaysia.

58. Aware of the labor turnover costs and the scarcity of skilled workers, rubber companies sought to gain loyalty among skilled workers through various economic and noneconomic programs. Such economic benefits included higher wages, a profit-sharing system, pension plans, and job security, while noneconomic benefits were primarily recreational facilities provided as a distraction for those skilled workers who were thousands of miles away from their homes. At USRC’s Indonesian subsidiary in Sumatra, HAPM, for example, plantation managers were hired on a three-year contract (with the exception of Dutch managers who were contracted for five years), which included the provision of six months’ leave with full pay prior to the termination of contract. HAPM disbursed 12.5 percent of its
USRC made concerted efforts to carefully recruit experienced and well-qualified staff in order to avoid costly mistakes. Early staff recruitment included factory engineers, mycologists, soil analysts, foresters, genetic botanists, planters, and accountants from the United States. They were deployed on USRC’s plantations in Sumatra and later, Malaya. A team of personnel was created and sent from the USRC Research Department in New York to work with experienced British and Dutch scientists.59 Meanwhile, supervisory personnel were of different nationalities. In Sumatra, USRC employed 90 Europeans and Americans to supervise the estate laborers, while at the Dublin estate in Kedah, four Irish managers were appointed.60

Engineers were needed mainly in the initial planning process at the estates. For example, at the Dublin estate in Central Kedah, a land concession comprising approximately ten thousand acres on the Muda River required a team of engineers for the reclamation project. This became the largest ever reclamation project in Malaya and took five years to complete from 1919 to 1924. In addition, engineers were needed to construct the ten miles of highway, which cost $7,000 per mile. A further 25 miles of graveled road was built, linking every part of the estate to the main highway. Another team of engineers was responsible for building drains, steam railroads, roads, houses, factories, and other buildings. Mechanical expertise was also needed in the repair shops, set up primarily to provide efficient services for any mechanical problems that could arise in the estate’s organization.61

Since the Kedah concession that the Dublin estate acquired comprised of 7,000 acres of hilly land, the contour system of planting earnings to its workers directly engaged in production, and bonus plans constituted 25 percent of staff salaries. Pension plans catered to both skilled and unskilled workers who gave 25 years of their service to the company. Hotchkiss, “Operations of an American Rubber Company,” 159.


60. This estate was named after the First Manager and his Assistants who were from Dublin. Desmond J. Muzaffar Tate, The RGA History of the Plantation Industry in the Malay Peninsula (Kuala Lumpur, Malaysia, 1996), Appendix 1, 602; “Dublin Estate—The New Plantation of the United States Rubber Company in Kedah,” Vice Consul, Penang, Oct. 29, 1923, Records of the Department of State Relating to the Internal Affairs of British Asia, 1910–1929, U.S. National Archives, College Park, Md.

61. The lack of local experts, particularly engineers and mechanics, had limited USRC’s expansion plans at the Dublin Estate in Kedah. For example, USRC abandoned an attempt to build a narrow gauge railway track equipped with American rolling cars because of this lack of expertise. See, “Dublin Estate—The New Plantation of the United States Rubber Company.”
was adopted, while for the flat land, they used geometrically spaced row planting. The estate preserved 50 acres for an experimental nursery with rubber seedlings for future transplantation projects. These activities required the services of a range of experts including mycologists to study and control tree diseases, soil analysts to determine suitable areas of planting and manure applications, foresters to supervise planted area and to study the thinning and tapping process, genetic botanists to assure the proper selection of seeds and the breeding of high yielders, and also, of course, planters. The innovative management of the USRC estates and the expertise rendered by skilled personnel would have been futile, however, if not complemented by a reduced turnover of unskilled labors. Increasing competition and the rising demand for rubber during the prosperous years of the mid-1920s emphasized the necessity for good labor relations to increase worker productivity.

The Economic Costs of Rubber Plantations

In the late nineteenth and early twentieth century, there were problems with the maintenance of the estates, labor sanitation, and healthcare on most rubber estates in Sumatra and in Malaya. In the early 1920s and 1930s because of the depressed rubber prices, most estates adopted a tight financial policy. There was a lack of organization, general care of the estates, and cultivation of rubber trees. In no small part because of this neglect, production figures were very low and there was a need to raise investment in the estates and to establish healthier living conditions in order to boost efficiency in the long-term. Laborers suffered from a number of poor working conditions: lack of cleanliness, overcrowding, and poor ventilation.

In Malaya, up until 1910, the Labor Department was responsible for employment and living conditions on the estates in collaboration with the Protector of Labour and the Indian Immigration Agent. With the passing of the Labour Act of 1912, these responsibilities shifted to the employers. However, as Leonore Manderson notes, employers failed to adhere to the regulations designed to enhance workers well-being and to provide healthcare regardless of their status, as indentured or free labor.

63. Leonore Manderson, Sickness and the State: Health and Illness in Colonial Malaya, 1870–1940 (New York, 1996), 139.
The same disregard for workers’ welfare was seen in Deli, North Sumatra, where even after several decades of operations most companies were unwilling to invest in a healthy and permanent workforce. In 1907, the Dutch government established a labor inspectorate to investigate labor conditions and to check the systematic abuse of labor contracts, but with minimal success. As in Malaya, employers refused to cooperate and considered this “development as a hostile, liberal, and pernicious threat to their autonomy.”64 This attitude prevailed as companies asserted their sovereignty over land and labor. In the 1920s and 1930s efforts to improve labor and estate conditions met with limited success. As noted by Stoler, “... the ‘colonists’ must be coolies first and foremost, accustomed to estate work, and subject to stipulations which would assure that they remained economically dependent on, and available to, the estates.”65

Similarly, in Malaya, from the 1910s to the 1920s, the colonial authorities took several steps to try to ensure health, and sanitation measures were being implemented. Among these steps were the establishment of administrative machinery to monitor estate conditions, enquiries into the health status and conditions of laborers, further guidelines for estate hygiene and sanitation, and the appointment of boards and individual officers to ensure adherence to these guidelines. In 1926, Health Boards were set up under the Health Board Enactment of the FMS. These boards were responsible for the supervision of health and medical services on estates and the organization of estate hospitals.66

The colonial authorities throughout the greater part of the colonial period reiterated the economic cost of illness and emphasized the relationship between health expenditure and profits, and between low production costs and a healthy labor force.67 Efforts to cut costs in the construction of laborers’ housing led to poor sanitation, which invariably led to poor health. Insufficient hygiene and sanitation led to epidemics of infectious diseases (diarrhea, hookworm infections,

64. Stoler, Capitalism and Confrontation, 39.
65. Ibid.
66. Several inquiries were held into estate health: the first in 1890, the second in 1910, and again in 1924. The 1924 commission was appointed to inquire into the health of estates in the FMS, specifically “the measures to be taken to improve conditions in regard to health, sanitation and prevention of disease on estates, the system of estate hospitals and nursing and medical attendance therein, and the system of visiting estates by medical practitioners.” Manderson, Sickness and the State, 149–53.
67. Ibid., 137.
smallpox, cholera, typhoid) and endemic diseases, such as malaria. Labor became more expensive and in the long run ill health led to a high turnover of labor—an important consideration on a rubber plantation, as the bulk of labor had to be imported. As observers noted, sick workers added to the high cost of production, while high turnover led to lower rubber output, as well as extra training costs to replace lost workers.

USRC and Capital Costs

USRC realized that investments in estates had to be undertaken to boost efficiency, which can be seen from the long-term outlook reflected in the capital costs incurred in their rubber investments in Sumatra and Malaya. Table 2 compares the capital costs and cost per acre among various nationalities in their Southeast Asian rubber ventures. In 1923, investors from Britain, the largest single foreign national group of investors in Southeast Asia, owned two-thirds of the rubber plantations with a capital cost of $505 million and a cost per acre of $269.47. This latter figure was close to the average cost per acre of all foreign owned plantations excluding those from the United States. U.S.-owned rubber plantation costs per acre of $367.82 stood 39 percent above the costs of Japanese-owned plantations, and 64 percent above the lowest, those plantations owned by French or Belgian interests.

The variation in capital costs between rubber producers reflects their short- or long-term strategies in rubber investments. Rubber producers with comparatively low capital costs could be considered as “penny wise and pound foolish,” according to Clement Schwinges commentating at the time, as “they start wasting money by saving in the very first step of operations—clearing the jungle. After cutting and burning they leave the stumps to rot in the ground, because their removal is rather expensive. But to leave them is often more expensive because they rot and spread contagious diseases among the growing rubber trees, destroying sometimes acres and acres of planted rubber.” As stated above, some rubber producers sought to save on

69. Malcolm Watson, The Prevention of Malaria in the Federated Malay States: A Record of Twenty Year’s Progress (London, 1921), 155
Table 2 Rubber Plantations: Differences in Capital Costs and Cost Per Acre by Various Nationalities in Southeast Asia, 1923

<table>
<thead>
<tr>
<th>Country</th>
<th>Acres (,000)</th>
<th>Capital Costs(^a) (USD, 000)</th>
<th>Cost Per Acre (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Britain</td>
<td>1,874</td>
<td>505</td>
<td>269.47</td>
</tr>
<tr>
<td>Netherlands</td>
<td>535</td>
<td>130</td>
<td>242.99</td>
</tr>
<tr>
<td>Japan</td>
<td>125</td>
<td>42</td>
<td>336.00</td>
</tr>
<tr>
<td>France and Belgium</td>
<td>134</td>
<td>30</td>
<td>223.88</td>
</tr>
<tr>
<td>China</td>
<td>52</td>
<td>14</td>
<td>269.23</td>
</tr>
<tr>
<td>Denmark</td>
<td>40</td>
<td>11</td>
<td>275.00</td>
</tr>
<tr>
<td>Others</td>
<td>37</td>
<td>5</td>
<td>294.12</td>
</tr>
<tr>
<td>United States(^b)</td>
<td>87</td>
<td>32</td>
<td>367.82</td>
</tr>
<tr>
<td>Grand Total</td>
<td>2,864</td>
<td>769</td>
<td>268.50</td>
</tr>
</tbody>
</table>

\(^a\) Capital costs or “one-off costs” refers to costs for acquiring, developing, or installing fixed assets of the firm.

\(^b\) The Americans were mainly represented by USRC, one of the largest rubber investors in Southeast Asia.


the construction cost of laborers’ lines or living quarters, resulting in poor and more expensive labor due to a larger turnover.

The Americans incurred the highest capital cost per acre because of the timing of their entry. Being latecomers, they had the advantage of learning from the mistakes of earlier planters, and therefore were able to carefully examine the costs and benefits of a long-term rubber investment. Edgar B. Davis, the Managing Director of USRC from 1911 to 1918, ran the plantations “on high efficiency, including scientific care of men and of trees, and a working organization of both coordination and cooperation” and USRC became “the first concern that spent real money on research.”\(^71\) Efforts were taken to guarantee the best conditions and highest efficiency in every branch of the operation to ensure the overall smooth running of the estate from initial clearing to the shipping of the finished product.

USRC employed free rather than indentured labor in an attempt to save on capital costs and reduce labor turnover rates, although in doing so found it necessary to introduce new welfare benefits to retain loyal workers. Progressive personnel practices not only retained skilled and loyal workers but also increased productivity and worker efficiency.

USRC’s Sumatran subsidiary, HAPM, in the state of Kisaran, was developed to be the largest single unit plantation in the world and became the cleanest and best-kept plantation in the East. It was not only the largest, but the most conspicuous plantation in the world. The emphasis placed on R & D and the provisions made by the company for the health and well-being of the indigenous workers was outstanding and excelled over those of other rubber plantations. These factors, among others, made Kisaran the Mecca for rubber planters.

The attraction of Kisaran was not lost on Frank G. Smith, the Secretary of the Rubber Growers Association (RGA) of London. In comments he made after his visit to the HAPM estates, he spoke of his visit as an education and that he was amazed with the organization and the headquarters of USRC’s Sumatran subsidiary. According to Smith, after careful scrutiny, he was greatly impressed by the comfort and well-being of the workers and the facilities provided for them, such as the well-equipped laborer housing and hospitals. The supervisory staff bungalows were models of modern estate buildings and an excellent clubhouse catered for the European staff.

In Malaya, USRC’s Dublin estate proved to be an ideal model for a rubber plantation following on from the success of its subsidiary, HAPM, in Kedah. The European manager lived in a spacious bungalow built on a hilltop. On most estates both managers and assistants were provided with free housing, medical attention, and, in the case of managers, a car for transportation. The Dublin estate was divided into four sections, in which each assistant occupied an attractively built home placed at the highest point in his respective section, and these bungalows were equipped with every modern utility.

Special effort was made for the comfort and well-being of laborers, and the Dublin estate was equipped with up-to-date laborer housing built on well-drained and ventilated sites placed throughout the estate to minimize travel time. A small store supplied the day-to-day requirements. There was also a brick plant with two large...
kilns and a saw mill for future building requirements. J.T. Clarke, a medical officer for Malaysian–American Plantations at Dublin, argued that workers’ housing sanitation might incur extra expenditure, but cleanliness would be repaid in the form of increased workers’ efficiency.

In addition to a profit-sharing and bonus system, USRC also adopted a pension plan for both managers and laborers who had served the company for more than twenty-five years. It is perhaps notable that in 1917 the parent company in the United States inaugurated a pension plan for “aged and infirm employees,” which became one of the first pension plans adopted by a major firm in the United States. Various kinds of remuneration systems were also adopted by British rubber firms, such as Guthries and Harrisons & Crosfield, for the same reasons: to attract and retain skilled employees. However, James Gould claims that USRC’s innovations were not restricted to the improvement in rubber production but also in “setting new standards in employee relations which forced European plantations to follow suit.” By the early 1910s, USRC had increased the monthly wages of its Sumatran rubber plantation laborers from the standard rate of $30 to $36, which also led raises for European assistants.

In Sumatra, USRC recruited most of its labor from Java on a three-year agreement and at a cost of about $60 per person. Some of these laborers were rejected because of poor health and at the expense of the company returned to their country. The remaining, approximately 90 percent, were sent to a rest camp where they were treated for hookworm and other tropical diseases and at the same time fed nutritious food. The subsidiary HAPM had spent at least $100 per person by the time they were considered fit for work. Labor investments ran into millions of dollars as HAPM employed 25,000 laborers at any given time. Effort was made to recruit female labor and a gender ratio of two-thirds male to one-third female was maintained. Thus, labor constituted a valuable asset and 85 percent of the men
and 60 percent of the women at HAPM were re-engaged after the expiration of their agreement.83

Another new standard set by the company in labor relations was to supply its indigenous laborers a diverse diet of healthy, clean, and nutritious food, which, as the company subsidized it, was at below the cost price to the company. In the 1910s, at the beginning of operations, the sick rate was at 4 percent dropping to 1 percent in the early 1920s.84 At HAPM, food was not only heavily subsidized but the variety was regulated and the meal was prepared by company cooks.85 This method was desirable, as it assured a proper diversity of diet. Apart from providing proper nutrition and diet, the provision of primary care and basic hospital services were needed to maintain healthy workers. As such, this goal could be accomplished only through providing high-quality medical facilities.

Estate Hospitals

In Malaya, the provision of hospital services had been the legal responsibility of the planters since 1886, which included the provision of hospital accommodation, medical supervision, and maintenance of sufficient good quality medicines.86 However, employers were slow in providing these medical services. This was reflected in a report by the government of Madras (following the visit of two Indian Commissioners) in late 1916, which claimed that the present system was “indefensible,” that only government hospitals were under the charge of registered practitioners, and that 163 estate hospitals, with a total of 6,488 beds, were “merely visited by a qualified medical practitioner or provided care by people without any qualifications.”87

The provision of healthcare services had somewhat advanced by the 1920s, reflected in the 1924 inquiry into estate health, which reported that around half of the labor force was employed on estates that provided “fair to good” provisions. Yet, out of the 1,304 estates of more than 100 acres, 1,000 lacked hospitals, 32 percent enjoyed visits from a medical practitioner only once a month, and 50 percent of

85. Ibid., 157
86. Manderson, Sickness and the State, 143–44.
87. Ibid., 116–17.
dressed-in-charge of estate hospitals had no qualifications, in contrast to just 11 percent who had first-grade qualifications. In the 1930s, conditions improved a little when the number of estate hospitals was increased with better accommodation and staffing. This led to a declining mortality rate on rubber estates (see table 3).

Similarly, a further standard set by USRC among rubber plantations in the area was to provide high-quality medical attention for its laborers in Sumatra and Malaya. The mortality rate at HAPM was 1.2 per thousand in the mid-1920s, a rate that was only matched by other rubber plantations in Malaya by 1932. Such adoption of medical facilities underlines USRC’s concern for its workers’ welfare, even if largely for reasons of reducing labor turnover (see table 3).

The Catherina hospital at HAPM in Sumatra (which began operation in 1917), located on 22 acres of land, received wide attention and was heralded as the best in Asia, prompting the Dutch government to confer a medal on the company. There was a regiment of European medical officers assisted by indigenous assistants and dressers trained at the Dutch East Indian medical school in Batavia (Jakarta). This well-equipped hospital fitted with modern equipment had one thousand beds including a maternity ward. There were mosquito-proofed wards for malaria patients and special wards were set apart for treatment of anemia and beriberi. Housing was provided for the hospital staff and there was a separate hospital for the European staff at Kisaran. Pioneering work on malaria was carried out at its newly built hospital in 1931, which became a center of learning on tropical medicine for experts worldwide.

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Table 3  Mortality Rate on Rubber Estates in Malaya

<table>
<thead>
<tr>
<th>Select rubber estates in states settlements</th>
<th>1911</th>
<th>1923</th>
<th>1932</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acreage cultivated</td>
<td>1,632</td>
<td>2,650</td>
<td>6,801</td>
</tr>
<tr>
<td>Average Indian labor force</td>
<td>870</td>
<td>450</td>
<td>957</td>
</tr>
<tr>
<td>Number of dependants</td>
<td>—</td>
<td>220</td>
<td>575</td>
</tr>
<tr>
<td>Crude death rate (per 1,000)</td>
<td>232</td>
<td>3</td>
<td>1.1</td>
</tr>
</tbody>
</table>


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88. Ibid., 148.
89. Schwinges, “America’s Greatest Stake in Rubber,” 158; Manderson, Sickness and the State, 148.
91. Ibid.
92. Gould, Americans in Sumatra, 89.
As early as the 1910s, the American management catered to the different dietary requirements of its workers. At the HAPM hospital, food for Chinese laborers was prepared by Chinese cooks while Javanese cooks prepared food for the Muslim laborers.\(^9\) The Dublin Estate secured approval from the Kedah state government to set up and maintain its own hospital, which was designed after the most modern facilities in the Sumatra plantations.\(^4\) The hospital at Dublin Estate was erected at a cost of $56,178. MAP also built its own hospital at the Harvard and Scarborough estates in Kedah at a cost of $30,900 each. In Dublin, a fully equipped hospital with highly trained nurses was built near the headquarters bungalow. This, according to Stuart Hotchkiss, President of one of USRC’s plantation subsidiaries (USRPI), was in the financial interests of the company, because it maintained the highest degree of efficiency in its labor force.\(^5\)

Recreation

Large rubber firms developed sophisticated systems of recreation for the managerial class. This elitism was viewed as necessary not only to offset the monotony of life in rubber plantations in a distant country full of various challenges, but also to retain these few skilled workers in a tight, competitive market. Thus, this employer-sponsored recreation was created to approximate as much as possible facilities in the home country.

Kisaran was of the biggest plantation settlements with European residences, where there was a club fully equipped with tennis courts, a swimming pool, a bowling alley, a baseball diamond, a dance hall with a stage at the end, and a bar. The Kisaran Club was the center of social life on the plantations.\(^6\) The HAPM complex, on the other hand, was uniquely American. There was a luxurious staff club (see figure 2), a film theatre, football fields, tennis courts, a golf course, and a “forbidding pillared head office all reaffirming the sound durability of U.S. investments in the Asahan jungle” (see figure 3).\(^7\) HAPM also maintained private bungalows for its staff at the hill station in Brastagi, Sumatra. In the meantime, some attention was also given

\(^4\) “Malayan-American Plantations Ltd.,” March 25, 1926, Kedah Secretariat Files, 2505/44, National Archives, Kuala Lumpur, Malaysia.
\(^6\) “U.S. Rubber II: Sumatra,” Fortune (Feb. 1934), 128.
\(^7\) “Sumatra Plantation,” 612.
to recreational activities for the laborers. At HAPM, for example, a native orchestra was formed.98

On USRC’s Kedah estate in Malaya, a tennis court claimed as the best in the state was built for the pleasure of the European managers and visiting guests, also in addition to a small clubhouse. Another large British rubber manufacturer, Dunlop, also provided recreational facilities for its managerial staff. For example there were five 9-hole golf courses at its Ladang Geddes estates.99

98. “American Interests in Rubber Planting projects are Going into Many Corners of the World,” Rubber Age 27 (July 1930), 420.
Although the paternalistic practices of welfare capitalism were not exclusive to the U.S. rubber manufacturer, none of the other large rubber producers implemented these policies as early and on such an extravagant scale as USRC. While similar practices were employed by the British rubber manufacturer, Dunlop, at its Ladang Geddes estates, where there were well-organized Chinese “villages” and Tamil “villages” claimed to be “a paradise for Tamils,” Dunlop began to implement these practices on its other estates only in the late 1920s and early 1930s. USRC, however, implemented this policy as soon as it entered into rubber plantations in 1910 (Sumatra) and 1919 (Malaya). The Danish firm, United Plantations, founded in 1906, also practiced welfare capitalism, but again it was only in the late 1920s that the company was able to display good living conditions not only to satisfy government officials who regularly made routine checks but also to attract free laborers who were in a position to choose the best options offered by estate employers.  

By the 1930s most plantations provided the necessary provisions as outlined in government directives. It remains open to question whether these provisions were made upon the corporation’s own initiatives or under pressure from government, or a combination of both. In addition, as suggested earlier in the article, strikes and resistance by indentured laborers were growing in Malaya and the DEI by the mid-1930s (partly encouraged by the free workers) and this was another possible motivating factor for the implementation of employee welfare plans. In short, welfare capitalism was implemented not out of free choice so much, but forced upon the employers by external exigencies that needed to be addressed in order to reduce labor turnover, and thereby to increase productivity.

Welfare Capitalism: Impact on the Rubber Industry

As early as the 1910s, realizing the significance of rubber to the American economy (mainly in the automobile industry) the U.S. government undertook a systematic investigation into the rubber industry.  


101. The U.S. Vice Consul General in Singapore, David M. Figart, produced a report on the development in some vital areas of the rubber industry from 1907 to 1910, namely rubber acreage, yield and production, cost and development per acre, and also issues of labor and diseases. David M. Figart, *The Plantation Rubber
own as early as 1915. Being late comers, USRC, via HAPM, its Sumatran subsidiary, initially worked with both the Rubber Growers Association (RGA) and the Planters Association of the East Coast of Sumatra (AVROS) research stations, but later set up its own research department headed by the very experienced rubber expert, J. Grantham.\textsuperscript{102} Stoler concludes that American influence in the estate economy was strong, as it was in the post-World War I period when people such as the “King of Kisaran [the contemporary term of reference—not address— for the American Manager of URSC’s Asahan estate] exercised disproportionate influence on policy decisions in the planters association of AVROS.”\textsuperscript{103}

Encouraged by the U.S. government interests in rubber cultivation and despite being late comers, USRC overtook its British and Dutch counterparts in the areas of R & D, and in the process influenced the existing planter’s association. The year 1918 marked a watershed in the rubber industry when emphasis on research led to new practices and modern cultivation of rubber. USRC’s adoption of welfare capitalism reduced labor turnover, which in turn allowed for an increase in R & D investments. These various innovations in budding, grafting, and tapping methods began with HAPM estate programs and had a huge influence in the estate practices of both the Dutch and British plantations in Indonesia and Malaya, who, despite being early rubber pioneers, were slow in adopting these revolutionary practices.\textsuperscript{104} It is significant that USRC
elect to disseminate all its research findings to the existing rubber communities.

HAPM investigation into tapping methods showed that alternate monthly tapping on half of the circumference was beneficial to the life of the rubber tree and increased productivity. This alternate tapping method became standard practice on the Sumatran plantations after 1922, and in the mid-1920s there was a shift from daily tapping to alternate tapping in Malaya.105 By 1922, large-scale plantings were carried out employing the budding system and the total area of bud-grafted trees on estates controlled by the USRC was about 10,000 acres. This was a courageous initiative, for there were potential high risks involved with the yielding power of budding and the effect on the root system not previously determined. However, planting was done alternately between budding and selecting seeds so as to be able to rely upon the yield of selected seeds if the budding trees failed.106

Research work carried out to develop high-yielding rubber trees was a painstaking process that took several years, and therefore it was crucial to have a constant, stable core of laborers and this was possible only by adopting welfare capitalism practices. The first step was to single out high-yielding trees. The next step was to bud-graft from these superior trees. By 1923, the manuring experiments, which began in 1918, proved that regular application of nitrogenous fertilizers could increase the annual yield per acre from about 350 pounds to 675 pounds or even more. Table 4 illustrates the gradual increase in USRC’s yield per acre from 1922 to 1927. The firm’s yield per acre for 1926 was 441 pounds, slightly more than the 1927 average

105. Tate, RGA History, 402–04.
yield per acre in the FMS of 420 pounds, while the average yield per acre throughout Southeast Asia was less than 350 pounds.\footnote{107}

One of the most important contributions made by USRC at its research center at HAPM was the handling and shipping of latex from the tree to the rubber manufacturers in the United States. The shipping of latex in liquid form was essential for manufacturers, as liquid latex retained certain important chemical properties.\footnote{108}

Despite its small percentage of rubber investment compared to the British and Dutch, USRC had a positive impact on the industry, as seen in the efforts of its R & D Department. R & D was effectively conducted by a team of experts, not only from the United States, but also well-experienced British and Dutch experts hired by USRC. Even with the dissemination of research findings by USRC, there was little use of high-yielding trees and improved seed selection methods among other Western rubber firms or local and indigenous smallholders. The majority continued to use conventional methods, and most Malayan rubber producers—the British and local smallholders—continued to lag behind in this field. John H. Drabble points out that by 1941 in Malaya “only about 14 percent of the estate acreage and a mere 2 percent of small-holdings had been planted with specially developed trees capable of yields per hectare three to four times that of the unselected types planted in the early 1900s.”\footnote{109}

USRC’s R & D did indeed increase rubber production and simultaneously decrease production costs. These innovations were then disseminated to other big rubber firms. USRC diffused the bud-grafting techniques not only within its subsidiary plantations in Malaya but also to other rubber firms within the industry via its research station at HAPM. Increasingly large British rubber firms began to invest in R & D in the mid-1920s and early 1930s.

Clearly the adoption of new technologies was mainly the preserve of big firms with the financial capability to do so, namely, Dunlop, Harrisons & Crosfield, and Guthrie. These new

\footnote{107. “American Planting Companies,” \textit{India Rubber World} 78 (Sept. 1928): 58.}
\footnote{108. As early as 1913, liquid rubber was shipped in five gallon kerosene cans; in 1920 it was shipped in 50 gallon steel drums; later the fore and aft peak tanks of cargo steamers were used for this purpose. USRC used 1,000-gallon containers, filled on the plantation and sent to the harbor by rail. The next step was to induce steamers to clean their ballast and oil tanks and fill them with latex for the trip home. Initially, shipping companies were reluctant to do so, but there was soon competition for this business and several lines began to equip their vessels for this kind of cargo. Schwinges, “America’s Greatest Stake in Rubber,” 156.}
technologies were unable to be adopted by local competitors, rubber smallholders, and small-sized Western firms until after World War II. Innovations in budding, grafting, and tapping methods resulting from a stable workforce, which in turn was brought about by welfare capitalism practices, assisted these big firms in increasing their productivity and profits. Reduced labor turnover led to increased investment in R & D, which enabled these innovations.

Conclusions

This article analyzes the reasons behind the introduction of welfare capitalism in Southeast Asian rubber plantations by using a case study of USRC’s plantation subsidiaries in Sumatra and Malaya. It began by looking at the origins of USRC and the development of its Southeast Asian rubber ventures in Sumatra and Malaya between 1910 and 1941. The discussion is placed in context by looking at the wider labor issues in the Southeast Asian rubber industry. Subsequent sections examine USRC’s welfare practices and the effect of welfare capitalism on the firm and the industry’s performance.

Following the initiatives of its parent firm in the United States in the 1910s and 1920s, USRC introduced welfare capitalism in Southeast Asia to promote labor stability and harmony. Although most labor historians claim that welfare capitalism died with the onslaught of the Depression in the United States in the 1930s, this article supports Sanford M. Jacoby’s argument that in fact it remained alive and well beyond the Depression years in other parts of the world. US subsidiaries abroad sustained the paternalistic practices of their parent firms even after the Depression had ended. USRC for example, continued practicing welfare capitalism in Malaya until after World War II.

In the light of the evidence presented here, the adoption and elaboration of welfare capitalism by USRC can generally be said to have been mutually beneficial to both employers and employees. For most of the unskilled workers (immigrant laborers), the provision of comfortable, clean housing, much improved medical attention, ample supply of nourishing food, and steady wages gave them the much sought after security and stability. In return, with reduced labor turnover, USRC was able to enhance growth in R & D and increase productivity.
The innovative management (changes in labor–management relations) and welfare capitalism approach, combining both new technology and worker appeasement, lessened turnover rates and helped to keep workers loyal. This in turn made technical improvements easier to implement, reaping increased production and higher yields. Importantly, there was also a qualitative impact on the DEI and Malayan rubber industries as a whole, in terms of the introduction of organizational skill, as well as improvement of productivity and yield through the dissemination of USRC’s research findings.

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