



# Cleansing the world of the germ of laziness: hygiene, sanitation, and the Javanese population in Suriname

*Limpendo o mundo do germe da preguiça: higiene, saneamento e população javanesa no Suriname*

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## Abstract

In 1915 the Rockefeller Foundation took its hookworm eradication campaign to Suriname, but was soon disappointed because of opposition from its main target group: the Javanese. Moreover, authorities and planters objected to the construction of latrines because of the costs and their belief that the Javanese were “unhygienic”. In describing the labor migration from Java to Suriname, I show that this “lack of hygiene” was closely related to the system’s organization. I argue that uncleanliness was the consequence of harmful socio-economic and ecological conditions. Secondly I suggest that even though the Foundation did not manage to cleanse Suriname of hookworm, its educational efforts, its emphasis on prevention, and its training of local health workers probably had more impact than Rockefeller officials thought.

Keywords: Suriname; colonialism; public health; sanitation; Javanese population.

## Resumo

*Em 1915, a Fundação Rockefeller levou sua campanha de erradicação da ancilostomíase ao Suriname, logo sofrendo a oposição de seu principal alvo, os javaneses. Autoridades e proprietários rurais também reagiram à instalação de latrinas devido aos custos implicados e à crença de que os javaneses eram “anti-higiênicos”. Ao descrever a migração de trabalhadores de Java para o Suriname, mostro que a “falta de higiene” ligava-se à organização do sistema. Argumento que a sujeira era consequência de condições ecológicas e socioeconômicas danosas. Sugiro ainda que, embora a Fundação não tenha livrado o Suriname da ancilostomíase, seus esforços educacionais, sua ênfase na prevenção e o treinamento de profissionais de saúde locais tiveram maior impacto do que o imaginado pelos funcionários da agência norte-americana.*

*Palavras-chave: Suriname; colonialismo; saúde pública; saneamento; javaneses.*

In 1915, the Dutch colony of Suriname<sup>1</sup> experienced an impressive demonstration of modern medicine: a physician, a dozen nurses, and four microscopists gave lectures, slide shows, and on-site demonstrations about the effect, cause, and prevention of hookworm. It focused on an eradication program and subsequent sanitation campaign among the Javanese population in Suriname.<sup>2</sup> Even though hookworm or ancylostomiasis is a non-fatal disease, it attracted the attention of the Rockefeller Foundation, the organizer of the program. The American foundation wanted to cleanse the world of this so-called “germ of laziness”, so nick-named because it had such a negative impact on labor productivity. The Americans also brought their mission to Suriname in an effort to eradicate hookworm, known locally as *woronsiekie* (Lampe, 1928, p.265), in the capital, Paramaribo, and in the plantations and settlements near the town. The Rockefeller Foundation thus introduced notions of public health and sanitation to the public discourse.

The Rockefeller Foundation's campaigns were two-stage rockets. The first was the eradication of and education about diseases and the second was the setting up of national public health services. An important element in this approach was prevention in the form of the building of latrines as the correct disposal of human waste was essential in all sanitation efforts. The Foundation's program, however, almost immediately ran into trouble in Suriname. First, the medical treatment of hookworm was not as effective as expected because of suspicion and opposition among the Javanese. Second, government authorities and planters objected to the mandatory construction of latrines because of the costs involved and also because they believed it was a hopeless project. As the then surgeon-general of Suriname, nominally the head of the hookworm campaign, stated, the Javanese, and all other non-European population groups for that matter, were known to be “dirty” and “unhygienic” (NHM, 28 Aug. 1918).<sup>3</sup> Such assertions were not uncommon in early twentieth-century Suriname, where racial stereotypes supported the extant racial hierarchy with white people on top, a small light-skinned middle class, and the large mass of dark-skinned Afro-Surinamese, British Indians or Hindustani, and Javanese. The Javanese were stereotyped as docile and orderly, but also as stupid, apathetic, and guileful outsiders who maintained low moral standards (Hoefte, 1998, p.102-106; Bielke, 1922). The Javanese, in turn, used stereotypes to characterize the Afro-Suriname as crude, rough, and loud, while Hindustani were easily labeled as hard-working but thrifty, cunning, blood-thirsty, and revengeful (Hoefte, 1998, p.102-106).

Given the surgeon-general's opinion, it is not surprising that after less than five years of actual campaigning, the Rockefeller Foundation left Suriname angry and frustrated with both the government authorities and the population. This, however, did not mean that the campaign for better hygiene and public health came to an end, as the local sanitation department took over and its leader, Rockefeller-trained Grace Schneiders-Howard, claimed success where the Foundation had failed.

The first part of this article introduces Suriname as a plantation colony, where after the abolition of slavery approximately 67 thousand Asian laborers were imported to work on the remaining plantations. In describing the migration from Java to Suriname, I will show that this “lack of hygiene” was part and parcel of the indentured migration process and labor conditions and had much to do with the way the system was organized. Rather than a problem of race, as expressed by the surgeon-general, I argue that uncleanness and

resulting diseases such as ancylostomiasis were the consequence of harmful socioeconomic and ecological conditions.

I will focus on the Mariënborg sugar plantation. It was easily the biggest enterprise in the colony and actually one of the largest sugar mills in the world, employing thousands. Mariënborg housed by far the largest Javanese population in Suriname in the period under study and it was also the place where the Rockefeller Foundation started its hookworm campaign.

Archival records from the USA, Suriname, and the Netherlands detail the organization and impact of the campaign as well as the follow-up by the local sanitation department. These documents show how the Foundation's initial ebullience quickly turned into frustration about the lack of co-operation in Suriname. After the departure of the Americans, local sanitation workers trained by the Rockefeller Foundation took over. They experienced similar problems with the authorities, but claimed great success among the Javanese. This raises the question about how the approaches of the Rockefeller Foundation and the sanitation department differed in convincing the Javanese population of the urgency of sanitation. A related issue is whether the efforts of the Rockefeller Foundation were as futile as portrayed by the organization's representatives in Suriname. I argue that despite the fact that the Rockefeller Foundation did not manage to cleanse Suriname of the germ of laziness, its educational efforts, emphasis on prevention, and training of local health workers may have had more of an impact than the Rockefeller officials thought at the time.

### **The plantation colony of Suriname**

In 1863 the Dutch abolished slavery in Suriname, a plantation colony located in the shoulder of South America. Owners would receive three hundred guilders from the Dutch treasury for every slave they released, regardless of age, sex or mental or physical health.<sup>4</sup> More than 33 thousand slaves were freed, and a sum of almost ten million guilders was paid out, financed mostly from the surpluses extracted from Java. In other words, the East Indies paid for abolition in the West Indies.

Planters and the government had agreed on a ten-year transition period in which the former enslaved would work for employers of their own choice under the supervision of the state. Failure to fulfill the terms of their contracts, idleness, and vagrancy were punishable by fines of imprisonment with forced labor. This official oversight provided a relatively peaceful transition from slavery to free labor, guaranteeing planters a captive supply of workers for some years. Moreover, it bought time; time necessary to decide how the plantations were to continue to operate without slaves or state supervised workers.

In an effort to save a plantation colony already in decline the Dutch government decided to resort to large-scale immigration. Following the example of neighboring colonies such as Trinidad and British Guiana the Dutch turned to British India for indentured workers. The first contracted migrants from there arrived in Suriname in 1873, just three weeks before the period of state supervision ended. The five-year contracts detailed the rights and, of course, the duties of the indentured workers. Fundamental to the contract labor system was the so-called penal sanction, which made neglect of duty or refusal to work punishable by

jail sentences. It gave employers the right to press criminal charges against any indentured workers who broke their contract. Breaking a contract was of course a civil offence, yet the indentureds were subject to a criminal penalty. Thus the penal sanction allowed planters to dictate the terms of the labor regimen.

Between 1873 and 1916 more than 34 thousand British Indians, in Suriname also known as Hindustani, entered the colony.<sup>5</sup> The initial enthusiasm of both planters and colonial authorities soon cooled, however, as doubts arose about the source of this contracted labor. The main problem was that the British Indian immigrants remained foreign nationals. This had two serious drawbacks. First, if immigration were to proceed at a continuous pace, a considerable proportion of the population of Suriname would soon be British. Second, these British subjects could appeal against the decisions of the highest Dutch authority and request assistance from the British consul in Paramaribo. This right of appeal would not enhance the submissiveness of the labor force, especially since the British Indians were already stereotyped as “cantankerous and rebellious”. Additional worries were the reliance on another country to supply Suriname with workers and the growing nationalist movement in India, which fiercely attacked the system of contract migration. The abolition of indentured labor from that colony was becoming a distinct possibility by the 1880s and 1890s. In India the system was eventually abolished in 1916.

### **Javanese contract laborers**

An alternative source of labor was found in Java. Plans for the immigration of Javanese to Suriname existed as early as the mid-nineteenth century. Initial attempts to import people from Java (and Madura) failed because the Dutch government was not inclined to permit the migration of people from its profitable Asian possession to the declining Caribbean when there was the possibility of acquiring labor in India. Yet the movement to import Javanese gained strength in the 1880s due to the changing political climate in India. Another advantage was that the Dutch themselves would be in control of the recruitment and immigration process and would have first choice, as opposed to the situation in India, where they had to compete for migrant workers with the British, French, and Danish.

The Dutch colonial minister objected to emigration from Java as late as 1887, arguing that the populace of Java and Madura was not inclined to migrate to far-away and unknown Suriname. After heavy lobbying from Surinamese planters and officials the government finally decided to allow a first experiment with contract migration from Java to Suriname in 1890. The trading station of the Dutch Trading Company (Nederlandsche Handel-Maatschappij, NHM) in Batavia (present-day Jakarta) recruited one hundred Javanese for plantation Mariëburg. Despite the fact that both the planters and the government officials expressed doubts about the physical strength of the new laborers, a second shipment with 614 indentureds left the port of Tandjong Priok in 1894. The voyage was a disaster as the death rate climbed to over 10%. An official inquest revealed that a delay in departure had forced the migrants to live in waiting depots for more than three months under extremely unhygienic and unhealthful conditions. Moreover, sanitary conditions aboard ship had been dreadful as most of the food was spoiled and drinking water was lacking.<sup>6</sup> This tragedy did not stop migration to

the Caribbean. On the contrary, the Dutch government liberalized the recruitment of Javanese to Suriname. In total, almost 33 thousand Javanese migrated to Suriname between 1890 and 1939. Migration from Java was particularly heavy after World War I and the final closing down of the Indian indentured migration system: between 1917 and 1928 more than half of the total number of Javanese migrants arrived in Suriname. Some 20 to 25% of the Javanese migrants returned to their home country before World War II. Thus the vast majority of the immigrants settled permanently in Suriname.

The main recruitment areas were the densely populated regions in inland Java and the seaports of Batavia, Surabaya, and Semarang. The colonial authorities classified most of the migrants as agricultural laborers, but it is questionable whether this is correct as it is possible that migrants claimed that they had agricultural experience, knowing that this was what the authorities wanted to hear. Most women seem to have been employed as nannies, maids, and batik women. From 1897 to 1930, there were 31% females on average amongst the Javanese workers at plantation Mariënborg.

Indenture began at the depots in Java and that was often an ignominious start. The waiting period for embarkation to Suriname was long and even parliamentarians in the Netherlands knew that particularly the depot in Semarang was dirty and unsanitary, causing many, sometimes fatal, diseases. Around the turn of the century the Mariënborg management asserted that many Javanese had to be admitted to hospital upon arrival. Physicians blamed the problem on the conditions in the Semarang depot in particular. The journey itself – until 1917 the indentureds travelled from Java to Paramaribo via Amsterdam – would then take weeks. According to the Surinamese Surgeon-General H.A. Hovenkamp (27 Dec. 1914, 29 Dec. 1914), upon arrival all Javanese immigrants were infected with hookworm.<sup>7</sup> In a journal article published in 1919, doctor R. Römer (1919, p.124) agreed with Hovenkamp, calling for treatment on board ship. However, government physician Cornelis Bonne (1919, p.304) reported in the same year that arriving Javanese were given treatment on board or in the Paramaribo depot, but that most of the immigrants were re-infected as soon as they arrived at the plantations. In short, it is unclear whether migrants at that time were treated during their passage to Suriname or not.

Once in Suriname the migrants again were housed in a depot before they were transferred to the assigned plantations. H. van Vleuten, a Dutch East Indian official, who visited Suriname in 1909 to investigate the living and working conditions of the Javanese, reported that conditions in the Paramaribo depot were satisfactory, but that more bathing facilities with a better supply of water to ensure the adequate disposal of human waste were needed (Hoefte, 1990, p.60).

According to the contract, the plantation had to provide free housing for its indentured laborers. At Mariënborg the quality of the workers' housing had long been substandard. From the very start of immigration, there was a housing shortage. Workers had to live in rooms the government had declared unfit for habitation. The first Javanese built bamboo huts in their own kampong (settlement – the Malay word continued to be used in Suriname), but they soon discovered that this was not a good idea. Bamboo turned out to be an ideal breeding ground for chicha's (sand fleas) and the huts had to be abandoned almost immediately. Mariënborg then bought old housing blocks from another plantation to house the Javanese.

These consisted of two rows of rooms, built back to back, with a gallery in front. According to regulations, each adult was allotted six square meters. Inspector Van Vleuten reported that the domestic life of the Javanese immigrants appeared “rather sad”. Most of the rooms “gave the impression of great poverty of their inhabitant” (Hoefte, 1990, p.90). Another hardship was the lack of drinking water. At Mariënborg the workers collected rainwater in buckets, but in the two dry seasons they had to collect it elsewhere.<sup>8</sup> A drier season than usual meant a shortage of drinking water.

The Javanese had to work in the fields or the factory. The labor contracts fixed the wages of men and women, yet wages were a major source of contention throughout the period of indenture. The main problem was that most contract laborers did not receive the established wage. According to the contract, people could be paid on the basis of the number of days worked or the number of tasks carried out. By and large, the planters preferred the latter and paid a worker for each task he or she completed. The planters defined a task as the work an “average laborer”, a term also defined by the employers, could perform in a single day. The planters argued that they were in the right and were acting according to the contract. Most indentureds, however, disagreed, pointing out that the assigned tasks were too heavy to finish in one day and, consequently, they were not able to earn the wages listed in the contracts. In addition, variables such as the heaviness of the soil, the density of the vegetation, and the climatic conditions were not taken into account.

External observers such as Van Vleuten, the British/Indian team of James McNeill and Chimmam Lal, and a Dutch group, known as the Suriname Commissie, as well as government officials from Paramaribo supported the indentureds’ complaints about low wages.<sup>9</sup> Van Vleuten concluded that “the average wage earned by a contract laborers is far below the minimum” (Hoefte, 1990, p.73). According to Van Vleuten, the earnings were much too low to make a living in a colony as expensive as Suriname. Some seven years after Van Vleuten’s visit, matters had deteriorated even further. As a result of World War I the cost of living had increased, while wages were, of course, stable. British Indian migrants, organized in the Suriname Immigrants’ Association, had calculated that their weekly budget for food alone had increased from 4.50 guilders before the war to 6.24 in 1917. Given that the average British Indian and Javanese family made 4.71 and 4.66 guilders a week, respectively, it is obvious that poverty was a very real problem on the plantations.<sup>10</sup>

Besides these material problems, the Javanese also often had to cope with health complications that in many cases were not unrelated to poverty and unhappiness. The migration of populations from their homeland to a new country with a different disease environment exposed them to increased risk. Moreover, the migrants had to adjust to a new lifestyle, diet, and work regime. As to be expected, many different diseases plagued the Asian laborers.

### **The hookworm eradication campaign**

The two diseases most people on the plantation suffered from, malaria and hookworm, were not usually fatal. Nevertheless, their social relevance was great because they caused a

considerable loss of labor productivity. Malaria occurred in the interior and along the rivers, where many plantations were located. But it was hookworm that received full international attention with the arrival in 1915 of the Rockefeller Foundation, then the largest public health organization in the world.

This foundation had started its activities in public health care in the south of the US, but encouraged by the results and convinced of the superiority of its *modus operandi* had decided to promote “public sanitation and the knowledge of scientific medicine” on a global scale (quoted in Abel, 1995, p.342). The Foundation’s International Health Commission, organized in 1913, took a two-pronged approach: education on and eradication of curable diseases such as hookworm and the establishment of permanent bases for public health work in countries where the Foundation was active.<sup>11</sup> Hookworm was chosen as one of the foci because it was simple to identify and inexpensive and easy to cure.

Hookworm is caused by 7 to 13mm long worms.<sup>12</sup> These have a complex life cycle that begins and ends in the small intestine. Hookworm eggs hatch into barely visible larvae. These penetrate the skin, often through bare feet,<sup>13</sup> are carried to the lungs, go through the respiratory tract to the mouth, are swallowed, and eventually reach the small intestine. This takes approximately a week. In the small intestine, the larvae develop into worms, attach themselves to the intestinal wall and suck blood. The adult worms produce thousands of eggs. These eggs are passed in the feces. If the eggs contaminate soil and conditions are right, they will hatch, molt, and develop into infective larvae again after another week. The transmission of hookworm infection requires the development of the larvae in soil; hookworm cannot be spread person to person. The density of human hosts is of paramount significance in the rate of infection. In the words of Steven Palmer (2010, p.26), “because the disease is defined by accumulation, the greater the concentration of hookworm parasites, the greater will be the incidence of severe hookworm infection and thus of hookworm disease in dense populations of susceptible hosts”.

High loads of the parasite coupled with poor nutrition eventually leads to anemia. The Rockefeller Foundation therefore called hookworm “the germ of laziness” as it sapped the energy of workers.<sup>14</sup> Hookworm thus caused a significant loss of labor productivity, which, Surinamese employers generally did not understand, if only because most individuals with hookworm infection showed no symptoms (Van Asbeck, 1919-1920, p.506; Bonne, 1919, p.291-304; Flu, 1922-1923, p.590; Lampe, 1927, p.140). Römer (1919, p.106) pointedly remarked that the “laziness of the Surinamese population is often seen as a character defect; its cause, however, is often to be found in physical debilitation”. This sentiment was reiterated more than a decade later by doctor R. Simons (1933, p.438), “the laborer isn’t lazy, he is sick”.

This debilitating disease led to unauthorized absences from work, which according to the labor contract could be penalized, or to an inability to complete assignments reducing wages as most plantation workers were paid per task. This diminished income in turn affected the standards of nutrition and thus created a vicious circle. A number of authors in Suriname explicitly linked the importance of hookworm campaigns to labor productivity (Bonne, 1919, p.291; Simons, 1933, p.431).

The spread of hookworm requires shaded soil, temperatures over 18°C, and rainfall averages of more than 1,000mm a year. Obviously, these environmental factors, which are all

present in Suriname, could not be influenced. Cure and prevention therefore had to center on people's behaviour. Individuals who had direct contact with soil that contained human feces in areas where hookworm was common were at high risk of infection. The improper disposal of human waste, causing pollution of the soil and drinking water, and inadequate drainage were targeted in the eradication campaign.

In March 1915, the Rockefeller Foundation received the governor's permission to start a hookworm eradication campaign in Suriname.<sup>15</sup> In order to cure hookworm and build a base for a public health organization, the Foundation used a two-step method: a public awareness campaign and a medical offensive. The Rockefeller Foundation was a philanthropic organization that encouraged self-help, not dependence on its financial and personnel resources (Farley, 2004, p.4; Palmer, 2010, p.1-16). Suriname would gradually have to fund its own public health care system and educational program after having been demonstrated the benefits of treating hookworm and the importance of hygiene.

The development of public health education was an essential element in the campaign. Thirty-three lectures and slide shows, attended by 8,200 people, on-site demonstrations, and leaflets in five languages<sup>16</sup> promoted modern ideas and methods designed to supplant traditional folkways and herbal medicines as administered, for example, by the *dukun*.<sup>17</sup> The campaign's leader, doctor W.H. Kibler, and a staff of three clerks, a dozen nurses, and four microscopists informed the inhabitants of Paramaribo and the nearby plantations about the effect, cause, and prevention of hookworm. The microscope demonstrations, showing young worms, are a particularly good example of how people were educated about the (almost) invisible organism that caused disease and also about the way modern medicine could eradicate the disease. For the Rockefeller Foundation the emphasis in these demonstrations was on prevention rather than cure.

Contemporary Dutch observers in Suriname were impressed by the approach and efforts of the Foundation: "They are very good at propaganda. They successfully lure the Asians in Suriname by using spiritual influences, through the magic lantern and film" (Van Blankensteijn, 1923, p.324).<sup>18</sup> This film was part of a second propaganda wave; it was a silent movie entitled *Unhooking the hookworm*, the first feature-length public health movie produced by the Rockefeller Foundation. It was finished in 1921 and first shown with great success in the US South. Later it was exported to other places, including Suriname. According to Marianne Fendunkiw (2007, p.16), "the scenes in the hookworm film were all distinctly American ... there was some concern about racial and cultural sensitivity".<sup>19</sup> The film, however, was a great success in Suriname: it was shown in August 1921, in the week celebrating the Queen's birthday, and attracted twenty thousand viewers (Lampe, 1928, p.271).

The medical relief and control program started at plantation Mariënborg. In 1915, Mariënborg employed almost two thousand Asian indentureds. In this period, the British Indian presence at the plantation diminished quickly as no new immigrants from India entered the colony. Therefore, from 1912 to 1916 approximately 62% of the indentured laborers were Javanese, while by 1917-1921 this proportion had grown to 88% (Hoefte, 1998, p.72). The Foundation targeted all population groups, but soon focussed its efforts on the Javanese.

The so-called intensive method was almost military in nature and highly intrusive.<sup>20</sup> Nurses were in charge of selected areas, visiting each dwelling to register all the inhabitants, meanwhile



explaining the symptoms, effects, and prevention of hookworm. The nurses would hand out and later collect back boxes that had to be filled with the feces of each recorded person; locally trained microscopists examined their contents. Treatment consisted of the administration of thymol to kill the worms, followed by Epsom salts to clear the body of the worms.<sup>21</sup>

Team leader Kibler was at first almost ebullient about the results and the management of Mariënborg which had “shown every courtesy ... and has rendered valuable assistance in carrying on the work” (The Rockefeller..., 15 Oct. -31 Dec. 1915). The estate managers provided the team with a free office and laboratory in the plantation hospital, while it furnished living quarters at small cost. By New Year’s Day 1916, the Rockefeller staff had treated eighteen hundred patients, while in 1917 the Foundation examined more than thirteen thousand people and found that 91.5% were infected. This seems to corroborate statements that on some plantations everybody suffered from hookworm (Bonne, 1919, p.304; Flu, 1922-1923, p.590). Given surgeon-general Hovenkamp’s reports it seems very likely that many of the laborers were already infected upon arrival in Suriname. The recovery rate was close to 83% (Hoeft, 1998, p.147-150).<sup>22</sup>

Interestingly, the Mariënborg directors did not share this enthusiasm and as early as September 1915 declared that the program was unworkable (NHM, 5 Sep. 1915).<sup>23</sup> These sentiments must have reached the Americans too. According to the Foundation’s staff, the Javanese, not only the most numerous but also the most heavily infected population, caused “considerable trouble”, including refusal to follow instructions and the occasional use of force against medical staff.<sup>24</sup> Many Javanese viewed Kibler and his successors as covert missionaries who would force them to convert through the use of secret potions. “They all [the Javanese] seem to have the idea that the salts are Holy water and the thymol will make them Christians” (Hausheer, 14 July 1921; The Rockefeller..., 1921, 1922).<sup>25</sup> Kibler did not explicitly say so, but he may have regarded this kind of behaviour as evidence of Javanese backwardness.

This suspicion was not only directed against Americans or medicinal personnel; a “real” missionary whose task it was to convert the Javanese to Christianity observed that this distrust was based on their experiences in the recruitment procedures in Java. Apparently the Javanese consensus was that “We have been duped once ... let’s make sure that another Dutchmen cannot get us again” (Bielke, 1922, p.117). It is likely that the Javanese did not make any distinction between white Americans or Dutchmen. Another aspect that was not taken into consideration by the Americans or their supporters in Suriname and the Netherlands was that as a group Javanese occupied the lowest rung of the social ladder and constituted a prime target for scorn and contempt. This enhanced their internal cohesion and their distrust of other groups (Meel, 2011, p.99).

Besides religious complications, Kibler listed a number of other obstacles to gaining the trust of the Javanese population, such as the absence of internal leadership, lack of respect for educated elders, and distrust of non-Javanese.<sup>26</sup> His successor wrote in his Annual report (The Rockefeller..., 1922):

[The free Javanese] are fatalists, extremely superstitious and suspicious of the white man. This taciturn disposition makes them extremely difficult to approach. It is almost impossible for a man of another race to convince them of anything, not that they are stubborn but their silence does not open up an opportunity for argument or discussion.<sup>27</sup>

In later years the Foundation hired elderly Javanese to convince their compatriots to partake in the program. This strategy had some success. Dutch journalist M. van Blankensteijn (1923, p.300) reported on a successful experiment with an “influential” Javanese man who was asked to propagate hygiene, distribute literature, and show illustrations to his fellow countrymen.<sup>28</sup> The Javanese may have remained reluctant to use the prescribed medication, but many of them “appreciated the advantages of sanitation [from a point of personal cleanliness]. Their pride in this matter is demonstrated by the fact that they built their latrines in front of their houses instead of in the usual position in back” (The Rockefeller..., 1923).<sup>29</sup> These were simple pit latrines, no less than 3 ½ to 4 feet in depth, without concrete or other lining, with a flyproof seat, and a hinged cover. A slight super structure made from sheet-iron secured a degree of privacy. According to the Americans, the Asian migrants in British Guiana and Trinidad used these latrines on a daily basis. In Suriname latrines were also built over trenches.

In his important book on the activities of the Rockefeller Foundation in the Caribbean, Steven Palmer rightly points at local differences between campaigns in various countries and the importance of “local” programs with a certain degree of freedom to develop clinical and treatment protocols. Local political, ethnic, and racial structures had to be taken into account by the Foundation’s representatives (Palmer, 2010). These local variations were also a product of the experimental nature of the International Health program. Palmer (2010, p.4) explicates further that “the form and fate of the missions were more a product of local historical dynamics than of Rockefeller Foundation public health science being applied from above”. This implies that the persona of the team leader was also of great import in the success of the hookworm campaigns. In Suriname, the first campaign leader, Kibler, soon lost his initial enthusiasm: despite the fact that he was hailed as a hero by some, the resistance he encountered at several levels of society clearly discouraged him.

### **The departure of the Rockefeller Foundation from Suriname**

In their reports and letters on the hookworm eradication campaign the representatives of the Rockefeller Foundation identified three reasons for its failure to achieve lasting results: opposition by unwilling Javanese, lack of co-operation by some planters – who did not understand the danger of hookworm and thus were not willing to release a sufficient number of laborers each day for treatment to be effective – and insufficient backing by the government.<sup>30</sup> An element that was not mentioned as contributing to the campaign’s failure was poverty. To be sure, the Americans duly reported on the conditions in the colony. In 1915, representatives of the Rockefeller Foundation described the area where the laborers at Mariënborg lived.

The housing areas are divided into lots by inter-lot drains. The latrines used by the free people<sup>31</sup> are mostly located over these inter-lot drains, which have no water in them during the dry season. When the sugar factory is running there is a considerable amount of waste water. This flows away from the factory in a cement trench approximately two feet wide by 2 to 3 feet deep. The trench runs through the area in which the Javanese live, dividing it into two divisions. Javanese who live near the trench use it as a latrine.

The trench passes under the estate hospital where it is used to carry away excreta from the closets of the hospital. The trench finally empties into a larger trench not made of cement. This empties into the Commewijne [River] after a course of a mile or more (The Rockefeller..., 1915-1916).

With regard to the plantation hospital the Rockefeller staff noted that the conditions of hygiene circumstances needed improvement. Even dogs were present in the hospital rooms. But the Americans, unlike other outside visitors such as Van Vleuten and Mc Neill and Lal, did not make a connection to poverty. In Suriname, the link between disease and the customs of non-white population groups was easily made, while social, economic, and environmental explanations were often disregarded. Physicians working in Suriname are an exception to the rule as a number of them identified the climate as well as the poor living conditions and inadequate infrastructure in the capital of Paramaribo as a danger to public health, but they did not explicitly include plantations or government settlements in their analysis (Bonne, 1919, p.292; Flu, 1928, p.3; Römer, 1919, p.105; Simons, 1933, p.433-434). Knowledgeable outsiders such as the journalist Van Blankensteijn (1923, p.325) or the Dutch social-democratic parliamentarian H. van Kol (1919, p.269-270) squarely blamed the colonial government for the lack of progress in the improvement of public health in the city.

Interestingly, during the 1920s, most local doctors in the Philippines regarded hookworm as a disease of poverty and not a manifestation of a racially determined unfit for hygiene (Anderson, 2006, p.207-208). The link between poverty and hookworm gained ground during this decade, but not among American physicians practicing in either Asia or the Americas. Benjamin Page (2007, p.9) also notes that the relationship between poverty and disease was not unknown at the time, "such perspectives, however, were hardly mentioned within RF circles".

Officially and unofficially, the Rockefeller Foundation and other experts regularly pressed the government on the issue of securing adequate sanitary conditions to lower the high percentage of reinfections. The construction and use of latrines was of crucial importance to the improvement of hygiene in general and the eradication of hookworm in particular. Even though there existed genuine support for the work of the Foundation in Suriname, also among high officials,<sup>32</sup> there was a lack of public funding and only limited active official support for the implementation of public health legislation. This situation bolstered the resistance among many planters who did not want to pay for the building and maintenance of latrines despite the assurance of government physician Bonne (1919, p.305-308) that sanitation would pay off because the cost of prevention would pay dividends in labor productivity.<sup>33</sup>

Ultimately, this lack of official backing led to the withdrawal of the Rockefeller Foundation from Suriname. First, doctor Kibler went on leave in the USA in 1917 and chose not to return to Suriname. Because of the US intervention in World War I it took until 1921 for the Rockefeller Foundation to resume its work in the Dutch colony. The high reinfection caused by the lack of progress in the government sanitation program was the knell of the American eradication campaign. In 1921 the Surinamese Health Inspector J.W. Wolff in a speech in English at the West Indian Medical Conference in Georgetown (British Guiana) declared: "The Anchylostome ordinance would be very effective against the spreading of infection, if the Government had the means to vigorously control its fulfilment of the act, but I am sorry to say, that there is not much done just now" (quoted in Lampe, 1928, p.271).

Wolff, however, was guardedly optimistic about the future as “during the last years the interest of the Government and population has been much raised” (Lampe, 1928, p.271). Wolff’s and the Foundation’s spirits must have taken a blow when in 1923 the Dutch colonial minister refused to allocate three thousand guilders for sanitation inspectors. Political pressure in Suriname by the governor and in the Dutch parliament reversed this decision, but the political message that the Dutch administration did not want to allocate resources to sanitation was clear (Van Blankensteijn, 1923, p.329-330). The Foundation was bitter that it had failed to implement a culture of hygiene and left Suriname in 1923.

### **The Suriname sanitation department**

After the Rockefeller Foundation’s departure from Suriname, the local department of sanitation (Hygiënische Dienst) took over its task. Soon the work of the department was widely acclaimed. Paramaribo physician R. Simons (1933, p.431) lauded the department’s achievements and judged it “indispensable”. In 1925, the total budget for public health care in Suriname was approximately eight hundred thousand guilders, of which forty thousand guilders (5%) was earmarked for the department of sanitation and the prevention of hookworm (Lampe, 1928, p.266-267). In the 1920s the sanitation department employed one physician, one chief inspector, nine inspectors (of whom three worked in the city of Paramaribo), and four microscopists (two in Paramaribo) (Lampe, 1928, p.271). The Chief Sanitary Inspector, Grace Schneiders-Howard, who had been trained by the Foundation, voiced the same complaints about the lack of government funds and co-operation, but challenged Kibler’s statements about the refusal of the Javanese to listen to “the white man”. Schneiders-Howard was a staunch supporter of the Foundation and its mode of operation.<sup>34</sup> She was responsible for sanitation in Paramaribo, and also for the surrounding plantations and settlements of smallholders. In her first year as chief inspector, she gave a passionate account of the progress at Mariënborg: “they say that the Javanese don’t want to sanitize etc. etc., but if you teach them, they’ll do it. If you gain their trust and convince them that it is in their own interest, he’ll sanitize outstandingly. I proved it” (Schneiders-Howard, 30 Nov. 1924).

She recorded similar successes at the Javanese smallholder settlement at Lelydorp, approximately 15km outside Paramaribo, with its “pleasant little houses” and “cheap, practical latrines” (Schneiders-Howard, 30 Nov. 1924). The Javanese, according to Schneiders-Howard (12 June 1928, 9 Feb. 1926), made the “most beautiful latrines” and the “best water reservoirs”. She stated that she preferred to work with the Javanese and her wish was to convert Suriname into a “miniature Java”. The sticks that were used to beat up the representatives of the Rockefeller Foundation were gone, “‘those same’ [emphasis hers] Javanese receive us now with great kindness” (Schneiders-Howard, 9 Feb. 1926).

Grace Schneiders-Howard declared she had gained the trust of the Javanese but how did this white woman do this? She claimed to speak Javanese, which obviously would have been a great asset in building confidence, but there is no corroborating proof of this.<sup>35</sup> One may expect that in her work, Schneiders-Howard would have targeted women in particular. Yet, she did not specifically demand attention for the position of Asian women, indentured or free. This self-proclaimed social-democrat was not a maternal figure who tried to convince women of

the importance of hygiene for their family. It seems that she relied more on repetition of her message voiced at frequent visits to urban yards, plantations, and settlements. According to contemporaries she worked hard, biking and walking in tropical temperatures to check latrines. Less diligent people “skirt the issue and report that everything is fine” (Health inspector, Apr. 1937; Flu, 1928, p.2).<sup>36</sup> She would fine people ten guilders for not constructing a privy and six guilders for not cleaning it (Schneiders-Howard, 4 Nov. 1924). One can imagine that people would not only be afraid of the financial consequences of not building or cleaning a latrine, but also resented someone intruding on their privacy by inspecting their yards or houses.

Schneiders-Howard seems to have been a strict teacher, who threatened with fines and punishment if her instructions were not followed. The Rockefeller Foundation had already noted that coercion was essential in getting the Javanese to co-operate.<sup>37</sup> In the end, her approach does appear not to have differed much from the likes of Kibler, but the frequency of her visits might have made a difference in the outcome of her efforts.<sup>38</sup> Schneiders-Howard’s departure from the department in 1930 took the wind out of the fledgling sanitation movement in Suriname.

### **Final considerations**

For the Rockefeller Foundation in Suriname, the “white man’s burden” turned out to be a burden indeed. Javanese migrants in Suriname showed little appreciation of the Foundation’s efforts to eradicate hookworm. They were not convinced that modern American technology and skills were better than their own ideas and habits. To the contrary, the Foundation’s representatives and their medical treatments sometimes literally struck the fear of god into the Javanese. The Foundation’s representatives failed to reach across the gulf dividing East and West. The intrusion of privacy by the collection and inspection of feces, the administration of medicine – even against the will of the patient – and the inspection of latrines caused resentment, something the Rockefeller team did not seem to grasp.<sup>39</sup>

The immediate results of the hookworm eradication campaign, quantified in treatment and recovery rates, were not lasting because of the lack of sufficient support among patients, planters, local health practitioners, and the government. The promise of modern medicine not only failed to persuade the Javanese, but many non-Asians as well. The indoctrination in the superiority of American knowledge and organizational skills could turn people educated in Suriname or Europe away. Grace Schneiders-Howard, on the other hand, was absolutely convinced by the hegemonic American approach and the principles on hygiene. She was an activist in the “mother knows best” mold. She wanted to help the poor and the powerless, but on her own terms. She firmly believed in Western superiority and that non-white population groups should know their station in life. These groups should (and could) be taught, and if necessary coerced, to adopt hygienic practices. Her sanitary evangelism was the driving force behind the promotion of cleanliness after the Rockefeller Foundation left the colony. Given the direct relationship between (re)infection rates and the building and use of latrines, she focussed her efforts on the disposal of human waste. Her frequent inspections of yards and settlements had some success, but her departure greatly contributed to the neglect of the latrine system.

One element the Rockefeller Foundation, medical authorities, and to a lesser degree, Grace Schneiders-Howard did not sufficiently take into account in their zeal to advance hygiene was that the system of (contract) migration and the poor living conditions in the depots, aboard ships, and on the plantations was detrimental to cleanliness. Instead, many officials in Suriname cited ethnic background to explain the lack of hygiene and therefore the prevalence of disease among the poor in general, and the Javanese in particular.

The tone in its Suriname documents may have been vinegary, but its legacy may have been more positive than initially thought by the Rockefeller Foundation's representatives. It was the Foundation that put public health and sanitation on the political map. With the assistance of its supporters, it managed to make the importance of sanitation a political and popular issue through education, eradication efforts, and prevention, including the building of latrines. In all likelihood the Foundation's pressure on the colonial government speeded up the legal implementation of sanitary regulations. And the Foundation was instrumental in training local paramedics and inspectors, and setting up a colonial sanitation department. Despite the fact that the importance of this department's work did not go unrecognized, it did not escape budget cuts during the economic depression of the 1930s, which increasingly undermined the efforts to improve public health in the colony. But even before, in 1926, Health Inspector P.H.J. Lampe (1928, p.276) concluded that the colony's health workers carried a heavy and difficult load.

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#### NOTES

<sup>1</sup> The smallest independent country in South America, Suriname (until its independence also known as Dutch Guiana) was a colony until it gained self-rule in 1954 and independence in 1975. Originally settled by the British in the early seventeenth century, in 1667 Suriname was traded to the Netherlands in exchange for their North American colony of New Amsterdam (present-day Manhattan/New York City). During the Napoleonic War Suriname was briefly an English possession again (1804-1816). Probably the two most famous books about Suriname are Aphra Behn's novel *Oronooko, or, The Royal Slave* (1688) – in the author's words, "The scene of the last part of his adventures lies in a colony in America, called Surinam, in the West Indies" – and *Narrative of a five years' expedition against the revolted Negroes of Surinam* by John Gabriel Stedman (1796), a first-hand account of his experiences while living in Suriname from 1772 to 1777.

<sup>2</sup> According to Rose George (2008, p.23), sanitation is the shortest word for the removal of human excrements.

<sup>3</sup> In this and other citations from Dutch, a free translation has been provided.

<sup>4</sup> The first section of this article is based on Hoeft (1998).

<sup>5</sup> In effect, the last Indian immigrants arrived years earlier as World War I disrupted shipping between India and the Caribbean.

<sup>6</sup> For a detailed study of this tragic journey, see Meijerman (2010).

<sup>7</sup> See also Hallewas (1981, p.158). Doctor Römer (1919, p.124) claims that in 1917, 83% of arriving Javanese were infected.

<sup>8</sup> There are four "seasons" in Suriname's coastal area: the short rainy season (early December to early February), the short dry season (early February to late April), the long rainy season (late April to mid-August), and the long dry season (mid-August to early December).

<sup>9</sup> In 1913 the Indian government dispatched James McNeill and Chimmam Lal to Fiji, British Guiana, Trinidad, Jamaica, and Suriname to investigate the living and working conditions of Indian indentureds.

Their report listed many serious problems, such as low wages, harsh punishments, inadequate government supervision, and high suicide rates. The two investigators concluded, however, that “the advantages of the system far outweighed its disadvantages”. See James McNeill and Chimman Lal (1915, p.322). The Suriname Commissie reported in 1911 to the Dutch Colonial minister on the economic and financial conditions in the colony (Commissie..., 1911).

<sup>10</sup> A contributing factor to the high prices was that the management at many plantations determined the prices of consumer goods by exploiting company stores and obstructing free traders from selling their wares at the plantations.

<sup>11</sup> For a history of the International Health Division of the Rockefeller Foundation, see Farley (2004). For an excellent history of the Foundation’s activities in Central America and the Anglophone Caribbean see Palmer (2010). For an inventory of the Foundation’s interventions in the British Caribbean, see Pemberton (2003).

<sup>12</sup> For a history of hookworm and treatment of the disease across the globe, see Palmer (2010, p.25-38).

<sup>13</sup> As far as I am aware, there were no programs in Suriname, or in other Caribbean colonies for that matter, to provide people with shoes. Physician Bonne is the only expert author who specifically points at the importance of shoes by stating that in Paramaribo people not wearing shoes were “much more” infected than those with shoes (Bonne, 1919, p.301). Shoes remained a luxury at the plantations for a long time. See for example the reminiscences of Ronald Haselhof (2007, p.29), who grew up at Mariënborg after World War II, who “often fantasized about shoes, which I and the other schoolboys did not have. Until the sixth form I went to school bare foot”. Many of the informants on the oral history site [www.javanenindiaspora.nl](http://www.javanenindiaspora.nl) tell similar stories.

<sup>14</sup> See, for example, Ettlting (1981).

<sup>15</sup> The surgeon-general of Suriname at that time, H.A. Hovenkamp, was instrumental in inviting the Rockefeller Foundation to start its campaign in Suriname. Hovenkamp, however, left his post in 1915 (Hallewas, 1981, p.158). On the importance of Hovenkamp to Suriname health care and prevention, see Oliveira (1924, p.573-575) and Hallewas (1981, p.87, 157-158).

<sup>16</sup> The Foundation’s representatives handed out 72 thousand circulars written in Dutch, Sranantongo (an English-based creole and Suriname’s lingua franca), Hindi, Urdu, and Malay. For an excellent article on the difficulty of addressing a multi-ethnic public see Palmer (2006); see also Palmer (2010).

<sup>17</sup> The dukun (in Suriname mostly women) often used vegetable dressings to treat ailments. For the magical powers of dukun in Suriname, see De Waal Malefijt (1963, p.170-173).

<sup>18</sup> See also Van Kol (1919, p.283) and Lampe (1928, p.270).

<sup>19</sup> As one of the Foundation’s officers noted, a “partially exposed white person” would bring down “a roar of laughter”. In order to avoid such unwanted distractions he suggested that the inclusion of images of “various sick patients from various countries would improve the film as bearly all races would then be represented” (quoted in Fendunkiw, 2007, p.16).

<sup>20</sup> Palmer (2010, p.64) speaks of an “evangelical spirit”; a certain religious zeal can be detected in the Suriname campaign as well, not only among the Americans, but also among the “believers”. On the intensive method and its limitations see the detailed description in Palmer (2010, p.115-139). He states that “the utopia of eradication was quickly surrendered” (Palmer, 2010, p.118).

<sup>21</sup> The regime prescribed a dose of salts at 6PM the first day, two doses of thymol the next morning at 6 and 8PM, and another dose of salts two hours after the last dose of thymol. The salt and thymol were provided and paid for by the Rockefeller Foundation.

<sup>22</sup> This high cure rate may be explained by the failure to locate eggs in light infections, see Farley (2004, p.75).

<sup>23</sup> According to the management, the main problem was that the “Javanese, Negroes and especially British Indians are not clean” (NHM, 5 Sep. 1915). In addition, the directors expected religious obstacles.

<sup>24</sup> Römer (1919, p.124) reports that at one plantation 43% of the Javanese refused treatment.

<sup>25</sup> The other side of the coin reveals that some of the European and Afro-Surinamese nurses feared the Javanese because they were believed to use secret poison on individuals they mistrusted.

<sup>26</sup> Kibler contrasted this lack of leadership and respect for educated countrymen with his experiences with British Indians.

<sup>27</sup> What the reports and letters did not mention was that fear might have played a role too, as rumors circulated that some children had died from the prescribed treatment. A letter from 1917 mentions two cases, but the causes of death were reported to have been heart failure and epilepsy (Kibler, 19 Nov. 1917).

<sup>28</sup> Van Blankensteijn was invited to Suriname by Governor A.J.A.A. baron Van Heemstra, and in his newspaper articles and subsequent book he paid ample attention to public health in the colony. Both Van Blankensteijn and the governor fully supported the Rockefeller Foundation's campaign. In his annual address to the Colonial Parliament in 1923, Van Heemstra (1924, p.168) "saluted the magnificent and altruistic work" of the Americans.

<sup>29</sup> The Annual report from 1923 caustically contradicts statements by the surgeon-general and the Mariënborg management about the supposed lack of cleanliness of the Asians. According to the Americans, they were more easily persuaded to sanitize their homes, than the town dwellers.

<sup>30</sup> See Hoefte (2009, p.215-217) for more details about the resistance from various groups and anti-American sentiments. Suriname was not the only colony where anti-US sentiments played a role, as the Rockefeller Foundation suspected that the governor's anti-Americanism was the reason for the abrupt ending of its program in British Guiana in 1919 (Palmer, 2010, p.216).

<sup>31</sup> Around the turn of the century, the local government started to promote the idea of populating Suriname with permanent colonizers. The authorities encouraged Asian indentureds to colonize it by offering them land while guaranteeing their right to a free return passage. Those who declined to return received one hundred guilders in addition to the land. As of 1900 thousands of free people lived on the plantations where they leased small plots of land. Only in the 1930's, however, did the number of free Asian laborers surpass the number of indentureds.

<sup>32</sup> In July 1917 Kibler gave a lecture on hookworm for colonial government officials and prominent members of the community. He emphasized the importance of the building and use of latrines. Kibler also enjoyed the support of a number of newspapers (Kibler, 19 Nov. 1917).

<sup>33</sup> See also Römer (1919, p.124). Physicians in Suriname deliberately used an economic argument to convince planters to build latrines and implement other prevention policies. Pemberton (2003, p.87) notes that in the British Caribbean, planters considered expenditures on health and sanitation as unnecessary: "Indeed, there was a definite attempt to keep to a minimum any activity which was perceived as encouraging laziness among the laboring population and which was viewed as an unnecessary diversion of funds".

<sup>34</sup> Grace Schneiders-Howard (1869-1968), the daughter of a British planter and a Surinamese-Dutch Jewish mother, became involved in unpaid social work among the poor and indigent in the early twentieth century. Her career at the sanitation department began when she became a casual employee in 1919. Two years later she was made a temporary sanitation inspector. In 1924, Schneiders-Howard was promoted to "head inspection of latrines, refuse and weed in Paramaribo and latrines elsewhere". For more on Schneiders-Howard's role, see Hoefte (2009).

<sup>35</sup> I have found no evidence, besides her own claim, that she actually did speak Javanese (Schneiders-Howard, 29 July 1928). According to her grandchildren, she did not speak any of the more than a dozen languages spoken in Suriname, except Dutch.

<sup>36</sup> At the age of 68 Schneiders-Howard still worked ten hours per day inspecting urban yards and smallholder settlements.

<sup>37</sup> According to the Foundation, the problems with Javanese laborers did not arise on plantations where an authoritarian manager was in charge.

<sup>38</sup> Schneiders-Howard was fired in 1930 for defamation of her superiors and other high-ranking colonial officials. In 1933, she was reinstated, only to be dismissed again in 1937 for insubordination.

<sup>39</sup> I did not find any references in archival documents or contemporary publications to a possible religious taboo among Muslims on handling excrement or using tins to collect specimens. See Palmer (2010, p.107) for such taboos in Trinidad and British Guiana.

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