Abstract
In the period 1870-1940 over a million Javanese labourers travelled to Sumatra hoping for a better life. Although the literature focuses on the labour activities, working conditions, and wages of male workers, especially from 1900 onwards a substantial part of the hired labourers were women and children. This paper argues that in the late colonial period attempts were made to improve the conditions for family life on the plantations. These policies were aimed at creating a stable pool of workers in a context of widespread labour scarcity. However, improvements were slow, and when a labour surplus occurred during the Great Depression, women’s wages and contracts were affected most, which shows the gendered labour policies on the plantations were very much driven by an economic rationale.

Introduction
In the period from 1870 until the end of Dutch colonial rule over Indonesia in the 1940s, over a million Javanese labourers travelled to Sumatra hoping for a better life. They were contracted to work on
plantations owned by Western enterprises. In the late nineteenth century, Sumatra (and then especially East Sumatra) was transformed into one of the major regions of export-oriented agricultural production in Southeast Asia (for locations, see Map 1). In contrast to the high availability of land in this region, labour was in short supply, so contract labourers (usually called ‘coolies’) were recruited, initially mainly from China but, from the early twentieth century onwards, predominantly from Java. The Dutch were not unique in this strategy: after the abolition of slavery in the nineteenth century, many European countries used indentured labour as a substitute, and large numbers of Chinese, Indian, and Javanese workers were transported to colonies in the Americas, Africa, and Southeast Asia. Although at first especially men were people migrated to Sumatra, while in the period 1930-1940 some 300,000 Javanese women and children made this journey. Also see: Thio Termorshuizen, ‘Indentured labour in the Dutch Colonial Empire, 1800-1940’, in: Gert Oostindie (ed.), *Dutch colonialism, migration and cultural heritage* (Leiden 2008) 261-314, 278.


hired, from around 1900 onwards women and children came to form a substantial part of the plantation population in various colonial areas, including Sumatra.\footnote{On Malaysia see e.g. N. Heyzer, \textit{Working women in South-East Asia. Development, subordination and emancipation} (Philadelphia 1986); On Sumatra see e.g. Ann Laura Stoler, \textit{In the company’s shadow. Labor control and confrontation in Sumatra’s plantation history, 1870-1979} (New York 1983); On Suriname see e.g. Rosemarijn Hoefte, ‘Female indentured labour in Suriname. For better or for worse?’, \textit{Boletín de Estudios Latinoamericanos y del Caribe} 42 (1987) 55-70.}

In the literature on indentured labour migration within Asia or from Asia to other continents, two opposing views exist on how the working and living conditions of ‘coolie’ women differed from those of men. On the one hand, Hugh Tinker describes the migration of contract labourers from British India to overseas areas in the period after the Slavery Abolition Act of 1833 as a ‘new system of slavery’.\footnote{Tinker, \textit{A new system of slavery}.} Tinker states that many men and women were lured into signing a contract, after which they were transported and put to work under slave-like conditions.\footnote{Also others have emphasized the parallels between indentured labour and slavery, see e.g. Gwyn Campbell, ‘Children and forced labour in the Indian Ocean world, circa 1750-1900’, in: Alessandro Stanziani (ed.), \textit{Labour, coercion and economic growth in Eurasia, 17th-18th centuries} (Leiden/Boston 2013) 87-112, 137; Tappe and Lindner, ‘Introduction’, 4-10; Van der Linden, ‘Introduction’, 32.} A large body of literature emphasizes how female indentured labourers were in this respect not only the victim of racial power relations but also of gender hierarchies.\footnote{See e.g. Arunima Datta, \textit{Fleeting agencies. A social history of Indian coolie women in British Malaya} (Cambridge/New York 2021); Hoefte, ‘Female indentured labour’; Angela Woollacott, \textit{Gender and empire} (Basingstoke/New York 2006).} On the other hand, a positive view has been voiced by Piet Emmer. Emmer, who has studied the settlement of British Indian women in Suriname in the late nineteenth and early twentieth centuries, describes this migration movement as ‘a vehicle of female emancipation’.\footnote{P.C. Emmer, ‘The great escape. The migration of female indentured servants from British India to Surinam 1873-1916’, in: D. Richardson (ed.), \textit{Abolition and its aftermath. The historical context, 1790-1916} (London 1985) 245-266, 248.} He argues that by signing a contract, women (even more than men) not only escaped low earnings and improved their material conditions, they moreover increased their personal freedom. According to Emmer, the Suriname plantation society represented a ‘social and cultural environment with fewer social barriers than existed back home’, which allowed Indian women to escape from pre-arranged marriages, widowhood, and poverty.\footnote{Ibid., 247.}
In this respect, the position of women and children working on Sumatran plantations is an interesting yet understudied case. Although on most of the around 600 Western enterprises that Sumatra hosted in the late colonial period, women and children performed year-round or seasonal labour, the scholarly literature on the indentured labourers in this region mainly focuses on men. While scholars agree that around 1900 the (predominantly male) labourers were subjected to extremely harsh working and living conditions, scholars have debated whether any improvements were made in the last decades before decolonization. Jan Breman claims there were no substantial improvements. The 1880 Coolie Ordinance regulating the indentured labour system included a penal clause, which gave plantation administrators a free hand in punishing workers whom they found idle, unmanageable, or disobedient. The 1902 pamphlet *The Millions from Deli* (‘De milioenen uit Deli’) by the lawyer Van den Brand, as well as the report by prosecutor J.L.T. Rhemrev that followed, exposed the atrocities workers were subjected to. Yet according to Breman, the Rhemrev report disappeared into a drawer and the authorities failed to take measures for improvement. Other scholars have, in contrast, emphasized the progress that was made from the 1920s onwards. Marieke van Klaveren, for example, argues that better health provisions led to lower death rates. According to Thomas Lindblad a tougher state policy against abuse by employers led to higher conviction rates. H.J. Langeveld demonstrates that more and more children living on the plantations received some form of education.

With this paper, I contribute to the wider debate on the working and living conditions of ‘coolie’ women from Asia, as well as to the debate

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11 Kantoor van Arbeid, *Verslag van de Arbeidsinspectie voor de Buitengewesten* (Batavia 1928) Bijlage I.
13 Breman, *Koelies, planters en koloniale politiek*, chapters VI and VII.
on indentured labour on Sumatra, by studying the working lives of Javanese women and children hired by Sumatran plantations in the period through to 1940. In this study, I build upon the work of Ann Stoler, who has pioneered the study of the gendered labour policies of Sumatran plantation owners. Stoler argues that women were not in the first place recruited to serve as labourers but, above all, as ‘reproducers of the future labor reserve’. Moreover, she states that women’s wages were too low to make a living, violence was widespread, and prostitution ubiquitous. Breman as well argues that women employed on Sumatran plantations were – even more than men – subjected to exploitation and oppression. Breman, however, mainly describes the period around 1900. Moreover, a detailed analysis of women’s and children’s wages is so far missing in the literature.

Therefore, in this paper I study the recruitment policies of Sumatran estates, the working and living conditions of female workers as well as their children, and the wages earned by both women and children in the period 1870-1940. For the purpose of analyzing renumeration, I have constructed a wage database which contains more than 3,700 observations of male, female, and children’s wages, both from Java and the Outer Islands. This database not only gives insight into wage differentials between the different islands, but also into the gender wage gap on the Sumatran plantations. I argue that the gendered labour policies on the Sumatran plantations were driven by an economic rationale. During the 1910s and 1920s, employers attempted to improve the conditions for family life on the plantations, as this could help create a stable pool of workers in a context of widespread labour scarcity. However, when a labour surplus occurred during the Great Depression, women’s wages and contracts were affected most, additionally showing they were more vulnerable in times of crisis.

The sources used are diverse. Firstly, I have examined all material available in the archival collections of colonial plantations in the National Archives in The Hague dealing with the recruitment policies of the plantations, in addition to the labour activities, wages, and labour condi-

18 Breman, Koelies, planters en koloniale politiek.
tions of the workers. In total I have studied the archives of approximately 45 enterprises and branch associations active on Sumatra in the period 1870-1940, of which about two thirds contained more or less detailed information on the labour activities of different members of the plantation workers’ households. The main sources used are annual and monthly reports, minutes, financial reports, and work reports, stating how many men, women, and children were hired, what kind of work they performed, and how much they were paid. Secondly, a large variety of statistical sources was employed, such as annual reports by the Central Bureau of Statistics (Centraal Kantoor voor de Statistiek) and the Labour Inspectorate for the Outer Islands (Arbeidsinspectie voor de Buitengewesten), as well as census data. I am aware that these are all colonial sources that can never give insights into the experiences of the plantation women and children themselves. As to my knowledge no ego-documents of labourers working on Sumatran estates have been preserved, we can only critically engage with these official records in order to shed some light on the working and living conditions on the Sumatran plantations.

The first part deals with recruitment policies and changes in the female labour force. Next I describe the working and living conditions on the estates. The last part focuses on the labour activities and wages.

Illustration 1 Female labourers preparing tobacco for shipment, Deli Maatschappij (Deli Company), c. 1900-1940 (source: National Archives The Hague, Deli Maatschappij, inv. 814).
Recruitment policies

After Jacobus Nienhuys’ Deli Maatschappij (Deli Company) successfully pioneered the cultivation of tobacco in the region around Medan in the 1860s and 1870s, other entrepreneurs followed suit. East Sumatra became a flourishing region for the cultivation of tobacco, as well as rubber, copra, oil, and palm oil (see Map 2). In South (and to a lesser extent West) Sumatra, coffee was produced in large volumes. In 1925, around half of the agricultural commodities exported from the Netherlands Indies were produced in the Outer Islands (the Indonesian islands apart from Java and Madura), of which 60 percent came from Sumatra. At the end of the colonial era, the Outer Islands had even surpassed Java and Madura in production volumes. This development took place in a context of economic liberalization. During the period of the Cultivation System (c. 1830-1870), the Dutch colonial government had controlled both the production of export crops and the transport to Europe. The Agrarian Law of 1870, however, enabled private entrepreneurs on Java as well as on the Outer Islands to obtain land for agriculture. Sumatra, as the largest island in the Indonesian archipelago, which was moreover sparsely populated, offered land in abundance.

On the growing numbers of Sumatran agricultural estates, labourers were much needed. As the indigenous population preferred to work their own lands over performing wage labour, however, entrepreneurs with Sumatran landholdings needed to import labour. Workers were initially recruited mainly from China, but from the early twentieth century onwards most of them came from Java. Women were scarce in the 1870s, as the pioneer work of transforming wilderness into agricultural grounds was at the time considered a “man’s job”. In the subsequent decades the plantation owners’ policy was to recruit unmarried

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21 Jeroen Touwen, Extremes in the archipelago. Trade and economic development in the outer islands of Indonesia, 1900-1942 (Leiden 2001) 104-111; Breman, Koelies, planters en koloniale politiek, 44-53.
22 Touwen, Extremes in the archipelago, 118-120.
24 Breman, Koelies, planters en koloniale politiek, 37.
25 Ibid., 44-45.
males, as women were believed to encourage their husbands to find work outside of the plantation once their contracts finished.\footnote{Breman, Koelies, planters en koloniale politiek, 125-127.}

Employers also feared that contracting entire families would be more expensive, as family houses and services such as health care had to be expanded. Around 1900 only about 10 to 12 percent of the contract labourers working on Sumatran estates were women.\footnote{Stoler, Capitalism and confrontation, 31, 38.}

After the turn of the century, however, plantation owners’ policies not only shifted towards recruiting Javanese rather than Chinese labourers, but also towards contracting women. Within a context of persis-
tent labour shortages, entrepreneurs increasingly believed that hiring women would contribute to the stabilization of plantation society. Employers not only came to value women as flexible and cheap labourers, contracting families, moreover, meant that children could be employed too. Women would, furthermore, serve the men's sexual as well as domestic needs. As a result of these changing ideas about the roles women could play on plantations, the share of female labourers in the Sumatran workforce rose quickly, to around 28 percent in the 1930s. The great majority of these women originated from Java. The Deli Planters Vereeniging (DPV; the Deli Planters’ Association) made frequent attempts to attract more Chinese women, but Chinese custom prescribed that married women should work for their parents-in-law rather than accompany their husbands abroad. From the 1920s onwards the DPV reported on increasing success rates in the recruitment of Chinese women, but even then their numbers on Sumatran plantations remained limited.

Across plantations, however, large differences in the employment of women can be observed. For example, on the rubber plantation Sumcana in the period 1929-1932, 21 percent of the contracted labourers were women, yet on the tea estate Goenoeng Dempo female labourers made up 51 percent of the workforce in the period 1930-1940. As the Appendix shows, it was on tea plantations that women on average made up the largest share of the workforce. Tea plucking is a delicate job for which women were believed to be most suited. According to research on contemporary Indian tea plantations, indeed, women are 150 percent more effective in plucking, and their work is also of higher quality.

On the two Sumatran tobacco plantations that were examined, women formed only 17 percent of the labour force.

30 See e.g. T.G.E. Hoedt, Indische bergcultuurondernemingen voornamelijk in Zuid-Sumatra. Gegevens en beschouwingen (Doctoral dissertation; Wageningen University 1930) 119-120.
31 Breman, Koelies, planters en koloniale politiek, 125-127; Stoler, Capitalism and confrontation, 31-35.
33 Stoler, Capitalism and confrontation, 31-35.
34 Kantoor van Arbeid, Verslag van den Dienst der Arbeidsinspectie (1937-1938); Departement van Economische Zaken, Volkstelling 1930 VIII (Batavia 1936).
35 National Archives The Hague (hereafter NA), NV Deli Maatschappij, Dochtermaatschappijen en Gefuseerde Bedrijven (hereafter Deli Maatschappij), inv. 304 (annual report April 1922-April 1923).
37 T. Koshy and M. Tiwary, Enhancing the opportunities for women in India’s tea sector. A gender assessment of certified tea gardens (Bangalore 2011).
What was the size of the underage workforce? Although the wish to put children to work was an argument for colonial entrepreneurs to increasingly hire women, many sources remain silent on the magnitude of child labour (usually defined as labour by children below the age of fourteen\(^3\)). Both the plantation archives and statistical reports from the Central Bureau of Statistics, for instance, suggest that labour performed by young people was negligible. In its 1919 report, the Labour Inspectorate for the Outer Islands notes that labour by children in the age category of 8 to 15 years ‘is still of little significance’. They are said to only perform ‘light work’, such as scaring away birds, weeding, and gathering fallen coffee berries from the ground.\(^3\) A few years later the report states that at some enterprises girls assisted with sorting activities, and boys were found in workshops, but this work only had ‘the character of a vocational training’.\(^4\) This assessment is in line with Ben White’s


\(^4\) Kantoor van Arbeid, *Verslag van den Dienst der Arbeidsinspectie in Nederlandsch-Indië* (Batavia 1920) 6.

\(^3\) Kantoor van Arbeid, *Verslag van de Arbeidsinspectie* (1927) 148.
statement that children possibly ‘did not play a crucial or indispensable role’ in Indonesian’s colonial export production, which he explains by the overall labour-abundant situation in the colony.\textsuperscript{41} We may question, however, whether this line of reasoning applies to the Sumatran estates where labourers were usually in short supply. A more plausible conclusion might be that, as White also states, labour ‘was considered a natural part of childhood’,\textsuperscript{42} as a result of which official reports either counted children as adults or, due to its casual nature, did not register child labour at all. In the exceptional case that a source mentions children as a separate category, they made up 7 to 10 percent of the workforce in the late colonial period.\textsuperscript{43} This might indicate that child labour was more widespread than we can trace, which would mean that from around 1900 onwards the workforce became more diverse both in terms of gender and age.

**Working and living conditions**

The plantation society that took shape in the early twentieth century included both women working on a contract and casual labourers who only worked during those times of the year when extra hands were needed. Although the records of the Sumatran plantations as well as of the Labour Inspectorate are far more detailed on labourers with a contract, there must in fact have been a large pool of Javanese women and children who were available for work on a casual basis. Between April 1913 and April 1914, the plantations of the DPV reported that 69 percent of the newly arrived women were ‘female family members’ who did not sign a contract themselves. As children (both adult and immature) were mentioned separately, these family members must have included mainly wives accompanying their newly recruited husbands. Of the women who were formally hired by the plantations that year, most – more than 80 percent – were unmarried.\textsuperscript{44}

\textsuperscript{41} White, ‘Labour in childhood’s global past’, 481.

\textsuperscript{42} Ibid., 489.

\textsuperscript{43} In 1929, on the palm oil enterprise ‘Ophir’ children made up 7 percent of the workforce, see: NA, Cultuur-, Handel- en Industriebank Koloniale Bank; Cultuurbank NV (hereafter Koloniale Bank), inv. 1608 (annual reports 1924-1934). In 1938, on the tea plantations Bah Boetong, Hilang Oeloe, Bah Biroren and Bah Aliran children made up 8 to 10 percent of the labourers, see: NA, Nederlandsche Handel-Maatschappij (hereafter NHM), inv. 11983 (concept annual reports 1913-1938).

\textsuperscript{44} NA, Deli Maatschappij, inv. 304 (annual report April 1913-April 1914).
Initially all women who signed a contract did so on the basis of the Coolie Ordinance. This set of regulations created the conditions for frequent abuses of power and overall lawlessness. There are many indications that both men and women were often forced or deceived into signing a contract.\(^45\) For recruiters, who in the case of contracting female workers were sometimes women themselves,\(^46\) it was especially profitable to lure women into contract labour, as the recruitment rates were usually higher than those of men.\(^47\) Van den Brand’s *Millions from Deli* extensively describes the abuses women had to deal with once they arrived on the plantations. There is the poignant case of a fifteen- or sixteen-year-old girl who had refused the advances of the administrator. She was hung from a cross, in the scorching sun, from six in the morning until six in the evening. Her genitals had been rubbed with the spicy sambal oelek to prevent her from fainting.\(^48\) The pamphlet also mentions sexual abuses and the ubiquity of prostitution as a result of the low wages.\(^49\) The Rhemrev report gives even more examples of atrocities, such as of women being beaten until they were bleeding heavily, or being tortured by means of electric shocks. In the most serious cases, the abuses led to death, such as when two women, who had run off and had been caught again, were forced to walk on the estates naked, after which they hanged themselves. Rhemrev states that these cases were only the tip of the iceberg.\(^50\)

Under these conditions, it is hardly surprising that women were averse to renewing their contracts. Around 1900 at the Sumatran coffee company Way Lima, it proved impossible to have women sign a new contract, even when higher wages and an advance on their payments were promised. Married women preferred instead to stay on the estate with their husbands, who did renew their contract, and only to work for the company according to their own schedules.\(^51\)

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\(^45\) See e.g. Engelen, ‘Van beroepswerving tot vrije werving’, 4.


\(^49\) Ibid., 285, 298-301.


\(^51\) NA, NV Cultuuronderneming Way Lima; NV Cultuuronderneming Kedongdong (hereafter Way Lima and Kedongdong), inv. 54 (reports and accounts, 1892-1909).
Central Bureau of Statistics of the Netherlands Indies confirm this picture: in the period 1920 to 1930, 27 percent of the new ‘coolie’ contracts (‘immigration contracts’) concluded at the east coast of Sumatra were signed by women, while for ‘reengagement contracts’ it was only 19 percent.\(^5\)

In 1911 a second category of contract labourers was introduced, the ‘free coolies’, a misleading term as these workers still signed a contract albeit one without a penal clause.\(^5\) The system of ‘free coolies’ only became fully operational from 1928 onwards when a new recruiting agency, the VEDA (Vrije Emigratie van DPV en AVROS), was established to encourage this ‘free’ migration.\(^5\) Table 1 gives an overview of the number of male and female contract labourers as well as male and female ‘free coolies’ on Sumatran private estates in 1928. It demonstrates that there were large regional differences. While in Tapanuli, in the northwest of Sumatra, women made up about 80 percent of the ‘free’ workforce, in Palembang, in the southeast of the island, this was only 3.5 percent. In most regions, however, the vast majority of the women signing a contract still did so under the Coolie Ordinance.

Although the system of forced labour had received quite some criticism since the revelations by Van den Brand and Rhemrev, it was the Great Depression that paved the way for the abolishment of the Coolie Ordinance. During the 1930s, when the estates experienced major financial difficulties, the Coolie Ordinance was gradually abolished, albeit only fully repealed in 1942.\(^5\) In the end, then, it was not out of compassion with the labourers that the penal sanction disappeared, but its abolishment resulted from a sharp decrease in the demand for labour, coupled with international pressure from the International Labour Organisation (ILO). Due to the economic crisis the Javanese migration to Sumatra was halted and contracts were not renewed.\(^5\) The balance then shifted towards the system of the ‘free coolies’: in 1936,

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5\(^2\) Centraal Kantoor voor de Statistiek in Nederlandsch-Indië, Statistisch Jaaroverzicht van Nederlandsch-Indië (Batavia 1926) 174; Ibid. (Batavia 1931) 223.


5\(^4\) VEDA stands for ‘Free Emigration of DPV and AVROS’ (Vrije Emigratie van DPV en AVROS). DPV is the Deli Planters’ Association (Deli Planters Vereniging); AVROS is short for General Rubber Planters’ Association on the East Coast of Sumatra (Algemene Vereniging van Rubberplanter ter Oostkust van Sumatra).


Table 1 Number of workers employed at private estates in Sumatra, 1928

<table>
<thead>
<tr>
<th></th>
<th>“contract coolies”</th>
<th>“free coolies”</th>
<th>% women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Javanese workers</td>
<td>Other</td>
<td>Total</td>
</tr>
<tr>
<td>Sumatra’s East Coast</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Atjeh and dependencies</td>
<td>12,404</td>
<td>5,146</td>
<td>146</td>
</tr>
<tr>
<td>Tapanuli</td>
<td>4,695</td>
<td>1,462</td>
<td>0</td>
</tr>
<tr>
<td>Sumatra’s West Coast</td>
<td>11,230</td>
<td>3,208</td>
<td>821</td>
</tr>
<tr>
<td>Bengkulu</td>
<td>8,899</td>
<td>3,638</td>
<td>142</td>
</tr>
<tr>
<td>Lampung districts</td>
<td>5,836</td>
<td>2,467</td>
<td>6</td>
</tr>
<tr>
<td>Palembang</td>
<td>8,723</td>
<td>4,490</td>
<td>0</td>
</tr>
<tr>
<td>Djambi</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Riau and dependencies</td>
<td>4,280</td>
<td>1,931</td>
<td>197</td>
</tr>
<tr>
<td>Total</td>
<td>207,488</td>
<td>80,227</td>
<td>31,276</td>
</tr>
</tbody>
</table>

Source: Kantoor van Arbeid, Verslag van de Arbeidsinspectie voor de Buitengewesten (Batavia 1928).
93 percent of the women (and 95 percent of the men) employed on the estates were ‘free coolies’.\textsuperscript{57}

Women were, however, in times of crisis more vulnerable to losing their income than men. The share of female labourers in the indentured workforce in the Outer Provinces declined during the Great Depression. While women had made up 23 percent of the contract workers in 1929, their share dropped to 19 percent in 1931.\textsuperscript{58} On the east coast of Sumatra, specifically, in 1929 a total number of 83,000 Javanese women were working either as ‘contract coolies’ or as ‘free coolies’, while in 1932 their number had decreased to below 38,000, which was a drop from 28 to 23 percent in the total labour force working on these estates.\textsuperscript{59} The reports of the Labour Inspectorate reveal that during this crisis period, employers chose to fire married women first, because in that way ‘many heads of households who would otherwise become unemployed were able to keep their income’.\textsuperscript{60} It was only in the second half of the 1930s that the share of women employed increased again.

As described in the introduction, the question is whether some progress had already been made in terms of living and working conditions before the Coolie Ordinance was abolished. From the archives of the Labour Inspectorate it becomes clear that from its establishment onwards attempts were made to improve family life on the plantations. The report from 1913 mentions that while the quality of housing had been very poor, it now had been sufficiently improved on most plantations.\textsuperscript{61} In that same year the Labour Inspectorate describes the right women had to take leave on the first two days of their menstrual cycle, as well as shortly before going into labour and thirty days after giving birth or having a miscarriage.\textsuperscript{62} This leave was unpaid, but female labourers were entitled to free food. During the 1920s several companies introduced free child care.\textsuperscript{63} Moreover, midwives were increasingly appointed to attend births.\textsuperscript{64}

\textsuperscript{57} Kantoor van Arbeid, \textit{Verslag van den Dienst der Arbeidsinspectie} (1937-1938).
\textsuperscript{58} Kantoor van Arbeid, \textit{Verslag van de Arbeidsinspectie} (1929-1938).
\textsuperscript{60} Kantoor van Arbeid, \textit{Verslag van de Arbeidsinspectie} (1930, 1931 en 1932) 45.
\textsuperscript{61} Kantoor van de Arbeid, \textit{Verslag van den Dienst der Arbeidsinspectie in Nederlandsch-Indië} (Batavia 1913) 77.
\textsuperscript{62} Ibid., 27.
\textsuperscript{63} Kantoor van Arbeid, \textit{Verslag van den Dienst der Arbeidsinspectie in Nederlandsch-Indië} (Batavia 1929) 27; Kantoor van Arbeid, \textit{Verslag van den Dienst der Arbeidsinspectie} (Batavia 1925). The company child care was, however, not very successful: many women preferred to pay 3 to 5 guilders per month to a ‘free woman’ to look after their children or to take their children to work.
\textsuperscript{64} Kantoor van Arbeid, \textit{Verslag van den Dienst der Arbeidsinspectie} (Batavia 1925).
At the same time, it was not only a success story. In the 1910s and 1920s, the Labour Inspectorate received regular complaints about employers who refused to grant menstruation or pregnancy leave. Some employers even denied labourers the right to marry. Plantation owners officially had to approve an intended marriage before the penghoeloe (the local priest) was allowed to perform the wedding. As marrying a contract labourer gave a woman the right to free medical care, housing facilities, and free passage to the place of origin after a contract ended, or a free funeral in case the woman died, some employers were hesitant to give their approval. Furthermore, the number of children that went to school on the plantations in East Sumatra rose from some 3,300 in 1921 to over 15,000 in 1939, but this was mainly a rise in absolute numbers. Both in the 1920s and 1930s only around a third of the children went to school. These examples show that although plantations increasingly depended on female and child labour, employers were not willing to facilitate the presence of families at all costs.

**Labour activities and wages**

How did the labour activities and wages of female workers on Sumatran plantations compare to those of male workers? The labour contracts often clearly defined which activities female workers were expected to perform. At the Sumatran coffee estate Way Lima, these were specified as tasks ‘which are commonly done by women on agricultural estates, such as the maintenance of gullies and roads, if they are capable of it, the maintenance of coffee gardens, the picking of coffee, the sorting of coffee, the sewing of coffee bags etc., and offering assistance in case of fire and flooding’. Men were, in contrast, hired for ‘constructing gullies and roads, if they are capable of it, building sheds and houses, with the exception of the more refined carpentry, felling forestry, building roads, serving as carters, stable-boys, etc., and offering assistance in case of fire and flooding’. This is in line with Stoler’s observation that on the estates there was a clear idea of what qualified as ‘women’s work’. From

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65 See e.g. Kantoor van Arbeid, Verslag van de Arbeidsinspectie (1920) 26-27.
67 Ibid.
69 NA, Way Lima and Kedongdong, inv. 157 (labour contracts).
the early twentieth century onwards, the newfound Dutch Labour Inspectorate moreover actively monitored whether female work was confined to specific tasks considered appropriate for women.79

Work reports from the plantations demonstrate that women’s labour activities were less varied than those of men. Again at Way Lima, while both men and women were occupied with picking, weeding, cutting, and the preparation of the product before transport, men had additional activities and acted, among other roles, as carriers, couriers, shepherds, stable-boys and brickmakers.71 This pattern can also be found at other plantations. In mines, women only worked above the ground, while men also performed underground labour.72 For children, tasks that are often mentioned in work reports are weeding, rubber tapping, collecting fallen leaves and berries, scaring away birds, finding caterpillars, as well as assisting their parents in all kinds of labour.73 Although there was a clear overlap in the kind of work done by men, women, and children, the latter two groups in general mainly performed the more ‘lighter’ tasks, at least according to the official sources.

Several contemporary observers have remarked that women’s tasks were not always restricted to these activities, however, and that they in fact performed more heavy work as well. For example, the Dutch lawyer J. van den Brand, who worked in Medan, stated in 1904 that ‘repeatedly you can see women performing work, for which in the Netherlands excavators are employed. Dredging gravel from the river, cutting stones, carrying and emptying defecation buckets for the Chinese.’74 According to W.C. Muller in 1914, ‘women performed the toughest field work’, such as eradicating alang-alang (Japanese bloodgrass).75 Moreover, many women not only worked in the fields or factories (between eight and ten hours a day, six days a week76), but also had to do household work and care for their children (if they had any), which can be described as a ‘double day’.77

70 Stoler, ‘In the Company’s shadow’, 5.
71 NA, Way Lima and Kedongdong, inv. 37 (resume of the costs of coolie labour, 1892-1903) 62-77 (appendices to the reports of the superintendent and the administrators, 1893-1909).
72 See e.g. Kantoor van Arbeid, Verslag van den Dienst der Arbeidsinspectie (1921) 43.
73 See e.g. Kantoor van Arbeid, Verslag van den Dienst der Arbeidsinspectie (1920) 6-7; Ibid. (1927) 69.
74 J. van den Brand, Nog eens: de millioenen uit Deli (Amsterdam 1904) 39 [author’s translation].
75 W.C. Muller, ‘Uit het leven der koelie’s op ondernemingen in Deli’, Tijdschrift voor Economische Geographie 5 (1914) 438-439 [author’s translation].
76 White, ‘Labour in childhood’s global past’, 864.
77 See e.g. Hoefte, ‘Female indentured labour in Suriname’, 61.
How was the work remunerated, and how large was the gap between male, female, and children’s wages? Although wages have received some attention in the literature, a thorough analysis of female wages and the gender wage gap is so far missing.\(^7\) Plantation workers either worked for a piece rate or received a fixed wage per day or task. According to both Langeveld and Leenarts, who have analyzed the wage situation in the 1920s and 1930s, most labourers were paid on the basis of a minimum daily wage which was stipulated in their contracts.\(^7\) Higher earnings were possible whereby allowances would compensate for rises in food prices or bonuses for arduous or overtime work. On the other hand, if employers were unsatisfied with the performed tasks, or if due to illness or rain the labourers had been unable to work, lower or no wages were paid.\(^8\) Also advance payments, costs of food, and income taxes were deducted from the minimum wage, as a result of which labourers in fact often received less than the wages mentioned in the contracts.\(^8\) ‘Field coolies’ on tobacco plantations, who made up around 10 percent of the total indentured labour force in East Sumatra, received a fixed piece rate for every thousand plants.\(^8\) As female labour force participation on tobacco plantations seems to have been lower than on other types of plantations, it may be concluded that most women on the plantations worked for day wages.

When fixed day wages were paid, men received more than women, even when they performed the same type of work. To enable an analysis of the gender wage gap, I have constructed a database containing more than 3,700 findings for contract wages from different islands in the Indonesian archipelago. This database not only gives insight into the development of the gender wage gap over time, but also into the differences in wages paid on Sumatra compared to on Java and the other islands. To what extent did the Javanese women signing a ‘coolie contract’ profit financially from their move to Sumatran plantations? Were

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\(^7\) On the general wage level (without differentiating between male and female wages) see e.g. Ellen Leenarts, ‘Coolie wages in western enterprises in the outer islands, 1919-1938’, in: Houben and Lindblad (eds.), Coolie labour in colonial Indonesia, 131-155. Also see Langeveld, ‘Arbeidstoestanden’.

\(^7\) Langeveld, ‘Arbeidstoestanden’, 313-327; Leenarts, ‘Coolie wages in western enterprises’. In contrast: a Labour Inspectorate report from 1913, daily wages were only used when a piece rate or a fixed wage per duty could not be applied: Kantoor van de Arbeid, Verslag van den Dienst der Arbeidsinspectie in Nederlandsch-Indië (Batavia 1913) 64. Also Breman concludes that labourers commonly worked for piece rate: Breman, Koelies, planters en koloniale politiek, 136.

\(^8\) Kamphues, ‘Na Rhemrev’, 311.

\(^8\) Leenarts, ‘Coolie wages in western enterprises’, 132-135.

\(^8\) Langeveld, ‘Arbeidstoestanden’, 316.
they able to earn a higher wage compared to working on Javanese estates? The majority of the wages (58 percent) in the database were paid on Java, while 39 percent concern Sumatran wages, and a small share was paid to contract labourers in other Outer Provinces, such as Borneo and Ambon. While 55 percent concern male wages, almost 40 percent of the wages found were paid to women, and 5 percent to children (see Table 2).

The wage data were collected using a large variety of sources, such as financial reports, ‘cooler contracts’, Labour Inspectorate reports, and residential accounts. Generally speaking, two types of wages are in-

Table 2 Number of male, female, and children’s wages within the database per 10-year period, 1871-1940

<table>
<thead>
<tr>
<th></th>
<th>Male wages</th>
<th>Female wages</th>
<th>Children’s wages</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1871-1880</td>
<td>52</td>
<td>39</td>
<td>27</td>
<td>118</td>
</tr>
<tr>
<td>1881-1890</td>
<td>8</td>
<td>3</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>1891-1900</td>
<td>272</td>
<td>159</td>
<td>7</td>
<td>438</td>
</tr>
<tr>
<td>1901-1910</td>
<td>645</td>
<td>233</td>
<td>119</td>
<td>997</td>
</tr>
<tr>
<td>1911-1920</td>
<td>182</td>
<td>142</td>
<td>12</td>
<td>336</td>
</tr>
<tr>
<td>1921-1930</td>
<td>622</td>
<td>602</td>
<td>30</td>
<td>1,254</td>
</tr>
<tr>
<td>1931-1940</td>
<td>299</td>
<td>304</td>
<td>1</td>
<td>604</td>
</tr>
<tr>
<td>Total</td>
<td>2,080</td>
<td>1,482</td>
<td>200</td>
<td>3,762</td>
</tr>
</tbody>
</table>

Sources: see note 83
cluded in the database: firstly, wages that were actually earned in a day’s labour, which were registered in the estates’ payment registers; secondly, contract wages (both ‘immigration’ and ‘reengagement’ contracts), specifying the minimum wage for a certain number of working hours per day and a specified task. The database contains wages for a large variety of tasks, and often wages for both men and women for the same kind of duties on the estates. Wages were only included if the sex (or age in case of children) of the workers was specified. Some of the sources only mention average wages on a yearly basis (e.g. in annual reports), while in other cases monthly findings were given (e.g. in monthly work or payment statistics), which have all been included in the database.\(^{84}\)

As a result of the labour shortages described above, wages were – at least on paper – usually higher in the Outer Provinces than on Java. This

\(^{62-77}\) (appendices), \(^{184}\) (payment records of native staff, 1894-1899), \(^{213}\) (annual reports Kedongdong 1895-1901); NA, Deli Maatschappij, inv. 304, 305 (annual reports 1909-1939); \(^{Onderzoek naar de mindere welvaart der Inlandsche bevolking, IXb3 and Xa (Batavia 1914); C. Th. van Deventer, Overzicht van den economischen toestand der inlandsche bevolking van Java en Madoera (The Hague 1904) 58.}\)

\(^{84}\) If only a lower and upper bound wage was given per year, I have calculated a lognormal distribution of wages (which is slightly below the average). For an example of an article in which the same method was applied, see: Ewout Frankema and Marlous van Waijenburg, ‘Structural impediments to African growth? New evidence from British African Real Wages, 1880-1965’, \textit{Journal of Economic History} \textit{72} (2012) 895-926.
increase was especially true for women's wages. On average, women earned about 40 percent more on Sumatran than on Javanese estates. For men it was only 18 percent, and in most decades wages were even comparable. This resulted in a smaller gender wage gap: where on Javanese plantations women earned on average approximately 70 percent of a male wage, on Sumatra it was about 80 percent (see Figure 1). 

For child wages too little information is available to draw any conclusions. For Sumatra there are only child wages in the database for the period 1911-1920, when they were about half of the average male wages. The relatively high remuneration for women was probably aimed at attracting more female contract workers to the estates in the Outer Provinces, which as we have seen above was a successful approach. Thus, although female wages were lower than male wages, women in this respect seemed to have been better off on Sumatran than on Javanese plantations. As Figure 2 demonstrates for the period 1921-1930, especially on tea plantations – where, as stated above, female workers

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85 On Java, children earned on average less than half of a male's wage. Since for Sumatra I have only one finding for child's wages, it is impossible to make comparisons in this respect.
were welcomed with open arms and the share of employed women was highest – women could earn a relatively high wage compared to other types of plantations. The gender wage gap was also smallest here.

There is broad agreement, however, that even though wages were higher than on Java, labourers on Sumatran plantations still had major difficulties making ends meet.\textsuperscript{86} The Labour Inspectorate, which was established in 1904, regularly conducted investigations into the wages and living standards of the working population on private estates, and more than once they concluded that the contract wages were below subsistence level.\textsuperscript{87} The monthly withholdings of the wage payments to compensate for the cash advancements paid to the labourers upon signing the contract also made the income very meagre.\textsuperscript{88} On days when there was no work to be done, moreover, employers often did not pay any wages at all, even though this practice was against the rules of the Coolie Ordinance.\textsuperscript{89} The cheap rice, as well as the free housing and medical care provided on the estates, served as a small compensation for the low wages.\textsuperscript{90} According to Breman and Stoler, the even lower payment for women’s work gave women in the end no choice but to prostitute themselves to be able to feed themselves and their families.\textsuperscript{91}

Nominal wages were quite stable in the late nineteenth century (see Figure 3). In the period 1900-1930 wages did rise, but when correcting for inflation in fact a downward trend becomes visible (see Figure 4). The increase in wage rates was thus only a very meagre compensation for a steep increase in food prices. This condition is in line with Lindblad’s statement that although the Labour Inspectorate was successful in improving health standards and in reducing violence on the plantations, it failed to improve the wage situation, which he explains from the ‘great bargaining power enjoyed by the employers’.\textsuperscript{92}

The Great Depression heavily impacted on the wage situation on the estates. During the 1930s the wages for both men and women plum-

\textsuperscript{86} See e.g. Langeveld, ‘Arbeidstoestanden’, 319; Stoler, ‘In the Company’s shadow’, 5-6; Breman, Koelies, planters en koloniale politiek, 76-77; Kamphues, ‘Na Rhemrev’, 311.
\textsuperscript{88} Breman, Koelies, planters en koloniale politiek, 141-145.
\textsuperscript{89} Ibid., 67-77; also see Van den Brand, ‘De miljoenen uit Deli’, 284-285.
\textsuperscript{90} Van der Zwaag, Tjoeroeg, 62.
\textsuperscript{91} Stoler, ‘In the Company’s shadow’, 5-6; Breman, Koelies, planters en koloniale politiek, 139.
\textsuperscript{92} Lindblad, ‘Coolies in Deli’, 53, 65.
Male wages on average showed a 23 percent decline, and female wages were even cut by 27 percent. The annual report from 1932 from the tea and cinchona estate Djolotigo in Central Java mentions that, although the wages had even fallen by 50 percent compared to 1930, there had not been the slightest problem finding enough workers, which must have been the case elsewhere as well. Still, Leenarts argues that real wages were not much affected, since food prices were low as well.

I also find that when correcting for inflation, the wages turn out to have been higher after the Wall Street Crash than they had been before 1929 (see Figure 4). Thus during the 1930s, when profiting from falling prices, the workers saw their disposable income increase. This advantage is of course only true for those who remained under contract, however, as many indentured labourers – and women even more often than men – became unemployed.

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**Figure 3 Nominal men’s, women’s, and children’s coolie wages on European private estates on Java and Sumatra, 1871-1940**

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*Sources: see note 83*

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93 NA, Djolotigo, inv. 15 (annual reports, 1908-1957).
94 Leenarts, ‘Coolie wages’, 151.
Conclusion

In this paper I have studied the changes in recruitment policies on Sumatran plantations which led to the increased presence of Javanese women and children, and how their labour conditions, work activities, and wages differed from those of men. Although scholars have debated the working and living conditions of indentured labourers on the Sumatran estates, the position of plantation women and children has thus far not received much attention. Yet from the 1900s onwards, women formed a substantial part of the labour population, rising to about 25 to 30 percent of the workforce at the end of the colonial period. For children it is more difficult to estimate how extensive their labour input was. Although we know of examples in which boys and girls made up the working population, the exact contribution of children is harder to quantify. This paper has highlighted the need for further research on the role of children in the colonial economy.
about 25 percent of the labour force, other sources give the impression that on the estates child labour was less widespread.

How did the working and living conditions of Javanese women working on Sumatran plantations compare to those of male labourers? And to what extent was any progress made in this respect in the late colonial period? On the one hand, the archival sources from plantation companies reveal that most women worked under the 1880 Coolie Ordinance, which meant they were subordinated to male-dominated managerial controls. Moreover, although their work activities were less diverse but usually not less strenuous, their wages were on average 25 percent lower than those of men. On the other hand, women did profit from higher wages and a smaller gender wage gap than on Java. Especially on tea plantations, where many women were recruited and female labour was highly valued, the gender wage gap seems to have been relatively small. Still, to call contract labour a ‘vehicle of female emancipation’ would be a bridge too far. Sumatran plantation society was a highly exploitative working and living environment in which violence was widespread and in which low wages drove women into prostitution. Under these conditions it is hardly surprising that many women chose not to renew their contracts.

In the late colonial period, two important developments regarding the working and living conditions of female and child labourers can be observed. Firstly, although the improvements were slow and real progress was only made when the Coolie Ordinance was phased out in the 1930s, plantation owners – under the supervision of the Labour Inspectorate – did make attempts to improve the medical care, education, and housing on the plantations. Women, moreover, profited from increased regulation regarding pregnancy and menstruation leave – although some employers were reluctant to implement these rules. Secondly, however, even in times when women were increasingly valued as labourers and employers tried to further diversify the workforce, women remained far more vulnerable to economic hardship. This issue became clear during the Great Depression, when not only more women than men lost their income, but the gender wage gap on Sumatra increased as well.

Therefore, the final conclusion is a mixed one. On the one hand, the increased presence of women and children on the plantations did go hand in hand with attempts to improve labour and working conditions. Employers understood that in order to solve problems of labour scarcity, they had to improve the conditions for family life, in which they were
encouraged by the Labour Inspectorate. On the other hand, the improvements were slow, and employers were clearly not willing to facilitate the presence of families at all costs. Moreover, when a labour surplus occurred, women’s wages and contracts were affected most, which shows that gendered labour policies on the plantations were very much driven by an economic rationale.

About the author

Daniëlle Teeuwen (1985) works as a lecturer in the Rural and Environmental History Group at Wageningen University. This article derives from her work as a postdoc researcher for the NWO-project ‘Industriousness in an imperial economy’, in which her research dealt with women’s and children’s labour in the Netherlands East Indies (1815-1940). She wrote her PhD dissertation at the International Institute of Social History on charity in the Dutch Republic. Her publications include the book Financing poor relief through charitable collections in Dutch towns, c. 1600-1800 (Amsterdam 2016).

E-mail: danielle.teeuwen@wur.nl
### Appendix Average share of women in the labour force on private estates in Sumatra, 1896-1940 (in chronological order based on available data)

<table>
<thead>
<tr>
<th>Name of estate</th>
<th>Percentage</th>
<th>Groups counted</th>
<th>Years for which data are available</th>
<th>Main product(s)</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kedongdong</td>
<td>17.23%</td>
<td>Number of work days counted (number of workers not always specified); 1899: only data available for Jan-Sept</td>
<td>1896, 1899</td>
<td>Coffee</td>
<td>South Sumatra</td>
</tr>
<tr>
<td>Way Lima</td>
<td>21.02%</td>
<td>“Contract coolies” and “free coolies”; for 1896 only “contract coolies” (number of “free labourers” not specified)</td>
<td>1896, 1901</td>
<td>Coffee</td>
<td>South Sumatra</td>
</tr>
<tr>
<td>Deli Cultuur Maatschappij</td>
<td>10.09%</td>
<td>“Contract coolies”</td>
<td>1904-1913</td>
<td>Tobacco</td>
<td>East Sumatra</td>
</tr>
<tr>
<td>Deli Planters Vereeniging*</td>
<td>23.97%</td>
<td>“Contract coolies” and “free coolies”</td>
<td>1914-1932, 1934-1939</td>
<td>Tobacco</td>
<td>East Sumatra</td>
</tr>
<tr>
<td>Kerasaan</td>
<td>34.00%</td>
<td>“Contract coolies”, “free coolies” and casual labourers</td>
<td>1915-1916, 1920-1921</td>
<td>Rubber and coffee</td>
<td>East Sumatra</td>
</tr>
<tr>
<td>Bah Bajoe</td>
<td>30.54%</td>
<td>“Contract coolies”, “free coolies” and casual labourers</td>
<td>1915-1916, 1920-1921</td>
<td>Rubber and coffee</td>
<td>East Sumatra</td>
</tr>
<tr>
<td>Permanangan and Penang Ratoes (field)</td>
<td>48.21%</td>
<td>“Contract coolies”, “free coolies” and casual labourers</td>
<td>1920-1921, 1929-1930, 1932, 1934-1939</td>
<td>Tea</td>
<td>East Sumatra</td>
</tr>
<tr>
<td>Boekit Kaba</td>
<td>32.38%</td>
<td>“Contract coolies”</td>
<td>1921-1922</td>
<td>Cinchona</td>
<td>South Sumatra</td>
</tr>
<tr>
<td>Aer Temam</td>
<td>32.91%</td>
<td>“Contract coolies”</td>
<td>1921-1924</td>
<td>rubber and coffee</td>
<td>South Sumatra</td>
</tr>
<tr>
<td>Name of estate</td>
<td>Percentage</td>
<td>Groups counted</td>
<td>Years for which data are available</td>
<td>Main product(s)</td>
<td>Region</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>-----------------------------------</td>
<td>--------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Pematang Danau</td>
<td>36.71%</td>
<td>1920s “contract coolies”; 1930s: “contract coolies” and “free coolies”</td>
<td>1921-1923, 1925, 1935-1938</td>
<td>Koffie, rubber and cinchona</td>
<td>South Sumatra</td>
</tr>
<tr>
<td>Aer Simpang</td>
<td>43.21%</td>
<td>1920s: “contract coolies”; 1930s: “contract coolies” and “free coolies”</td>
<td>1922-1926, 1935-1938</td>
<td>Tea</td>
<td>South Sumatra</td>
</tr>
<tr>
<td>Taba Pingin</td>
<td>23.32%</td>
<td>1920s: “contract coolies”; 1930s: “contract coolies” and “free coolies”</td>
<td>1925-1926, 1935-1938</td>
<td>Palm oil</td>
<td>South Sumatra</td>
</tr>
<tr>
<td>Kanopan Oeloe</td>
<td>21.96%</td>
<td>Unclear whether this only includes “contract coolies” or also “free labourers”</td>
<td>1927-1934</td>
<td>Rubber</td>
<td>North Sumatra</td>
</tr>
<tr>
<td>Leidong-West</td>
<td>22.82%</td>
<td>Unclear whether this only includes “contract coolies” or also “free labourers”</td>
<td>1927-1934</td>
<td>Rubber</td>
<td>East Sumatra</td>
</tr>
<tr>
<td>Ophir</td>
<td>35.85%</td>
<td>“Contract coolies” and “free coolies”; for 1927 only “contract coolies”</td>
<td>1927-1934</td>
<td>Palm oil</td>
<td>West Sumatra</td>
</tr>
<tr>
<td>Sumcana</td>
<td>20.95%</td>
<td>“Contract coolies”</td>
<td>1929-1932</td>
<td>Rubber</td>
<td>East Sumatra</td>
</tr>
<tr>
<td>Permanangan and Penang Ratoes (factory)</td>
<td>47.51%</td>
<td>“Contract coolies”, “free coolies” and casual labourers</td>
<td>1929-1930, 1932, 1934</td>
<td>Tea</td>
<td>East Sumatra</td>
</tr>
<tr>
<td>Bah Biroeng Oeloe and Bah Aliran (factory)</td>
<td>32.52%</td>
<td>“Contract coolies”, “free coolies” and casual labourers (1915 and 1916: only Bah Biroeng Oeloe; 1920, 1921 and 1929: only Bah Aliran)</td>
<td>1929-1930, 1932, 1934-1939</td>
<td>Tea</td>
<td>East Sumatra</td>
</tr>
<tr>
<td>Bah Boetong and Hilang Oeloe (field)</td>
<td>43.61%</td>
<td>“Contract coolies”, “free coolies” and casual labourers</td>
<td>1929-1930, 1932, 1934-1939</td>
<td>Tea</td>
<td>East Sumatra</td>
</tr>
<tr>
<td>Name of estate</td>
<td>Percentage</td>
<td>Groups counted</td>
<td>Years for which data are available</td>
<td>Main product(s)</td>
<td>Region</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>----------------------------------</td>
<td>-----------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Bah Boetong and Hilang Oeloe (factory)</td>
<td>29.33%</td>
<td>“Contract coolies”; “free coolies” and casual labourers</td>
<td>1929, 1935-1939</td>
<td>Tea</td>
<td>East Sumatra</td>
</tr>
<tr>
<td>Goenoeng Agoeng</td>
<td>47.19%</td>
<td>Includes “free coolies not working regularly”; but from 1933 these cannot be distinguished from the regular work force</td>
<td>1930-1932</td>
<td>Cinchona</td>
<td>South Sumatra</td>
</tr>
<tr>
<td>Goenoeng Dempo</td>
<td>51.04%</td>
<td>Includes “free coolies not working regularly”; but from 1933 these cannot be distinguished from the regular work force</td>
<td>1930-1940</td>
<td>Tea</td>
<td>South Sumatra</td>
</tr>
<tr>
<td>Pager Alam</td>
<td>47.38%</td>
<td>Includes “free coolies not working regularly”; but from 1933 these cannot be distinguished from the regular work force</td>
<td>1930-1940</td>
<td>Coffee</td>
<td>South Sumatra</td>
</tr>
<tr>
<td>Ajer Poetih</td>
<td>34.63%</td>
<td>“Contract coolies” and “free coolies”</td>
<td>1932-1935</td>
<td>Coffee</td>
<td>West Sumatra</td>
</tr>
<tr>
<td>Boekit Malintang</td>
<td>43.03%</td>
<td>“Contract coolies” and “free coolies”</td>
<td>1932-1939</td>
<td>Tea</td>
<td>East Sumatra</td>
</tr>
</tbody>
</table>

Sources: NA, NHM, inv. 11983 (concept annual reports, 1913-1938), 12023 (annual reports central administration South Sumatra, 1922-1926) and 12024 (annual reports South Sumatra, 1929-1938); NA, Koloniale Bank, inv. 1287 (annual reports Pager Alam, 1929-1940), 1294 (monthly reports Goenoeng Dempo, 1927-1931), 1297 (monthly reports Goenoeng Dempo, 1938-1940), 1580 (annual report Leidong West, 1927-1959), 1584 (annual report Sumcana, 1930-1959) and 1608 (annual report Ophir, 1924-1934); NA, Way Lima and Kedongdong, inv. 65 (appendices, 1896), 70 (appendices, 1901), 74 (appendices, 1906) and 188 (work and payment reports, 1896); NA, Deli Maatschappij, inv.159 (annual reports, 1908-1919), 200 (annual reports Bantang Sangir, 1926-1940), 304 (annual reports, 1909-1925) and 305 (annual reports, 1926-1939).

* The Deli Planters Vereening is a branch association of which in 1925 14 companies were a member, representing a total of 69 plantations. One of these companies was the Deli Cultuur Maatschappij, which I also mention separately in the table above, as additional data was available for an earlier period. The other companies were: Amsterdam Langkat Cie., Cultuur Maatschappij “De Oostkust”, Deli Batavia Maatschappij, Deli Cultuur Maatschappij, Deli Maatschappij, Holland Deli Compagnie, Holland Sumatra Tabak Maatschappij, Rimboen Tabak Maatschappij, Semenbah Maatschappij, Serdang Cultuur Maatschappij, Shanghai Sumatra Tobacco Co. Ltd., Soengei Lipoet Cultuur Maatschappij, Tabak Maatschappij “Arendsburg”, Tabak Maatschappij Tjinta Radja.”