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3 Economic Institutions and Shifting Labour Relations in the Indian, Brazilian, and South African Diamond Mines

Karin Hofmeester

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Abstract
This chapter investigates if and how colonial economic institutions influenced shifts in labour relations in the diamond mines in India, Brazil, and South Africa. Diamond mining is very labour intensive, and institutions developed to recruit, employ, and control labour were pivotal for the success of diamond mining. They also had a major impact on labour relations in the mines as the widespread use of slave labour in the Brazilian mines and the shift from reciprocal labour to wage labour in South Africa show us. However, the effectiveness of these institutions cannot be analysed without taking power relations into account, both between pre-colonial and colonial institutions, as well as within colonial administration, as the differences between Brazil and South Africa reveal.

Keywords: diamonds, extractive institutions, power relations, labour

Introduction

Diamonds have a long history as a global commodity. They were first mined, polished, sold, and consumed in India, found their way to the Indian Ocean seaboard, and reached Europe in the early Renaissance. For a long
time, India had a near monopoly on diamond production,¹ until diamonds were found in Brazil in the 1720s. In the 1870s, the discovery of primary deposits in South Africa meant another major change in the global diamond commodity chain.² Although geological fate determines where diamonds can be found, political systems and economic institutions – such as land, subsoil, and other property rights – determine who can exploit the mines. In addition to mining rights, capital and technology is needed, especially in the case of deep mining, but even more important is labour. Diamond mining is very labour-intensive, and institutions that were developed to recruit, employ, and control labour were pivotal for the success of diamond mining and had a major impact on labour conditions and labour relations in the mines, such as the widespread use of slave labour in the Brazilian mines and the shift from reciprocal labour to wage labour in South Africa as a consequence of the development in the diamond mines.

This chapter investigates if and how economic institutions influenced shifts in labour relations in the diamond mines in India, Brazil, and South Africa. To analyse this influence, we need to know who the workers were, where they came from, how mining fitted into existing systems of household, seasonal and migratory labour, what the conditions of labour were (including payment), and most of all, what type of labour relations prevailed in and around the mines and how they changed over time. The development of economic institutions cannot be analysed without taking political changes into account. In the late eighteenth and early nineteenth century, the British gained power over parts of India where diamond mines were located, taking over the right to exploit the mines from the royal rulers they defeated. In the last quarter of the nineteenth century, the British took control over parts of South Africa where mines were located, and in Brazil, the Portuguese Crown considered the diamond mines part of its possessions from the moment their discovery was reported. As we will see, regime changes often led to economic institutional changes, though existing institutions sometimes remained in place and in other cases colonial institutions lingered on long after independence. Diamonds are special. They have to be rare and expensive to be attractive, which makes control of the supply and price a very important part of the governance of

¹ Diamonds were also found in Borneo, though in much smaller quantities and local rulers were reluctant to sell them.
² Primary deposits are pipes that bring the diamonds to the surface in volcanic magma, often called Kimberlite after Kimberley in South Africa where their existence was first discovered in the 1870s. Secondary deposits comprise diamonds from primary deposits that are washed to a lower area by rainwater. These deposits are also termed alluvial deposits.
the segments in the diamond commodity chain. In the three case studies discussed in this chapter, we see how institutions were used to establish global monopolies; in mining, but often also in trading, in price setting, and sometimes even in transport. At the same time, we see how illicit mining and trading always managed to evade the institutions meant to control the processes, which could deeply influence labour relations.

India

India’s Golconda mines had worldwide fame in the early modern world. The mines were actually not located in Golconda itself – the diamonds were only sold there – but situated further east on the Deccan plateau, near rivers in and around Kollur, Kurnool, and Cuddapah. A second group of mines existed around Sambalpur, in present-day Orissa. The third group was located in Panna, in Central India.

From a number of sixteenth- and seventeenth-century descriptions, we can obtain a picture of the activities in and around the mines. Usually the emperor, king, or sultan who had the mines in his territory also owned them. He could choose whether or not he wanted to farm out the mine, and if so, to whom. The ruler leased the mine to the highest bidder. These governors – revenue farmers – acted as intermediaries between the ruler on the one hand, and the merchants who actually commissioned miners to dig for diamonds on the other. These merchants were often Banians from Gujarat, who maintained a tight grip on the diamond trade and had a wide trade network. The capital needed to rent the mine and to hire miners was provided from within their family networks.


4 According to Henry Howard, several rajas and sultans in South India had (some of) their mines dug out only privately, “A Description of the Diamond-Mines”, pp. 907-909.

5 For the highest bidder, Mentz, The English Gentleman Merchant at Work, p. 111; for the goldsmith, see Methwold, “Relation”, p. 31, and Chetty, Manual of the Kurnool District, p. 94; for the Portuguese, see Verberckmoes and Stols, Aziatische omzwervingen, p. 177, and Wolf, “Jews in Elizabethan England”, 24-25.

6 Mukund, “Mining in South India”, 17.

In some mines, merchants only had to pay a fee per miner to the governor. In the Kollur mine, the governor provided the merchants with workers, suggesting he may have acted as a labour recruiter. He also equipped miners with tools and he divided the merchant’s fee between the king and
the miners. In addition to rent, the king also received 2 per cent of all diamond purchases and sales, and any diamonds of more than ten carats. Notwithstanding the presence of overseers – hired by the merchants – large diamonds were often excavated without being reported to the governor, and sometimes sold to foreigners for half the price the merchant would ask. Usually, stones were bought and sold in public and assessed by special weighers, employed by the king. Generally speaking, the Indian rulers, whether they were Deccan sultans, Mughal emperors, or rajas of smaller successor states, arranged the ownership and revenue rights reasonably well, though they could not prevent some large stones from not reaching their treasury, or that price setting through royal weighers also sometimes failed. Good care was taken of production control. The Bijapur sultan appears to have shut down a number of mines in 1622, just when the Dutch East India Company (VOC) had started trading the stones very profitably, in order “to keepe the commoditie in request”.

Mining methods differed somewhat from mine to mine, depending on the type of diamantiferous stratum. In all cases, very few technological devices were used and all the methods were very labour-intensive. Men dug the pits and removed the earth (and superfluous water), which was carried away in baskets by women and children. Indian miners could not dig below the water table, pits therefore varied from four to fourteen feet deep. These pits were not supported with timber and could easily collapse after heavy rainfalls, taking the lives of the miners. The miners used no “pullies and such like devices”, but sat on top of each other, and passed on the baskets. The women and children carried the soil to a place where they would wash and dry it. Lastly, they would sieve and search the earth to find the diamonds. Although the miners worked in small groups, the total number of miners in a field could be enormous. In the early seventeenth

14 Methwold, “Relation”, p. 32
15 Tavernier, Travels in India, vol. 2, pp. 60-61.
century, the Flemish merchant De Coutre counted 50,000 men, women, and children in one mine field, while a little later, the East India Company (EIC) administrator Methwold counted some 30,000 “souls” working in the diamond fields near the Kollur mine. In the 1660s, the famous precious stone merchant Tavernier signalled no less than 60,000 men, women, and children at work in the Kollur mine. These large numbers can only be explained by the very labour-intensive production process.

According to De Coutre, the miners were the poorest of the poor. Tavernier thought they were peasants, who went back to tilling the soil when the mines were exhausted. This would suggest that work in the mines was not part of a system of seasonal migration. During the monsoon season, the mines would fill up with water and digging was not possible, but washing and sieving continued. Ishrat Aslam categorizes the miners as “possibly [...] pauperised peasants and landless workers from the villages”. The fact that women and children joined the male miners supports Aslam’s idea of landless workers, otherwise the women and children would have taken care of the land. We may therefore suppose that at least a large number of miners were labour migrants who moved with their families from agricultural areas to the mines and vice versa, working as wage earners in both sectors. Miners were contract labourers who worked for wages in cash, and who were sometimes also partly compensated in food. Observers noted monthly wages from 0.5 to 1.5 pagodas (a pagoda was roughly equal to eight British shillings). Compared with the other production costs (merchants usually had to pay two pagodas a day per fifty miners as a fee), wages were very low. These low labour costs were also indicated by De Coutre, who stated that they would be much higher in Spain, leading to a higher price per carat. From De Coutre’s descriptions, we learn that the miners were sometimes paid per stone by merchants, who in return supplied them with food. As the miners might sometimes not find a stone for two or three months, they could easily end up in a position of

20 Mukund, “Mining in South India”, p. 18. According to Ravi Ahuja, a male general worker in Madras would have earned a monthly money wage of one pagoda around 1760: Ahuja, *Die Erzeugung kolonialer Staatlichkeit*, Appendix 8.1.
debt bondage. Although the miners were often exploited by the merchants, they were worse off if they were not hired by them, because they then had to carry out mine work for the king, in exchange for only board. The VOC administrator De Lange described these miners as “slave-like objects”. This would suggest these people had no other source of income apart from the mines, owned no land, and were not hired by farmers as day labourers, which made them effectively tributary labourers for the king, as long as no commercial exploiters worked the mine. This tributary aspect is also mentioned by the British duke, Howard, who visited the Mallavilly mine in the 1670s.

By the end of the eighteenth century, production from the Indian mines seems to have slowed down, though it is very difficult to estimate the output of the Indian mines, as royal bookkeeping is silent on these matters and foreign trade was measured in monetary value, not carats. Nevertheless, the development of the value of the Indian diamonds imported via the EIC does tell us something about diminishing returns from the mines by the end of the eighteenth century (see Figure 3.2). Right at that moment, the British gained control over a number of mines.

Figure 3.2  Value of diamond imports from India


22 Ibid., pp. 172-174.
23 Report by Pieter de Lange, as included in Van Dam, Beschrijvinge van de Oostindische Compagnie, vol. 2, pp. 179-181.
British rule, mine exploitation, and labour relations

In 1796, the Deccan Nizam Asaf Jah II opted to obtain British military protection against attacks from the Marathas and the Tipu Sultan. In return, the Nizam ceded a large portion of his territory to the British, who called it Ceded Districts. There are quite a number of reports from British officials who explored the possible revenues from diamond mines in these districts. Starting in 1796, Benjamin Heyne – a surgeon, naturalist, and botanist working for the EIC – wrote several reports on the mines. The exploitation of the mines near Cuddapah he described was more or less the same as in the sixteenth and seventeenth century: the mines were governed by a headman who paid a yearly rent of 130 pagodas – this time to the EIC – and who worked some mines himself, farming out the rest. For diamonds weighing more than twelve carats, he had to pay one-third of their value to the company. Miners were hired by the headman and received one pagoda per month. Heyne noted that men, women, and children were working in the mines. As in previous centuries, the actual owner of the mine (in this case the EIC) farmed it out, received rent as a percentage of the larger stones, but as before, did not carry the financial risks; these were borne by the renters. The renter made 5,000 pagodas profit per year, against 2,000 pagodas in expenses.25 Labour costs still seemed to have been only a small part of the production expenses. The mining procedures were much the same as in the earlier descriptions, though the number of miners was much lower than in the earlier days, which could point to the exhaustion of the mines, or at least the layers that could be worked with the simple methods the miners had at their disposal.

In 1814, a collector from the Board of Revenue in Fort St George for Kurpah (near Cuddapah), wrote a report on the mines stating that most miners owned shares in the produce, and only some were “mere labourers for hire”. Given the prevailing output of the mines, he did not expect cultivators to go working in the mines, although this might change if mining would become more profitable. He was convinced that in reverse, miners would never engage in cultivation as their job was hereditary (suggesting a specific caste background, which is not confirmed by other sources). If they could find no work in one mine they went to another. One might conclude from this that labour migration continued, although not from agricultural areas to mining areas, but from one mining area to another.

In addition, the number of wage labourers seems to have diminished in favour of the number of self-employed miners, probably as a consequence of the reduced yields that attracted a lower number of entrepreneurs. To make the exploitation of the mines more profitable, smaller plots of the mine were rented out and advertised in the District Gazette. Only some Indian entrepreneurs responded.26 In 1821, the Board of Revenue found that the rent had yielded no more than 200 pagodas a year, and therefore they stopped the exploitation.27

In the meantime, another EIC servant suggested that convicts in the Cuddapah district could be put to work in the mines nearby. They cost the company a fortune each year, and although they worked to build water tanks, roads, and bridges, in the mines their unpaid work would be much more profitable since nobody wanted to rent the plots of mines, because “coolie hire” was expensive and the rent was too high in relation to the profits. He added an extra encouragement: “The government of Brazil employs all its convicts and many slaves in digging and searching for diamonds.”28 The Board of Governors of the EIC rejected the plan. The convicts did useful work already, and it was not wise to put people who had been convicted for theft to work in a diamond mine, where they had to be guarded and peons had to be paid. Most of all, the capital for exploitation should be provided by private individuals and not by the government.29

Throughout the nineteenth century, mining in the Ceded Districts seems to have continued under unchanged conditions. In 1834, a British researcher noted that the mines near Cuddapah were rented by a “native contractor” and that a labourer could be hired on the spot for four pice (0.06 rupees) a day plus a rice meal.30 A report written in 1872, by an employee of the Geological Survey of India (GSI)31 on the mines near Kurnool and Cuddapah, reconfirms the existing exploitation methods and labour relations.32 Though solid production figures are lacking, the general impression is that the mines in the Ceded Districts in South India at that time were not very profitable.33

27 BL, IOR F/4/676/18769, extract of revenue letter from Fort St George, 6 July 1821.
28 BL, IOR F/4/676/18769, letter of Mr Christy, 9 January 1817.
31 The Geological Survey of India was established in 1851, as a follow-up to the EIC Commission on Coal, which aimed to study and explore the availability of coal in the eastern parts of India. Eventually it became a government organization, controlled by the Union Ministry of Mines for conducting geological surveys and studies.
The mines in and around Panna in Central India seemed more profitable: in an 1831 publication, annual production with a value of 120,000 rupees is mentioned. Around that time, the monthly exploitation of a mine cost 122 rupees. Some forty rupees were needed to hire twenty miners who each earned two rupees a month, thirty rupees were needed to hire twenty “water women” (whose wages were not mentioned in the source), six rupees were needed to hire two guards, and some forty rupees were needed for implements for digging. Other than the ones in the Ceded Districts, these mines were still in the hands of the local ruler: the Raja of Panna. In 1820, an EIC captain suggested a considerable investment of capital, knowledge, and technique by the EIC and by private investors in the Panna mines, but the company turned this plan down as these mines were still “in the possession of a foreign power”.

The mine works in and around Panna consisted of two different types: alluvial mining and the mining of the deeper deposits that were part of a more rock-like matrix. For the latter, pits from thirty to forty feet deep had to be dug, and water and diamantiferous soil had to be removed from the mine with the help of a Persian wheel, driven by bullocks. For this type of mining, slightly more capital investment was needed than for riverbed mining. An estimated 6,000 miners worked in the whole district, and on average some 240 carats per year were found in the period from 1889 to 1903. According to a report written for the British, basically anybody could start mining as long as royalties were paid per stone, while stones of more than six carats had to be handed in to the maharaja, who gave the finder a percentage. This would mean that the merchants no longer functioned as commissioners for mining work. The price of the stones was determined by appraisers of the maharaja, and the stones were sold once a month by auction. This situation would last until the end of the nineteenth century.

35 Ball, Diamonds, Coal and Gold, p. 51.
36 BL, IOR F/4/661/18326, Extract Bengal Public Consultation, 15 September 1820.
37 For a vivid description and a drawing of this deep mining, see Rousselet, L’Inde des Rajahs, pp. 440-443.
38 National Archives of India, Delhi [hereafter, NAI], Bundelkhand agency 19, 1890, for carats and miners. Some 925 miners worked in the two smaller mines. Based on the ratio between carats and miners, the largest mine is calculated to have been worked by some 4,200 miners. Another document gives a total of 4,415, i.e., 4,017 carats for the years 1892 to 1901. NAI Bundelkhand Agency files Progs. no. 147.
39 NAI Bundelkhand Agency file no. 19 of 1890, undated statement on Panna mines. Raja Nirpat Singh assisted the British in 1857, for which the British rewarded him and his successors with the title maharaja.
century, when the maharaja wanted to investigate if a more modern way of exploiting the mine could be profitable, especially since more and more entrepreneurs, both from India and abroad, started asking for concessions and even a monopoly on the Panna mines.\footnote{NAI Bundelkhand Agency file no. 19 of 1890; NAI Bundelkhand Agency/English files/Progs. no. 230, 1903.} A GSI researcher had already advised the maharaja in 1892 to import technical management and not to allow a monopoly, but instead to let his state manage the mines, leasing portions of the property if needed.\footnote{NAI Bundelkhand Agency file no. 19 of 1890, report no. 670, 21 May 1892.} In 1904, the maharaja again asked the GSI for help, and its researcher again concluded that the mines could still be worked profitably, as long as modern science and techniques were used. Of course, Indian labourers would still have to do the real mining work, and this should be family work: men, women, and children working together, as “the Indians clearly preferred this way of working”. Strict supervision of the workers was needed, but since there were women and children involved “such severe measures as are practiced in the South African mines” were of course impossible.\footnote{BL, IOR/R/2/449/4 E. Vredenburg, Geology of the State of Panna, principally with reference to the diamond-bearing deposits (1904), p. 37.}

The Indian case shows that migratory wage labour, often family labour, was the major form of labour relations that prevailed in the Indian mines from the seventeenth till the early twentieth century, although in the seventeenth century, tributary labour seemed to have existed in the mines in Kollur and nearby Mallavilly. The property and exploitation rights of the Indian rulers were firmly installed; a governor exploited the mine, and in general, merchants provided the capital and labour to work the mines. When the British gained control over the districts where some of the mines were located, they took over these rights and left the exploitation system intact. Although the British did investigate the options of new (possibly labour saving and production enhancing) mining techniques, they decided not to invest in the mines and the actual situation remained unchanged. The existing wage labour relations of migrants – often families – working for merchants remained in place. Convict labour was not considered appropriate, as it would involve investment by the British government, whereas private individuals were supposed to invest. In addition, family labour seemed to have such a strong tradition in the Indian mines that even in the twentieth century, a British researcher suggested retaining this specific type of labour. The only real change in labour relations in the
mines was caused by a severe drop in output. Merchants were no longer interested in investing and the miners became self-employed, rather than wage earners. This shift had very little to do with colonial institutions. The colonial impact on labour relations was much greater in Brazil – the next case we will study – where diamonds were discovered in the 1720s.

**Brazil**

In the 1690s, gold was discovered in riverbeds in the Brazilian Minas Gerais district, north of Rio de Janeiro. In the late 1720s, these riverbeds also proved to contain large deposits of alluvial diamonds. Within the Minas Gerais Captaincy it was especially in the Serro do Frio district that diamonds were found, mostly in the village of Tijucu, later called Diamantina. In the 1740s, diamonds were also found in the Mato Grosso district on the Bolivian frontier and lastly in the 1840s, new fields were discovered in Bahia, though they produced primarily black diamonds used in industry.

Diamonds were found in riverbeds, which had to be dammed or redirected to smaller channels to be able to dig out the diamantiferous sands and gravel. In addition, valleys and plateaus could contain diamond-bearing ground, which had to be separated from more solid matter. Collecting work could only be done during the dry season. The gravel was subsequently sieved and washed, a job that could also be performed during the rainy season. The procedure was more or less the same as in India, though here, bed-like sieves were used with holes in the bottom where water ran through, as well as sieving pans for the finer soil. A big difference from India was the composition of the workforce: in Brazil it consisted of male slaves supervised by overseers.

The discovery of diamonds in Brazil, and the way the mines were exploited, meant a major change in the global diamond commodity chain. No longer was India the sole supplier of rough diamonds, and no longer did local rulers control the mines. The diamond fields in Brazil were exploited by colonial powers in Lisbon, where the Crown had declared the diamond deposits (and other subsoil rights) to be royal property. The Crown was not in the first place interested in diamonds for its own adornment, as in India, but in making as much profit out of extraction and trade as possible. Initially, the exploiter welcomed all merchants and miners to work the

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43 For a detailed description, see Mawe, Travels in the Interior of Brazil, pp. 222-224; Von Eschwege, Pluto Brasiliensis, pp. 416-417.
44 Triner, Mining and the State, p. 20.
Figure 3.3  Diamond fields in Brazil

Source: Bauer, Precious Stones, vol. 1, p. 156
mines, as long as they paid a tax per miner to the Portuguese treasury. Most mineworkers were slaves; some of them had already migrated with their masters from the coastal areas to the interior when gold was discovered, others were brought in later from Rio.45 Before the 1690s, the interior region

of Minas Gerais had only been populated by “unconquered” Indians who lived off their own produce. They either ran off, were caught and killed, or were enslaved by the gold seekers. By 1735, there were about 96,500 slaves in Minas Gerais, some 10.5 per cent of whom lived in Serro do Frio, in addition to some 1,750 white people and 1,750 pardos (people of mixed descent).

The slaves worked under harsh conditions; removing the gravel was heavy work, controlled by force though not intensely guarded. The washing and sieving work was also very exhausting, since the workers stood bent over from little before sunrise until sunset, with a half-hour break for breakfast and a two-hour break at noon. This part was much more controlled, as diamonds could easily be hidden in the eyes, ears, nose, or and other body parts, or thrown away to be picked up after dark. Although the overseers in this part of the process carried a whip, they also applied positive incentives. To encourage the slaves to report the diamonds they found, they were compensated. Depending on the size of the stone slaves could “earn” a hat, clothing, a knife, or a day off. Reporting a stone of seventeen and a half carat or more would lead to manumission. Slaves could also be paid in money for good finds, and thus they could save for their manumission. There are no remaining lists of manumissions, so we have no clue how many slaves “earned” their freedom via diamond finds, though there are testimonies of male slaves receiving their freedom via diamonds. In addition, slave owners sometimes allowed their slaves to work independently as itinerant miners (faiscadores) as long as the slave paid a daily fixed sum to his owner.

The global diamond market and the establishment of the Diamond District

The uncontrolled diamond explorations caused an enormous flow of rough diamonds into the world market, more than five times the value that usually came from India. This led prices to drop to half, and in some cases even

46 Hell, “Die Sklaverei”, pp., 110, 113, 118.
47 Bergad, Slavery, p. 84.
48 Ferreira Furtado, O Livro da Capa Verde, p. 41.
49 Mawe, Travels in the Interior of Brazil, p. 225.
50 Ibid., p. 224; Ferreira Furtado, O Livro da Capa Verde, p. 54.
51 For the non-existence of such lists, see Bergad, “Demographic Change”, 898; for the testimonies, see Ferreira Furtado, O Livro da Capa Verde, p. 114.
52 Klein and Luna, Slavery in Brazil, pp. 120-121; Kiddy, Blacks of the Rosary, p. 74.
to a third, of what they had been.53 The Indo-European trade came to a complete standstill. Startled by the lowered prices and the responses of the European traders – who feared that in Brazil “diamonds were as plenty as transparent pebbles” – the Portuguese Crown shut down the mines in the Minas Gerais district in 1734.54 Like many other rules that would come from Lisbon, in reality the area was difficult to control and illicit mining and trading continued, though on a smaller scale.

To control production, the Portuguese Crown established a demarcated Diamond District of some ninety square kilometres, where nobody except administrators, miners, and their slaves were supposed to live.55 Not only was entrance to the district controlled, but also exit from it. Several companies of dragoons, supplemented by slave catchers, had to prevent slaves from escaping. Anyone who was accused of smuggling could be expelled from the district.56 In the district, an intendant was appointed, with far-reaching judicial, fiscal, and administrative powers. On top of that, when the mines officially reopened in 1739, the Portuguese Crown established a mining monopoly, with the actual mining entrusted to one single contractor or consortium (a group of investors, partners, and stockholders associated with them). The contractor had to bid for this closed contract and had to pay rent per slave. He was not allowed to employ more than 600 slaves, in order to avoid overproduction.57 João Fernandes de Oliveira (a merchant from Lisbon) held this contract for the first and subsequent four years. After a gap of four years, Oliveira regained the contract and he and his son held it in different partnerships until 1771.

Because of the restricted number of slaves, the Crown demanded exact information for every slave owned, so lists had to be kept for each contract, with individual data on the slaves. One of these lists has been preserved. It covers the years 1753 to 1758, and gives information about 394 slaves. The largest proportion of these were owned by João Fernandes de Oliveira himself, almost one-third were owned by individuals whose holdings ranged from one to thirty-one slaves.58 From the list, we learn that over 43 per cent of all the slaves came from the Banto West coast of Africa, almost 30 per cent from the Gold Coast, some 5 per cent from Sudan, and the rest from

53 For the amounts, see Yogev, Diamonds and Coral, p. 116.
54 Jeffries, A Treatise on Diamonds and Pearls, p. 66.
55 Von Eschwege, Pluto Brasiliensis, p. 404.
diverse groups. Brazilian-born black slaves only formed 1 per cent of the total. The slaves on the list were all men, with an average age of twenty-eight. The slave force on this list quickly diminished: at the end of the contract almost 20 per cent had died and 32 per cent had escaped. The mean age of the slaves who died was thirty-one, the largest percentage of slaves died in the first four years of the contract, which is telling with regard to their working and living conditions. Most escapes took place in the first two years of the contract.59

The slaves usually ran away in groups based on ethnic origin. They developed communities of runaway slaves, termed the quilombos. Around Tejuco, approximately twelve such groups were known to exist, each with between fifteen and sixty inhabitants. They often lived off illegal mining, and as such resembled the garimpeiros (workers who became illegal miners after they had lost their official jobs because of the Portuguese measures). The groups helped each other, and sometimes even received help. In 1782, a lieutenant and sergeant of the army were accused in two separate cases of delivering food to runaway slaves and garimpeiros. Many of their settlements were close to centres of habitation, and a “horizontal solidarity” existed between clandestine miners, quilombolas, army members, slaves, and inhabitants.60 Though the list mentioned above contains data on fewer than 400 slaves, during his second contract in the 1740s, João Fernandes de Oliveira employed at least 1,200 slaves, twice the number that was admitted.61 The intendant reported this abuse to the governor of the Minas Gerais Captaincy, but the latter preferred to feign ignorance, probably because of his personal interest in the diamond trade.62 This was neither the first nor the last time the policy of the Crown in Lisbon did not correspond with social reality in the Diamond District, where not all the servants of the Crown obeyed its laws.

In order to control the world diamond market, the Portuguese Crown decided not only to control production but also the trade in rough diamonds, so the latter was linked up with the mining monopoly. This meant that representatives of the contractor could only sell their products in Lisbon, where trading procedures were state controlled and officials of the king

59 Ibid., pp. 50-56.
61 In reality, the total number of slaves was even higher: more than 2,000 in the early 1740s according to Tijl Vanneste, who made an estimate of the total number of slaves in the Diamond District from 1734 to 1785 based on a calculation of average productivity of carats per mined slave. See Vanneste, “Women in the Colonial Economy”, p. 261.
62 Von Eschwege, Pluto Brasiliensis, p. 357.
had first choice. The main goal of this rule was to direct the best stones to the royal treasury and to settle the lucrative resale of rough diamonds in Lisbon. Only after this procedure could representatives of the contractor sell the remaining diamonds to other European merchants.63 In 1753, the Crown – in an attempt to stop the ongoing illegal mining and smuggling – decided to split up the two parts of the diamond commodity chain, establishing a separate trading monopoly. The Dutch consul in Lisbon, Daniël Gildemeester, obtained this extremely valuable trading monopoly in 1761 and held it for several decades.64 This meant that in reality he held the monopoly on selling rough diamonds in Lisbon, though only after the Crown had selected the best diamonds first. As a consequence of the 1753 rule, the Crown, via its contractors, now had an overall monopoly on the mining, buying, selling, transporting, and dealing of diamonds.

Despite, or in many cases because of, the severe measures, illicit mining and trading continued, starting in and around the mines themselves. Mines were scattered, so controlling them was difficult, even though soldiers searched the Diamond District. Intendants, the diamond council, and the contract holders did not always obey the law. They employed more slaves than allowed and they bought diamonds from garimpeiros. Runaway slaves worked as independent miners, and many of the diamonds they discovered found their way to the contractors and to Rio and Bahia via ambulant merchants who supplied the ever-growing community in Minas Gerais with all kinds of commodities. In the second half of the eighteenth century, intensely used trading routes developed between the mines, Rio de Janeiro, and Bahia.65 A number of sources claim that the number of illicitly mined and traded diamonds was at least as great as the number of diamonds officially administered in Diamantina and Lisbon.66

The Royal Extraction and its consequences for labour relations

In 1772, the Crown – or rather, the Marquis de Pombal – ended the mining concessions and started to exploit the mines directly under the name Real Extração do Diamante. This decision should be seen in the light of Pombal’s radical economic reforms, which included the expansion of colonial

64 Ibid., pp. 231-235; Yogev, Diamonds and Coral, p. 122.
65 Mawe, Travels in the Interior of Brazil, p. 259.
66 Ibid., p. 258; Von Eschwege, Pluto Brasiliensis, p. 401.
exploitation. Pombal himself was to be the director of this “Royal Extraction”, and he introduced a “Regimento” or very strict standing orders for the administration of the Diamond District. Its main goal was to regulate supply and eliminate smuggling. In accordance with these rules, royal cashiers were appointed to receive, weigh, and transport the diamonds in Diamantina. Once a year, a ship – guarded by soldiers – carried the diamonds from Brazil to Lisbon. The demarcated Diamond District was well guarded; everyone entering or leaving was checked and only people with a license could enter. All the slaves in the district had to be registered, and unregistered slaves were heavily punished. Whites, mulattos, and free blacks without legal occupations had to leave the district at short notice. Ambulant traders could only stay there for twenty-four hours, female slaves living in the district were no longer allowed to work as peddlers, and anyone breaking these and other rules could be punished by ten years of exile in Angola. People who bought illicitly mined diamonds were also heavily punished. Soldiers could carry out person and house searches, and the intendant would function as judge for the whole Diamond District. Lastly, from then on, the intendant of the Diamond District would exploit the mines himself, directly employing slaves to mine the diamonds.

This latter rule in particular had an important impact on labour relations within the Diamond District. The Crown now put slaves to work, hiring them from their masters. This “slaves for hire” system stimulated the ongoing importation of slaves from Africa. This effect becomes clear if we compare the situation in Minas Gerais as a whole with the situation in the Diamond District. In Minas Gerais the import of slaves decreased and the reproduction of slaves increased in the second half of the century. When the gold boom had ended around 1750, and by approximately 1770 the biggest diamond boom seemed to have passed, a local economy developed in Minas Gerais, characterized by heavy trade with Rio and Bahia, and based on agriculture and raising cattle, first for self-sufficiency and the local market, later for export (with goods also including coffee, cotton, and tobacco). This led to a more diversified economy in Minas Gerais, which stimulated reproduction amongst slaves. In the Diamond District, the situation was different. Here, African-born slaves remained the majority

67 Triner, Mining and the State, p. 36.
68 Quoted in Von Eschwege, Pluto Brasilienis, pp. 359ff. For the impact of his policy on social reality in the Diamond District, see Ferreira Furtado, O Livro da Capa Verde.
69 On female peddlers, see Vanneste, “Women in the Colonial Economy”.
70 Bergad, Slavery, pp. 16-23, 126-127.
until the early nineteenth century.\textsuperscript{71} This was not only a consequence of the high death and escape rates in the diamond mines, but also of the Royal Extraction. During peak years, such as 1773 and from 1780 to 1785 (see Figure 3.5), over 4,000 slaves were rented for the Royal Extraction and slave prices increased in Diamantina.\textsuperscript{72} Slave owners rose to the occasion and let out their slaves on a large scale, buying new slaves specifically for this purpose. Even people who had not owned slaves before, now saved some money to be able to buy slaves so they could rent them to the Crown. Slave owners received a secure 16 per cent profit from renting out their slaves.\textsuperscript{73} Because escape, sickness, and death usually occurred in the first two to four years of enslavement, this newly imported slave population probably declined more rapidly than the group of slaves born in Brazil, which also led to new imports.

The development of the slave for hire system had various consequences for labour relations. Masters received a monthly payment for their slaves, whereas slaves seem to have received a small daily wage.\textsuperscript{74} “The pay of the

\textsuperscript{71} Ibid., pp. 128-130, based on censuses and data on slaves in probate inventories; Ferreira Furtado, “Quem nasce, quem chega”, p. 228, based on baptismal records that present the same results.


\textsuperscript{73} Ferreira Furtado, \textit{O Livro da Capa Verde}, p. 47; Saint-Hillaire, \textit{Voyage dans le district des diamans}, vol. 1, p. 58.

\textsuperscript{74} Mawe, \textit{Travels in the Interior of Brazil}, p. 254 ; Saint-Hillaire, \textit{Voyage dans le district des diamans}, vol. 1, p. 10.
slaves is trifling compared with the risk, their labour being heavy, their maintenance poor and their treatment harsh", according to Mawe, who also stated that the masters “lived idly” on their slaves’ wages. The masters had to clothe the slaves and take care of them when they were sick, and the administration of the Royal Extraction had to feed them. Employees of the Crown could also own and rent slaves, and some of them possessed up to fifty. The administration of the Royal Extraction even had a preference for hiring slaves from people who worked in the service of the Crown. In general, masters seemed to prefer renting out their slaves to the Crown rather than having them in the house, and even the slaves seemed to have preferred to work in the diamond mines, rather than in their master’s house. For both, the biggest advantage was the possibility of illicitly mining and selling stones to increase their income, or in the case of slaves, buy their freedom.

The establishment of the Royal Extraction clearly did not diminish illicit mining and trading. The contractors who were left aside by the Royal Extraction often switched to illicit mining and trading. Moreover, many employees working at all levels in the Royal Extraction were engaged in smuggling. There were conflicts of power – as had also existed during the monopoly period – between the governors of the Captaincy of Minas Gerais and the intendant of the Diamond District, and the latter clearly did not have a tight grip on the local elite and their illicit practices. Intendants, contractors, overseers, slave owners, and slaves all had their reasons for smuggling diamonds and they frequently joined forces.

The Portuguese Crown, spending too much money on slave hire, salaries of administrators, and material costs, lost on the mining operations, which yielded no more than 20,000 carats a year in the period from 1801 to 1806. Therefore, when the Crown settled in Rio in 1808 after the French had occupied Portugal, foreign powers were allowed to trade with Brazil, and British capital entered the mining operations, though in Minas focusing on gold only.

Even though Brazil became independent in 1822, very little changed in the actual situation in the Diamond District. In the political turmoil of

76 Saint-Hillaire, *Voyage dans le district des diamans*, vol. 1, p. 10.
77 Mawe, *Travels in the Interior of Brazil*, p. 250.
80 Mawe, *Travels in the Interior of Brazil*, p. 249.
81 The British St John del Rey Mining Company had been active in the Minas gold mines since 1830.
the first years of the rule of the Portuguese-Brazilian King, Dom Pedro I, a struggle broke out over the ownership of the mines between the Cortes in Lisbon and the ruler of now independent Brazil. In this vacuum, the situation remained unchanged and existing claimholders kept their rights for a number of years.\textsuperscript{82} Legally, Tijuco was still governed as a form of camp; it was only in 1831 that it officially became a township with its own local government, and in 1838 it became a town called Diamantina. The governance of the mining area was changed as late as 1845, when the Royal Extraction was officially abolished and a new “Regimento Diamantino” was established, governed by an inspector-general, a fiscal prosecutor, a secretary, and an engineer. They had to arrange public auctions of diamond claims that would last for four years. Because of legal quarrels over existing claims, the Royal Extraction was effectively ended only in 1853, after an amendment to the law that settled these cases.\textsuperscript{83} From that moment on, mines were leased to private entrepreneurs, who employed slaves but invested little in more modern mining techniques.\textsuperscript{84}

The settlement of Portuguese colonists in the gold- and later diamond-mining areas of Minas Gerais led to massive migrations of Portuguese settlers, their slaves, and people of mixed descent from the coastal areas to the interior. For the indigenous population of Minas Gerais – if they did not run away or fall victim to murder – this settlement meant a shift from self-subsistence to slavery. The majority of the workforce in the diamond mines consisted of male slaves from Africa. This situation remained unchanged in the Diamond District until the beginning of the nineteenth century, despite the fact that in the surrounding areas in Minas Gerais slaves started to reproduce as a consequence of a more diversified economy. The continuation of slave imports was partially caused by the establishment of the Royal Extraction, which led to the slaves-for-hire system and an increase in the number of slave owners and imports.

Despite the development of a series of colonial institutions (including the Diamond District with its seemingly powerful intendant, a Crown monopoly on mining and trading, and eventually the Royal Extraction) set up to control diamond production and trade, illicit mining and trading seemed unstoppable, leading to a situation where slaves could more or less work as self-employed diggers, albeit in an unfree and unstable position.

\textsuperscript{82} Bernstein, \textit{The Brazilian Diamond}, p. 93; Ferreira Furtado, \textit{O Livro da Capa Verde}, p. 6.
\textsuperscript{83} Ferreira Furtado, “O Distrito Diamantino”, p. 7.
\textsuperscript{84} Russell, “Diamond Mines of Brazil”, p. 7313.
The Brazilian case shows that economic institutions alone could fail to control labour and labour relations if the state that tried to enforce them was represented at various levels of administration, often in conflict with each other and plagued by corruption. The next case, South Africa, seems to be the success story, where local representatives of the colonial government paved the way for institutions that had a huge impact on labour conditions and labour relations in the diamond mines and their hinterlands.

South Africa

In 1867, diamonds were discovered near the confluence of the Vaal and Orange rivers, north of Cape Colony and west of the Orange Free State. The Griqua (descendants from relationships between the Khoikhoi and European colonists in the Cape) were the main inhabitants of this area, and in 1834 the British recognized the area as Griqualand-West and promised the Griqua protection and self-government.85

Mining started on a relatively low scale: by the end of 1870, some 5,000 people were working at the river diggings,86 where the mining, sieving, and washing techniques needed to retrieve the alluvial diamonds resembled the Indian and Brazilian procedures. Digging and washing was carried out by men, often Boers from the Orange Free State and the South African Republic, or by their black employees. Women and children usually took on the sorting.

Late in 1869, larger deposits were found on the farms of Dorstfontein and Bultfontein, not only in surface soil but also deeper. The discovery – of what would turn out to be primary diamond deposits – led to a rush. After several conflicts, the farmer proprietors, who were considered to be the owners of the minerals in “their soil”, opened up their farms to diggers who paid them a monthly fee and in return received a claim on part of the mine. By 1871, some 50,000 diggers were working on what were termed “dry diggings”, and encamped on the farms; some 20,000 of them white, the rest black.87 At this time, working methods were more or less the same as in the river diggings: diggers and their workers used picks, shovels, and buckets to remove the soil, and a series of sieves to separate the diamond-bearing matter from the rest. Even with these simple tools,

86 Worger, *South Africa’s City of Diamonds*, pp. 11, 15.
87 Ibid., p. 15.
some 269,000 carats were found in that year (see Figure 3.8). The diggers sold the diamonds locally to representatives of European merchants. In contrast to the situation in the 1720s when the Brazilian diamond fields led to a crisis on the global diamond market, this time the diamonds were very welcome, as Brazilian yields were low and consumer demand was growing, leading to high prices. At this point in time, no institution had been established to limit or even guard against overproduction, so exploitation expanded.

In 1871, a group of London diamond merchants bought the farms of Dorstfontein (the diamond deposit called Dutoitspan) and Bultfontein from their owners. Now that the area turned out to be rich in diamonds and people from different parts of the world rushed towards Griqualand-West, conflicts over access to the land and mineral rights broke out between the Griqua chief, representatives of the Afrikaner Orange Free State, and the South African Republic, who all claimed ownership over parts of the territories. The same year, the British intervened by annexing not only the diamond fields, but also a considerable additional part of Griqualand-West. Two years later, they made the area a Crown Colony and called the mining region Kimberley. From then on, British officials administered the area and collected and redistributed the rent, while diamond merchants had to pay a licence fee. The British officials were answerable for their actions to the governor of the Cape and ultimately to the British Colonial Office in London. Although British administrators had taken over the administration of the mining region, in name replacing the diggers’ republican self-government, this did not mean they had taken over the property rights for the diamantiferous soil. Accordingly, a group of merchants bought two diamond deposits on the Vooruitzicht farm, called Kimberley Mine and De Beers Mine. Kimberley was the richest deposit, and since it was located in a relatively small area, the prices of claims rose sky high. To control the situation, the diggers decided that none of them could hold more than two claims, although there was no limit on the number of workers each could employ.

The workers in the diamond mines were male migrants, basically from almost all black societies south of the Zambezi River though the Pedi, the Tsonga, and the South Sotho formed the largest groups until at least 1885.

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88 Turrell, Capital and Labour, p. 10.
90 Worger, South Africa’s City of Diamonds, pp. 27-28.
91 Ibid., p. 17.
92 Ibid., p. 74; Turrell, Capital and Labour, pp. 20-21, 92-93.
They had once lived off hunting-gathering and subsistence farming, but ecological pressures and regional conflicts had already driven many of them to look for other economic possibilities long before the development of diamond mining.93 For many others, work in the diamond mines was a seasonal job they took on for three to six months before returning home, thereby combining wage labour with self-subsistence farming. The money they earned in the mines was often spent on the purchase of tools to improve their agricultural output, but also on guns and bridewealth. Initially, a number of chiefs directed the migrant labourers to the mines and they could also call mine workers back home in the case of conflict or war.94 The black communities that lived near the mines produced foodstuffs and fuel for the mining town.

Because of the labour intensity of mining, there was a shortage of labour for at least a decade after the first discovery. Migrant mine workers could gain high wages by moving from one mine to another, or by going temporarily to the Cape for other wage work. Between 1871 and 1875, weekly wages quintupled from five shillings per week to twenty-five shillings per week plus

93 Worger, South Africa’s City of Diamonds, p. 65; Turell, Capital and Labour, ch. 2; Harries, Work, Culture and Identity, ch. 3.
Figure 3.7  The Bultfontein, Dutoitspan, De Beers, and Kimberley mines

Source: Turrell, Capital and Labour, p. 2
In 1872, in an attempt to regulate labour supply, the Cape Governor proclaimed that labour contracts had to be registered as contracts of service. Connected to this, each employee was given a pass: a piece of paper stating their name, the name of their master, the duration of the contract, and their wage. The proclamation in itself was colour blind; only the terms masters and servants were used. In practice, only black Africans were contracted, whereas all the other workers refused to comply with a system they regarded as being for natives only. When a worker wanted to leave the diamond fields, he had to present a discharge certificate, or a pass attesting his conduct, before the registrar handed him a travel pass. Men who broke the pass law were liable to three months imprisonment, or a fine up to twenty-five pounds or twenty-five lashes. In the beginning, the passes did little to prevent black workers from leaving the mines. Since diggers had to pay the British administrator for the registration of a contract, many choose not to do so; only later did the system become more elaborate and the control more strict.

In addition to the government, white diggers also started to draw up regulations – not supported by the Cape Governor – that prohibited blacks from holding claims, thus basically keeping them from self-employment or working as an employer. The motivation was theft. Claim ownership entitled blacks to sell diamonds and thus could facilitate theft. Theft had already been used as a motive against what the employers called desertion: if a black worker left the diamond fields before the end of a contract he had probably stolen a diamond. Black claim owners nonetheless continued their work, though mainly in the poorer Bultfontein and Dutoitspan mines.

Technological change, consolidation, institutional change, and labour relations

Digging in the relatively small but rich Kimberley and De Beers mines went deeper, and as a consequence, the rims of the mines started to collapse, while heavy rainfalls often flooded the deep, open-cast mines, making them largely inaccessible. In the second half of the 1870s, several technological

95 Worger, South Africa’s City of Diamonds, p. 87.
96 Turrell, Capital and Labour, p. 24; Worger, South Africa’s City of Diamonds, p. 28.
97 Harries, Work, Culture and Identity, p. 54.
98 Turell, Capital and Labour, pp. 25, 29. Exact data on the prevalence of diamond theft is non-existent. We do know how illicitly mined stones were sold and we know white workers were reported as thieves as often as black workers, see ibid., pp. 56, 174-181.
99 Worger, South Africa’s City of Diamonds, p. 17; Turrell, Capital and Labour, pp. 29-30.
innovations (the use of dynamite, haulage systems based on aerial tramways, and the use of horse power and small steam engines) were introduced. This made mining more capital intensive, and many small claim holders went bankrupt and left. As a consequence of the rising claim prices, a system of share working developed: one claim could be subcontracted to a number of share workers. The claim holder paid the licence and the mining taxes, the share-workers paid him a percentage of the net profit of the enterprise, varying from 40 to 90 per cent.\textsuperscript{100} Share-workers (Africans and others) did the digging, hired labourers, bought tools, and sold the diamonds. They considered themselves to be in a partnership, and saw the percentage as payment not as a wage. In 1875 there were some 750 owners, holding a total of some 1,240 claims in the four mines. At least 120 of these owners were Africans, Indians, or “persons of colour”.\textsuperscript{101} By that time, there were some 15,000 to 20,000 mine workers, 85 per cent of whom were black.\textsuperscript{102}

In an attempt to organize the now more complex mining structure, Richard Southey, the British lieutenant-governor who had governed Griqualand-West since it became a Crown Colony, put in place “mining boards”, one for each mine, and composed of representatives of the claim holders.\textsuperscript{103} At the same time, he tried to protect the minor claim holders (since the British collected a fee per claim holder), to limit the amount of money landowners could charge for a claim and to increase taxation. On top of that, he wanted to establish British Crown ownership of all minerals.\textsuperscript{104} In 1875, after fierce and violent protests against the measures by claim holders, share-workers, and people who lived of the mining activities – such as storekeepers and canteen keepers – the British intervened with military power. After this “Black Flag Revolt”, Colonel Owen Lanyon was appointed as the new administrator of Griqualand-West, while a commission wrote instructions for the new government of the mines: “The mines should be looked upon partly as municipality and partly as a trading corporation, and Government should interfere with them as little as possible.”\textsuperscript{105}

Regulations that limited the number of the claims per digger were now abolished, and foreign capital was invited to buy claims and farms with diamantiferous soil. One important outcome of this conflict was that other

\textsuperscript{100} Turrell, Capital and Labour, pp. 49-50.  
\textsuperscript{101} Ibid., pp. 50-52.  
\textsuperscript{102} Based on Turrell, Capital and Labour, pp. 26, 228.  
\textsuperscript{103} Worger, South Africa's City of Diamonds, p. 28.  
\textsuperscript{104} Ibid., pp. 28-29.  
\textsuperscript{105} Ibid., p. 30.
than in Brazil and parts of India, the British Crown did not succeed in making the mineral rights a Crown property.

The new policy led to a process of consolidation. As claims became bigger and more valuable, and more capital was needed to employ large steam engines to pump the water from the mine and to wash the diamantiferous soil with rotary washing machines, smallholders and share-workers disappeared. The remaining claim holders clustered their existing claims. From 1880 onwards, to obtain the capital needed for the technological innovations, claim holders transformed their firms into joint-stock companies, selling part of the shares to the public. The capital supply problem was now more or less solved, although labour supply was still an issue.

In the second half of the 1870s, the colonial state tried to solve the problem of scarcity of labour in various ways. The police force in Kimberley was more than doubled, and was told to enforce the pass law more strictly than before. However, this and other regulations were not subsequently enforced. When in 1876 a crisis in the diamond trade occurred because of overproduction and a price fall, employers cancelled the contracts they had registered and reduced wages by half. As a consequence, more than half the work force left Kimberley, so labour supply was far from being stabilized.106

In the same year, Colonel Lanyon proposed the establishment of rural locations where blacks in Griqualand-West were forced to live after the land they owned was annexed. In 1878, black land owners resisted this legal expropriation, but their resistance was broken and localization continued, segregating whites from blacks, and leaving blacks with plots of land too small to be self-sufficient, meaning that they had to hire themselves as wage labourers either to white farmers or in the mines.107 This policy was extended one year later by the introduction of a hut tax in the area. For people who were already unable to live off their land, the hut tax was actually an incentive to enter wage labour. Nevertheless, the Griqua and other populations together only formed only 4 per cent of the labour force in the mines in 1880.108 So as harsh as the measures were, they did not solve the problem of labour scarcity. The destruction of the Pedi polities and the annexation of the Transvaal in 1880 seem to have been more productive. After a strict round of hut tax collection that year, almost 12,000 Africans went to Kimberley. However, this solution was only temporary, as Transvaal

106 Worger, *South Africa’s City of Diamonds*, p. 35 (on crisis) and p. 127 (on contracts).
regained its independence in 1881 and the Boers now profited from black labour and the collection of the hut tax.\textsuperscript{109}

In 1880, a crucial event took place that deeply influenced the way institutions governing both mining and trading would develop, and that in the end would also affect labour control, labour supply, and labour relations. The Cape Colony annexed the Crown Colony of Griqualand-West, abolished the local British administrator in Kimberley, and made the Cape parliament directly responsible for enacting legislation for the territory. The parliament in Cape Town was now the place where decisions about the mines were made.\textsuperscript{110} In 1881, J.B. Robinson, one of the major shareholders of the Kimberley mines, and Cecil Rhodes of the De Beers Mining Company, were both elected for Kimberley in the Cape Parliament and had a heavy influence on decision making in this political institution. According to Colin Newbury, the annexation and its political and economic consequences led to the control of diggers and mine owners by local government, which made it easy for the latter to control the minerals, manpower, town, and its market “with a minimum of legal or fiscal interference” and this “early weakness in state rights to dispose of precious stones and in administrative supervision explains the coercive and protective legislation framed by diggers and mine owners”.\textsuperscript{111}

One of the first things the Cape Parliament enacted in 1882 was the “Diamond Trade Act”, suggested by Rhodes and Robinson. People accused of illicit diamond buying were presumed guilty until they could prove their innocence. A special court without a jury decided on these cases. Punishments for whites could be imprisonment for up to fifteen years, fines, and the possibility of banishment from Griqualand-West. Blacks would be subject to the same punishments, together with flogging.\textsuperscript{112} The pass law was enforced with the help of extra police, and as a consequence of both measures, the number of arrests rose from some 8,500 in 1876 to 14,000 in 1897.\textsuperscript{113} The police force controlled the urban locations and the act also allowed the mining companies to set up searching houses, where white and black employees were checked in separate rooms when entering or leaving the diamond mines. Blacks had to strip naked and had to undergo intimate body searches, whites could keep on their clothes and were only visually inspected. Although very few diamonds were found in these searching houses, the process did function

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\textsuperscript{110} Turrell, \textit{Capital and Labour}, p. 133.
\textsuperscript{111} Newbury, \textit{The Diamond Ring}, p. 361.
\textsuperscript{112} Ibid., p. 134
\textsuperscript{113} Worger, \textit{South Africa’s City of Diamonds}, p. 136.
\end{flushleft}
Figure 3.8 Diamonds found in the Kimberley, De Beers, Bultfontein, and Dutoitspan mines, in carats, 1867 to 1913

Sources: For 1867-1893: Bauer, Precious Stones, vol. 1, p. 204; for 1894-1913: Lenzen, History of Diamond Production, pp. 159-160

as form of labour control. In 1883, the De Beers Mining Company successfully negotiated with the Cape government to establish a privately controlled convict station on its mining compound. It started with a convict labour force of 200 men; in 1894 there were 800. The men carried out compulsory work in the mines, were housed in the convict station, and fed by De Beers, which paid a small fee to the Cape government in return for this favour.

In the first half of the 1880s, a stricter control on labour and labour supply was established via land grabbing, the introduction of the hut tax, imprisonments and forced labour in convict stations, the control of urban locations and streets, and searching houses in the mines. However, all these regulations and institutions would have failed to control labour supply, had things in the diamond industry and in the labour supplying areas not dramatically changed in exactly the same period.

The establishment of joint-stock mining companies had led to a “company mania”, with shares becoming expensive objects of speculation. By the end of 1881, the collapse of these speculative shares led to a depression in Kimberley that coincided with the collapse of the European diamond market as a consequence of overproduction. The depression that would last until 1885, led to bankruptcies and takeovers, and would in the end be an incentive for further concentration. As a consequence of the depression,

114 Ibid., p. 140.
115 Turrell, Capital and Labour, p. 155.
116 Worger, South Africa’s City of Diamonds, p. 145.
117 Turrell, Capital and Labour, p. 89.
118 Worger, South Africa’s City of Diamonds, p. 54.
more than half of the mining companies disappeared and the demand for labour dropped. In 1882 there were 17,000 black mine workers, in 1885 their numbers had dropped to 11,300, and in 1890 there would be only 6,000.\textsuperscript{119} Wages dropped by 50 per cent.\textsuperscript{120} Not only did the demand for labour fall, but also supply increased as a consequence of the annexation in 1882 of Basutoland (north of Griqualand-West) and in 1885 of Bechuanaland (southeast of the Orange Free State), and the consequences this had for ecology and the reallocation of land. Many former black farmers were no longer forced to go to the mines and other places for wage labour.\textsuperscript{121} By that time, work in the mines had changed drastically.

Deep mining, amalgamation, closed compounds, and labour relations

As the production costs of open-pit mining kept rising, the mining companies decided to shift to deep mining. For deep mine shafts (reaching over 400 feet below surface level), tunnels and galleries had to be made. To avoid overproduction, open-cast mining was restricted.\textsuperscript{122} The capital investments were large, so to get as much out of their capital as possible, mine owners introduced a system of continuous twelve-hour back-to-back shifts. The disciplining, supervising, and controlling of the underground work was carried out by white subcontractors. As control on production below the surface was difficult, piece rates were introduced. Subcontractors were remunerated according to the amount of diamantiferous soil brought to the surface by their teams, the men were remunerated per inch drilled or the number of trucks filled. Deep mining also meant dangerous working conditions. Apart from accidents, pneumonia was the most important cause of death because of the temperature differences between underground and above ground.

Deep mining also stimulated the process of amalgamation: the three largest companies were now Kimberley Central, the Compagnie Française, and Rhodes’ De Beers Mining Company.\textsuperscript{123} This reduced the bargaining powers of the workers, especially since the few remaining mining companies

\textsuperscript{119} Ibid., p. 103; Harries, \textit{Work, Culture and Identity}, p. 66.
\textsuperscript{120} Worger, \textit{South Africa's City of Diamonds}, p. 102.
\textsuperscript{121} Ibid., pp. 105-106; Turrell, \textit{Capital and Labour}, p. 133.
\textsuperscript{122} Harries, \textit{Work, Culture and Identity}, p. 69.
decided to cooperate rather than to compete over labour. Now that deep mining needed a stable, skilled workforce and the position of the workers had weakened, the mining companies decided to fence off the compounds many black workers stayed in.

Between 1885 and 1886, the three big mining companies closed their compounds, taking the De Beers Convict Station as a model. The workers at De Beers and Kimberley Central refused to accept the situation, but were soon replaced by others, and their strikes were broken.\footnote{Worger, South Africa’s City of Diamonds, p. 144.} Living conditions in the compounds were bad; they were often overcrowded, sanitary conditions were insufficient, sleeping barracks were cold, there was no proper medical care, contagious diseases spread fast, and a death rate of around 80 per 1,000 workers prevailed.\footnote{Turrell, Capital and Labour, pp. 161-162, Worger, South Africa’s City of Diamonds, p. 100.} Workers (apart from the convict labourers, of course) entered the compounds on a voluntary basis. This was often on a two-to-four month contract that could be voluntarily re-registered, though in practice pressure was often used. However, a large proportion of the workers in the compound were uncontracted.\footnote{Turrell, Capital and Labour, p. 170.} Although this was in contravention of the law, mine owners let the miners who had ended their contract and were not directly needed, stay in the compound.\footnote{Worger, South Africa’s City of Diamonds, p. 266.} These uncontracted people were the reserve pool of trained labour: “to work 900 men we want 1,400 or 1,500”, according to a representative of the De Beers Mining Company.\footnote{Turrell, Capital and Labour, p. 171.} Several economic reasons could make miners stay in the closed compounds. If piece work rates were low, miners had to stay longer to earn enough to be able to go home, in addition there were all kinds of fines that could oblige the miners to stay longer.\footnote{Ibid., pp. 171-172.} By 1889, practically all the black mine workers were housed in closed compounds and supplied by company stores.\footnote{Newbury, Diamond Ring, p. 228.}

In 1890, a crisis in the diamond trade led to lowered wages, while at the same time prices for basic goods in the company stores remained at the same level.\footnote{Harries, Work, Culture and Identity, p. 70; Worger, South Africa’s City of Diamonds, pp. 257ff., on prices see p. 266.} Discontent rose, and in 1891, black mine workers started resisting against their white subcontractors, leading to severe racial antagonisms in the mines.\footnote{Harries, Work, Culture and Identity, p. 71; Worger, South Africa’s City of Diamonds, p. 279.} Protests against the by now truly explosive and exploitative
situation in the compounds led to some improvements, such as a change to eight-hour shifts and better medical and sanitary services. By that time, the De Beers Mining Company had bought all remaining shares in the South African diamond mines and reached a complete mining monopoly in 1888 as the De Beers Consolidated Mines. This mining monopoly was expanded in 1893, when De Beers established a London-based diamond syndicate, together with the major diamond merchants. The syndicate bought the compete yield of all the De Beers mines and controlled the resale, including the prices, securing the De Beers a mining and trading monopoly for quite a long time.

Apart from the introduction of convict labour and the semi-free wage labour of mine workers in between contracts, what other effects did the introduction of closed compounds have on the labour relations of miners? Did closed compounds mean the end of circular migration between the mines and the fields, and thus of double labour relations? We do not know exactly. What we do know is that in the period up until 1886, more and more miners who stayed for a contract period had already worked in the mine. Therefore, it is probable that a stabilized circular migration existed of men who consciously combined wage work and subsistence farming. When the closed compounds were established, the number of miners that remained in the urban locations between two contracts increased. According to the historian Patrick Harries, the fact that in 1891 the black miners revolted in the closed compounds and the mines, rather than returning home, is also a sign of the permanency of wage work of these men. At the same time, the composition of the mining labour force changed: the Pedi and the Tsonga started carrying out wage work in the Rand gold mines, and the South Sotho were now the largest group of diamond miners. In the region of Basutoland where they had their farmlands, the ploughing season was in November and December, and in the 1890s these became months of labour scarcity in the mines, pointing in the direction of a continuation of the system of circular or seasonal migration, although for a different group. Nevertheless, by 1903 the number of women living in urban locations and dependent on men working in the mines, seems to have increased, pointing to a general increase of wage workers without land.

133 Ibid., p. 290; Harries, Work, Culture and Identity, p. 77.
134 Turrell, Capital and Labour, pp. 165-167.
135 Ibid., p. 168.
136 Harries, Work, Culture and Identity, p. 71.
137 Turrell, Capital and Labour, p. 169.
In the first decades of diamond mining in South Africa there was a shortage of labour, due to the migratory workers who combined wage work in the mines with self-subsistence on their farms in the homelands. This combination of labour relations and the structural shortage of wage labour gave them a strong bargaining power. To control labour and labour supply, the private mine owners used their influence in the Cape Parliament, which ruled the mining area after its annexation in 1880, to instal a series of institutions: pass laws and the Diamond Trade Act, a legal apparatus to punish alleged illegal diamond buying. These measures worked against the black mine workers, in particular, and turned a proportion of them into convict labourers. The establishment of rural locations, the introduction of the hut tax, and land annexations, were all institutions that forced black workers to leave their land and spend more – or all – of their time on wage work. The establishment of the closed compound system ended the combination of self-subsistence and wage work for many mineworkers, turning them into full-time wage labourers.

Conclusion

The three case studies show how diverse authorities made use of their (appropriated) land and mineral rights, as well as of taxes and laws, to govern as many segments of the diamond commodity chain as possible. In India, the Deccan sultans, Mughal emperors, and rajas of native states, as well as the EIC; in Brazil the Portuguese Crown in the metropolis; and in South Africa a concentration of mining and merchant capital well represented and highly influential in local politics. For the Indian rulers, the situation was relatively easy. Until the 1720s, India was the only diamond-producing part of the world, global demand for diamonds was high, and overproduction was not an issue. Labour was abundant, because profitable alternatives were lacking for the migratory wage labourers and their families who went to work in the mines, often combining this with agricultural work, thus combining wage labour with reciprocal labour. Even though conditions were harsh and wages low, in general wage work was free and there was very little incentive on the part of the rulers to change the situation. When the EIC gained control over some of the mines, it more or less continued the pre-colonial governing rules. With no inclination whatsoever to invest in mining, and with relatively low yields, the EIC did not consider unfree labour as a serious option. The only shifts in labour relations we see in the Indian mines had little to do with (colonial) institutions, but were
the consequence of the exhaustion of the mines, or at least a diminishing number of merchants willing to invest in mining. Sometimes this situation was temporary, such as in the seventeenth century, when some Indian rulers used the labour force of the landless migrant labourers for tributary purposes for a brief period. In the nineteenth century, we see an increase of self-employed mineworkers as a consequence of the structurally diminished interest of entrepreneurs.

In Brazil, the situation was completely the reverse. The Brazilian mines yielded more diamonds than the Indian mines, and when they were appropriated by the Portuguese Crown, overproduction led to a crisis on the global diamond market. The problem of labour shortage was solved by major imports of slaves from Africa. Slave labour was almost endemic in the Brazilian economy under Portuguese rule, and when diamonds were discovered in Minas Gerais, slaves moved with their masters from the coastal areas to the inland. Here, the problem was to control the workforce, its owners, and their administrators, in order to keep them from illicit mining and trading and to stop overproduction.

On paper, all the institutions shaped by the colonial powers in Lisbon to control production, including labour, seem harsh and effective, and those who fell into the hands of the authorities were worse off. However, few illicit miners and traders did fall into the hands of the authorities, whose institutions to control mining and trading failed. The Diamond District was in many ways a model for the later South African closed compounds, except for the fact that in the district, the rules were colour blind and applied to white, mulatto, and free and unfree black inhabitants alike. Nevertheless, despite the demarcated area and the guards controlling its borders, there were many possibilities both inside and outside the district to combine slave labour with self-employment or even to shift from slave labour to self-employment, albeit with very insecure foundations. The most important reason for these institutional failures was conflicts, including conflicts of interests, between the Crown in Lisbon, the governor of the Captaincy of Minas Gerais, and the intendant of the Diamond District. On top of that, corruption was rampant at various levels of governance. Lastly, the area was geographically widespread and not easy to control. The Royal Extraction did have one important consequence for labour relations though: when the Portuguese Crown started to employ slaves for hire in 1772, the number of slaves imported from Africa increased in the Serro do Frio district, whereas in Minas Gerais as a whole, imports diminished.

In South Africa, the diamond deposits were primary, and therefore yields were enormous and – with the exception of a number of periods
of overproduction and crisis – in demand on the global diamond market with its growing number of consumers. Here, the British government was quick to annex the diamond-bearing grounds, and these were bought by mining entrepreneurs, although they never acquired the mineral rights. After several stages of consolidation and amalgamation, a few joint-stock mining companies were left, which could easily dispose of capital and make investments. For a long time, labour supply was unstable and insufficient, as many black miners combined wage work in the mines with subsistence farming in their homeland, and left if they considered the wages too low. To control labour supply, mining entrepreneurs suggested all sorts of mechanisms that failed until the second half of the 1880s.

What made the later institutions a success is the influence of mining entrepreneurs on the local Cape government, which had controlled Griqualand-West since 1880. Without much resistance, these entrepreneurs were able to develop a set of institutions that helped them to control labour. Discriminatory pass laws, imprisonments, and searching houses were steps in the direction of a tightly controlled and segmented labour market. After the introduction of deep mining, convict labour, and closed compounds, mining entrepreneurs truly governed the mining area and all aspects of the production that took place there. The colonial power's activities, such as the establishment of agricultural black localizations, the introduction of the hut tax, the destruction of local polities, and the annexation of Basuto and Bechuanaland "helped" the mining entrepreneurs solve their labour problems and economically forced many black farmers into permanent wage labour.

If we compare the three case studies, we see that colonial institutions only had an impact on the development of the diamond mines and on labour relations if the colonizer was willing to invest in them. The British Empire did not invest in the Indian mines, but did invest in the South African ones. Here, power relations were extremely important. In principle “inclusive institutions” were established: a parliament, respect for property rights, rule of law, and contracts, which all stimulated the development of the diamond-mining industry, but in the words of Charles Feinstein “of course, like almost everything else in South Africa, these institutions were warped by racism”. This makes these institutions only “inclusive” for part of the white population. The influence of diamond producers on local political power relations and on colonial institutions was great. This had a huge impact on the labour relations of the black workers; it did, however, lead to smaller revenues for the Empire than one would have expected.

Feinstein, An Economic History of South Africa, p. 98.
In Minas Gerais, the Portuguese Empire seems to have established a series of classical extractive institutions. However, power relations also played a major role here: disrupted power relations within the colonial administration made the institutions in the local context far less effective than those in South Africa, even when the empire itself – during the Royal Extraction – invested heavily in slave labour. Large quantities of diamonds were certainly extracted from the Brazilian mines with the help of enslaved labour and then sent to the Lisbon treasury, but half of the revenues ended up in the pockets of private individuals, and even slaves – at least some of them – had some room for manoeuvre in this failing system.

Bibliography


Heyne, Benjamin, Tracts, Historical and Statistical on India, with Several Tours through Various Parts of the Peninsula: Also an Account of Sumatra, in a Series of Letters (London, 1814).


Kiddy, Elizabeth W., Blacks of the Rosary: Memory and History in Minas Gerais, Brazil (University Park, 2005).


Klein, Herbert S., and Francisco Vidal Luna, Slavery in Brazil (Cambridge, 2010).


Mawe, John, Travels in the Interior of Brazil, Particularly in the Gold and Diamond Districts of That Country (London, 1812).


About the Author


E-mail: kho@iisg.nl