

### *CHAPTER 3. AN OVERVIEW OF CONDITIONS IN THE MINES*

The previous chapters have concentrated on the quantitative aspects of Chinese labour in the tin mines during the 19th century. This chapter aims to discuss some of the qualitative aspects, in particular labour conditions with respect to the role of labour in the mines. Emphasis is placed on three main features and the chapter is divided accordingly. Section 1 contains a description of the methods of mining employed by Chinese miners. The use of labour-intensive mining techniques was a typical feature of early Chinese tin mining enterprise as the immigrants originated from a country where labour was abundant in relation to other factors of production. Section 2 contains an examination of working conditions in the mines. Special attention is paid to the types of business organisation and patterns of employment; wages and hours; the conditions of immigration; living conditions and the health of the workers. The third section contains an evaluation of colonial labour policy with respect to Chinese tin mining labour. This includes a study of the relation between the colonial government, employers and labour; the establishment of the Chinese Protectorate; and attempts at setting labour codes and minimum wage conditions for Chinese miners.

#### *1. CHINESE MINING METHODS:*

Chinese superiority in the Malayan tin mining industry throughout the 19th century was due largely to the greater efficiency of Chinese mining methods over those of the Malays. These techniques, however, owed little to the methods employed in the Chinese provinces of Yunnan and Kwangsi, where ore extraction was based exclusively on underground techniques. Rather, Chinese mining methods were an adaptation of existing Malay methods. As mining was highly labour-intensive an examination of Chinese and Malay mining methods contributes significantly to a discussion of labour conditions in the mines.

The simplest method of Malay mining involved the occasional panning for tin in streams where water had deposited stanniferous soil from the hills. This method employed a large shallow wooden dish (called a *dulang*), which was skilfully swirled to separate the tin-ore from the river sediments.<sup>1</sup> A second popular method, but requiring more organisation, was *lampan* or ground-sludging. In its typical form *lampan* operated where ditches or races were shovelled into a stream of water. These races carried away the lighter soil, leaving the heavier tin-ore at the bottom. The loosened soil was then driven down the ditches into a second channel (called the tail race) with the aid of a paddle-shaped wooden spade. Periodically, the ore in the races was scooped out by means of a wooden tray. *Lampan* methods required little labour and capital and therefore met the needs of small groups of Malay peasants who took to mining as a part-time activity to supplement agricultural income. However, the method had two significant drawbacks: firstly, it could only be employed where streams and hilly land were found together to provide the necessary water power, and, second, it was limited to previously unexploited ground where the grains of ore were sufficiently large and heavy to withstand being swept away by running water.

In order to reach the deeper ores that lay above the bedrock, the Malays resorted to sinking pits in the ground. But in these mines drainage became a problem. In the upper parts of the plains, where the layer of wash-dirt was near the surface, the pits (known as *ludang*) did not extend beyond a few feet and could be kept sufficiently dry with a wooden bucket. In the deeper mines (called *tedok*), drainage was a more serious problem. Furthermore, the walls of the pit had to be supported to prevent subsidence and some mechanical means of lifting the soil was required because of the small numbers of labourers employed in the mine.<sup>2</sup>

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<sup>1</sup> The *dulang* method was most commonly employed by women. However, production from this method was relatively insignificant. Nevertheless, in virgin tin-fields a *dulang* washer could make a comfortable living. As late as 1886, in the comparatively untouched region of Kinta, a good *dulang*-washer could earn as much as a dollar a day, a sum considerably greater than could be earned by a paid Chinese labourer in a mine who, under the most favourable conditions, could earn about 60 cents a day. Wong, *The Malayan Tin Industry to 1914*, p.43; De la Croix, "Some Account of the Mining Districts of Lower Perak", p.4.

<sup>2</sup> A typical *tedok* mine employed 6 men working a pit some 17 feet square in area and 13 feet deep. The pit walls were supported by a rough framework of wood and the pay-dirt and water were lifted respectively by the *kait ayer* and the *kait raga*, which were both adaptations of the balance bucket.

A fourth method of Malay mining, known as *lombong*, involved open-cast mining in shallow, well-like pits. Although similar to *lampanning*, *lombong* mining was distinguished by water use: with *lampanning* the water was brought to the tin-bearing ground and then used to concentrate the ore on the spot; in *lombong* mining the ore was excavated by dry methods and taken to the water source to be concentrated.<sup>3</sup> However, *lombong* methods were difficult because the Malays did not possess the correct types of digging tools necessary to work to great depths and, more importantly, could not overcome the constant problem of water flooding the mine pits and retarding work. The depth of Malay *lombong* mining was therefore determined by the water table and it was usual to cease working about a foot above that limit. Consequently, Malay mining tended to be horizontal rather than vertical and confined largely to shallow and easily accessible surface deposits with free natural draining, usually on hill slopes.<sup>4</sup>

Malay smelting was also a simple affair. *Dulang*-washing was, in fact, a method of recovering ore that had been refined and dressed by natural processes. In *lampan*, *ludang* and *tedok* mining the ore was dressed in three stages - first in the rases, then in an eight-foot long *palong* (a sluice-box made of a hollowed-out tree split in half), and finally, in a *pandei* (a smaller version of the *palong* measuring only five-feet in length). The ore was then reduced in simple and irregularly-shaped clay furnaces.<sup>5</sup> The furnace was charged with alternate layers of ore and charcoal and the blast was “produced from two upright cylinders the pistons of which are worked by one man”, or simply by blowing into the furnace with the aid of a bamboo pipe.

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<sup>3</sup> Of the two methods *lampan* was most commonly practiced by the Malays. See Ooi, “Mining landscapes of Kinta”, pp.351, 362-363; De la Croix, “Some Account of the Mining Districts of Lower Perak”, p.7; Wong, *The Malayan Tin Industry to 1914*, pp.43-44.

<sup>4</sup> De la Croix, *ibid.*; Pike, “Mining in Perak”, pp.198-199. There is actually some dispute as to whether *lombong* techniques were attributable to the Malays. In Selensing in Pahang, for example, derelict mines were discovered with remnants of galleries, stopes and shafts, the construction of which required greater mechanical skill than the Malays were observed to possess. These, as well as similar pits discovered in Kinta, were popularly ascribed to the Thais and called *lombong siam* by the Malays. See Wong, *ibid.*, p.17. Whether this was in fact true or not, it is definite that the Malay’s knowledge of drainage was very limited for the *kait ayer* was unable to cope with any excessive flooding of the mine. Even if they employed the *kait ayer* the Malays could not mine to any considerable depth. Therefore, they were restricted in the choice of mining sites, being able to mine only in higher areas with considerable natural drainage. Even in these regions mining was subject to interruptions or mishaps such as heavier seepage than was anticipated or a torrential downpour of rain that would cause the mine to be abandoned.

<sup>5</sup> Though far from perfect Malay smelting was sufficient to produce tin that was marketable after being refined in the Straits Settlements. This degree of success was due entirely to fortuitous circumstances. In particular the alluvial ores, because they had been extensively weathered by natural processes, were free from any of the impurities associated with lode ores. Smelting of lode ores normally required a high degree of technical knowledge to remove the impurities in the dressing and smelting processes. Alluvial ores on the other hand could be dressed by washing and reduced in simple shaft furnaces in which charcoal acted as both the fuel and the reducing agent. For details see Wong, *ibid.*, p.45; De la Croix, *ibid.*, pp.41, 47.

The molten metal emerged from a tap hole at the lower end of the furnace and was dropped into a receptacle below. The liquid metal was then cast into blocks and the product was ready for market.<sup>6</sup>

Organisation in the Malay mines was as backward as their technical knowledge. Because of the small scale of operation, the Malay miners did not enjoy the advantages of the division of labour. In the *tedok* mines, for example, deadwork such as the removal of the overburden could not be kept ahead of actual mining in order to maintain a continual output. The Malay miners also worked only one pit at a time, throwing the overburden near the mine opening with the result that it had to be removed a second time when the working was extended. The day's work began with some workers draining the water that had collected in the mine during the night and with others washing the ores obtained the previous day. The actual business of mining commenced when the mine was sufficiently dry, but much labour was consumed to work the *kait ayer* the whole day. The ores were smelted during the rainy season when the mine had to be abandoned owing to the inefficiency of the drainage system.

In addition to the lack of large-scale economies, the Malay mines were hampered by the absence of economic rationalisation. The cost structure of Malay mining was rigid owing to the payment of customary dues and the observance of costly mining superstitions. The *pawang* (Malay medicine man or magician), benefited most from these superstitions by combining the functions of prospector and intercessor between the miners and the supernatural forces, on whose favours the success of the undertaking depended. Overall, the fact that the cost structure of Malay mining was determined largely by custom and not by market considerations, put the Malay miners at a comparative disadvantage when they became engulfed in a market economy

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<sup>6</sup> It was recorded in 1884 that the Malay furnace was the cheapest of all the furnaces then in use, but it had the shortest span of life and the highest total costs per unit of output. The Malay furnace was therefore very uneconomical to work and its disappearance was a matter of time in the face of competition from the Chinese and, later, European methods.

in which the factors of production were valued by the impersonal forces of supply and demand.<sup>7</sup>

On the whole, the Malays lacked both the motivation and the technical knowledge to develop tin mining on an industrial basis.<sup>8</sup> Therefore, when the new deposits were discovered in the 1840s they were beyond the capacity of Malay methods to exploit. The main technical limitation of Malay methods lay in the inability to devise an efficient drainage system. Water was indispensable for dressing the ores and for providing power, but it became a drainage problem the moment the pits were opened in the ground. Moreover, with the *kait ayer* the Malays could not work the lower parts of the plains where the wash-dirt occurred deeper in the ground. To mine these deposits the average mining organisation had to command sufficient capital for installing a more elaborate form of drainage system and to maintain the large labour force needed to undertake the extensive preliminary dead-work and subsequent productive work. It was therefore left to the Chinese to fulfil the requirements for mining in the plains.

The principal method of alluvial tin mining employed by the Chinese was open-cast or *lombong* mining.<sup>9</sup> But where the Malays failed to develop the method into an efficient mining technique, the Chinese succeeded. This was achieved by the introduction of various digging implements, notably the *changkol* (a versatile broad, deep hoe) and, more importantly, a device for draining excess water from the mine-pit by use of a water-wheel and chain-pump, known as the *chin-chia*.<sup>10</sup> In the matter of drainage the Chinese also implemented the "level" - a deep channel that ran from the mine to a river which, in shallow mines on higher ground, was capable by itself of keeping the mines sufficiently dry. The "level" was usually constructed immediately after the jungle had been cleared and the mine traced out. Together, these

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<sup>7</sup> Wong, *The Malayan Tin Mining Industry to 1914*, p.46.

<sup>8</sup> As late as 1885 the small number of Malay miners in the industry still used implements made of wood, bamboo, or bark from trees. The only known improvements were iron digging tools with wooden handles and tin boxes used occasionally for bailing water from the pits.

<sup>9</sup> Statistics of production by mining methods are unavailable for these early years but it is estimated that prior to 1900 no less than 90 per cent of the total Chinese output was attributed to *lombong* mining. Ooi, "Mining Landscapes of Kinta", p.351.

<sup>10</sup> The *chin-chia* was a device adapted from the rice-fields of China. A detailed description of the Chinese *chin-chia* is given in Appendix C.

innovations enabled the Chinese to mine to greater depths than the Malays and to re-work profitably grounds previously abandoned because of flooding. With the Chinese vertical mining thus became more important than horizontal mining.<sup>11</sup> In 1839 Newbold described the system of Chinese mining in Sungei Ujong as follows:

The mines are generally excavated on the swampy flats at the base of hills of primitive formation. They average from 6 to 20 feet in depth, following the streams of ore...These excavations are called *Lombongan*...The soil is carried away by the miners in baskets, suspended at the extremities of a stout elastic bamboo or panga, which passes across the shoulders...The ore is thrown into a stream flowing through artificial channels...and is stirred about with an iron rake...The water carries off the sand, small pebbles and earth, leaving the ore and large stones at the bottom, which are afterwards separated by a riddle and the hand. The ore, thus cleared of extraneous substances, is deposited in the *koppo*s to await the process of smelting...This process usually occurs at stated periods twice or thrice a year...within a rude furnace of clay.<sup>12</sup>

The simple overshot water-wheel was the main source of power for the *chin-chia*. The Chinese also displayed considerable ingenuity in the use of hydraulic power. In an isolated mine the water led from a river or stream to work the *chin-chia* was subsequently united with the drainage water in a run-off channel and used to wash the ore. In larger tin-fields the run-off water was channelled to move the water-wheels of other mines situated at lower levels. In this way the stream of water, originally diverted from a river and subsequently supplemented by drainage water, was made to keep the water-wheels of several mines in motion.<sup>13</sup>

The *chin-chia*, although crucial to early Chinese alluvial tin mining, did not completely solve the problem of flooding; its performance was modest, although this varied with size.<sup>14</sup> Furthermore, as the *chin-chia*'s operation depended on a constant supply of water only land near water could be worked. Operation was further retarded during periods of inadequate rainfall.

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<sup>11</sup> Vertical mining implies that excavation could be carried to a greater depth and therefore deeper deposits could be worked with less area of ground being turned over for the same volume of *karang* mined. In areas of good drainage and with the assistance of the *chin-chia*, the Chinese could work to a depth of 30 feet, although the average depth of a mine was between 10 and 18 feet. Doyle, *Tin Mining in Larut*, p.6.

<sup>12</sup> Newbold, *British Settlements*, Vol.II, pp.96-98. A detailed account of Chinese smelting methods is given in Ta Chen, *Chinese Migrations*, pp.90-92. See also Flower-Ellis, "A Brief Account", pp 11-12; Hampton "Tin Deposits of Perak", p.147.

<sup>13</sup> Simple treadmills replaced water-wheels in places where water could not be harnessed for power (or had to be conserved for dressing the ore), and where mining operations were kept on a small scale owing to land policy and a scarcity of capital and rich tin resources. This was particularly the case in Melaka. These treadmills were worked by coolies.

<sup>14</sup> On average the *chin-chia* could dispose of only 1,500-3,500 gallons of water per hour.

Chinese mining, therefore, was still dependent to a large extent on the weather and the location of the mines in relation to the water-table. To reduce the need to pump water from the pits the Chinese, like the Malays before them, moved to the foothills. It was a fortunate coincidence that the foothills where the early Chinese mines were located also contained the richest concentrations of tin-ore.

When a site had been selected for Chinese *lombong* mining, the jungle was cleared and the timber stacked ready for later use in charcoal-making.<sup>15</sup> The ground was then mined to a depth of six feet, or until water began to infiltrate the workings. At this time a channel was cut from a neighbouring stream into the mine. Where the channel reached the mine-head, a *chin-chia* was erected and the overburden stacked around the mine-head to form a dam to divert the flow of surface waters during heavy rain. The *karang* was then carried to the surface where concentration took place in wash-boxes. Waste material was deposited on the worked-out portion of the ground, while operations continued both vertically and horizontally until the available land had been turned over and the *karang* exhausted.

In areas containing a high percentage of clay it was necessary to puddle the *karang* before the tin-ore could be separated. The preliminary operation, during which the *karang* was mixed with water and broken on its way from the mine floor to the surface, was performed by a human elevator.<sup>16</sup> A second puddling was usually undertaken at the surface in *palongs*, at one end of which a stream of water was introduced. Several coolies would stand around the *palong* and stir the *karang* until the clay was separated from the tin-ore.<sup>17</sup> The gravel mixture floated away leaving the tin-ore behind in the sluice. The *palong* was later replaced by the *lanchut* (*lanchut-kechil*), a

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<sup>15</sup> In prospecting for a site the Chinese trusted the Malay *pawang*s who knew the character and layout of the terrain better than the immigrants. In the course of time the *pawang*'s long record of success won for them the confidence of the Chinese who employed the Malay *pawang* methods even when they did their own prospecting.

<sup>16</sup> A series of flat terraces were cut on one side of the mine and on each terrace a coolie was stationed with a ladle. The coolie at the bottom of the mine lifted the *karang* to the coolie on the step above, who in turn ladled it to a higher level. The process was repeated until the *karang* reached the surface. At each stage the *karang* was mixed with water, with each handliner assisting the disintegration process. By the time the *karang* reached the wash-boxes at the surface it had been thoroughly puddled and was ready for concentration.

<sup>17</sup> The Chinese *palong* was a vast improvement on the hollowed tree trunk employed by the Malays. It consisted essentially of a long wooden trough with riffles placed at intervals across the bottom for retention of the tin-sand. The *palong* was fixed at a slope of about one in twelve, with the wider end upper-most. Periodically, the water was cut off and the tin-ore collected from the bottom of the box.

coffin-shaped trough that worked along similar principles.<sup>18</sup> Seven coolies were required to operate the *lanchnut* (three to feed the debris and four to stir the tin-dirt and water with *changkols*).

A major advance in the development of Chinese *lombong* mining was made in 1877 with the introduction of the steam engine and Gwynne centrifugal pump into a mine at Taiping. By 1881 there were 20 steam-pumps in operation in the Larut mines. A steam-pump had also been introduced into Selangor by Yap Ah Lo, the largest mining speculator in the district. In 1882 a pump was introduced into Sungei Ujong by a Western mine owner. The steam-pump had the advantage of further increasing the depth to which the mines could be worked. The majority of Chinese mines, however, were slow to adopt the steam-pump because of its high initial fixed cost compared to the *chin-chia*. Although it was less efficient, the comparatively low operating cost of the *chin-chia* naturally appealed to the snail Chinese *lombong* miner.<sup>19</sup>

Chinese tin miners also employed *aulang*, underground and *lampan* methods, although these failed to achieve the importance of *lombong* mining because of their wasteful nature. Underground mining of alluvial deposits, for example, involved sinking shafts into the ground and lining the sides with thin planking, buttressed with timber.<sup>20</sup> But, as the exploitation of the *karang* was usually incomplete, underground methods were only employed where the overburden was so thick that the *karang* was too deep and costly for removal by *lombong* methods. *Lampan* mining, on the other hand, was suited to small-scale operations where the deposits were limited, the working face small and the mine located some distance from supply lines. In an adaptation of Malay *lampan*

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<sup>18</sup> In construction, the *lanchnut* was similar to the devices employed in the placer-washing stages of gold mining in Australia and California. The average *lanchnut* was fitted with two riffles to catch the tin-ore. The box usually measured 20-30 feet long, 2-3 feet wide and 1-2 feet deep. It was placed at an angle to the ground to allow the water let in at the upper end to gain sufficient force to wash the tin-dirt as it ran downwards. By adjusting the angle of the *lanchnut*, the velocity of the water could be regulated to suit the character of the wash-dirt. This made it possible for smaller grains of ore normally lost to be recovered. This advantage alone ensured the use of the *lanchnut* in lower grounds where the ore was in finer grains, but it became indispensable in heavily worked tin-fields such as Larut where the water had to be economised for driving the water-wheels and where dressing in the races of one mine might have blocked the flow of water to another mine below. De la Cruz, "Some Account of Mining Districts of Lower Perak", p.47.

<sup>19</sup> The first centrifugal steam-pump was installed at a cost \$4,340, approximately twenty times the cost of the ordinary *chin-chia*. In addition, the monthly working cost of the steam-pump was \$300, of which about three-quarters was spent on fuel. This compared to the monthly operating cost of \$16 for the *chin-chia*. A further factor inhibiting the widespread adoption of steam-pumps was the difficulty of transporting this bulky machinery to the mining regions before the completion of the Kinta railway in 1895. Doble, *Tin Mining in Larut*, pp.29-30.

<sup>20</sup> The usual shaft-mine consisted of two compartments separated by planks with a miner working in each compartment. In wet ground the shaft was divided into three compartments with the centre divisor at a lower level than the others to serve as a sump for excess water. This water was baled out in bamboo buckets and tins. Crude windlasses were used for hauling the tin-bearing *karang* to the surface.



methods, the *karang* was hoed from the hillside with *changkols* and thrown into a stream to liberate the tin-ore from the waste material. No machinery was used and often a single miner could engage the technique, although it was likely that as many as six miners would work on one deposit. On the whole, *lampanning* was also a very inefficient method of recovery and only *karang* with a very high percentage of tin-ore was worked.<sup>21</sup>

Overall, the significant characteristic of Chinese mining methods was that they were generally small-scale and labour-intensive.<sup>22</sup> Except for the *chin-chia* (and in some later cases the steam-pump), machinery was conspicuously absent and the Chinese miner was relied upon for everything.<sup>23</sup> Moreover, labour was not highly specialised. Nor did it require any extensive organisation and supervision. The mainstay of production was the Chinese miner working with a “hoe which performs the dual role of pick and shovel being used to break the ground. The broken ground [was] removed in small flat baskets, one coolie carrying two baskets at a time, suspended from a yoke-stick resting on the shoulder.”<sup>24</sup> The earth was carried to the mine surface up notched beams (known as Chinese ladders). The tin-ore was concentrated and dressed on the surface. The quantity of earth carried by each miner averaged about one cubic foot of clay soil per trip. In this way 100 coolies steadily employed could work 2 or 3 *orlongs* of tin-land in a year. This quantity produced 250 *baharas* of metallic tin.<sup>25</sup> Importantly, this labour-intensive production technique

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<sup>21</sup> In a lease of ten acres on a hillside only one quarter of an acre could be profitably worked by *lampan* methods. Not only was a high percentage of the ore lost in the stream, but because the miners selected to work only those proportions of ground that paid the most, the ground under *lampanning* was never properly worked out. Although this did not necessarily mean an ultimate loss of the residual tin, it did mean that unless more efficient and lower-cost methods could be developed to re-work these areas, the residual tin would remain temporarily lost to the industry. Yip, *The Development of the Tin Mining Industry*, p.87.

<sup>22</sup> In 1850 the average number of coolies on the mines in Malaka was 70-80 men. In 1862 the average number of coolies employed in 12 of the mines in Larut averaged 71 labourers per mine. Among the larger *lombong* mines labour accounted for up to 80 per cent of the total cost of production; in smaller mines this proportion was likely to be even greater. As late as 1906 it was recorded that in the Kamunting tin mine, the largest *lombong* mine in the country with a monthly output of 1,500 pikuls (nearly 90 tons) of tin-ore, labour accounted for \$32,000 out of a monthly expense of \$40,000. *Ibid.*, p.85; Deposition of Larut Miners. E. in Gov. of Indian Government, 16 June, 1862 in CO 273/5.

<sup>23</sup> Indeed, the *chin-chia* had been introduced as a complement to rather than a substitute for labour. As late as 1874 it was recorded that, “the process of tin mining in Larut is very simple. The mine is simply an excavation in the form of a square, averaging an acre in extent and penetrating perpendicularly to the strata containing tin. This is generally found in the plains at a depth of from 20 to 50 feet, though at the foot of the hills it lies within six feet of the surface. With the exception of a simple but ingeniously contrived water-wheel, no machinery is used in the mine.” *Straits Settlements Gazette*, 1875, p.227.

<sup>24</sup> T.F.Flower-Ellis, “A Brief Account of the Malay Tin Industry”, *Proceedings of the Chemical and Metallurgical Society of South Africa*, Vol.2, 1897-1899, p.8. See also Pike, “Mining in Perak”, p. 96; Hampton, “Tin Deposits of Perak”, p.146; Doyle, *Tin Mining in Larut*, pp.12-13.

<sup>25</sup> 1 *orlong* = 1<sup>1</sup>/<sub>3</sub> acres.

allowed for rapid movement from one piece of rich tin-land to another. It also provided a ready reserve of fighting men who were available at short notice.

## II. WORKING CONDITIONS:

It has been commented that Chinese mining labourers were among the most exploited of any of the immigrants to Southeast Asia during the 19th century.<sup>26</sup> Section 2 will examine this contention with respect to Chinese labour in the Malayan tin mining industry. Emphasis is placed on business organisation and the pattern of employment in the mines; the conditions of immigration; and the living and working conditions experienced by the miners.

### *Business Organisation and Patterns of Employment*

The type of business organisation in the mines contributed significantly to the conditions of tin mining labour by setting the structure within which the labourers worked and, importantly, by determining the pattern of employment. Broadly, business organisation in the Chinese mines throughout the 19th century can be divided into three periods: (i) the Early Chinese period, 1824-1850; (ii) the Age of Great Capitans, 1850-1880; and, (iii) the Rise of Kinta, 1880-1900.<sup>27</sup>

#### *(i) the Early Chinese Period, 1824-1850.*

As previously outlined, the small number of Chinese miners who ventured into the interior Malay States in the early decades of the 19th century did so at the invitation of Malay chiefs. These miners worked for a percentage of the tin they produced. In these early mining centres the economic basis of enterprise was the *ka ngsi*, each under its own respective *towkay* (boss) who

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<sup>26</sup> See, for example, Jennifer Cushman, *Family and State: The Formation of a Sino-Thai Tin-Mining Dynasty 1797-1932*, Singapore, Oxford University Press, 1991; Purcell, *Chinese in Southeast Asia*, p.15.

<sup>27</sup> These divisions are based on R.N.Jackson, "Changing Patterns of Employment in Malayan Tin Mining", *Journal of Southeast Asian History*, Vol.4, No.2, September 1963, p.1.

acted as intermediary between the miners and the local rulers.<sup>28</sup> The *kongsi* was both a commercial enterprise and a system of local government. In addition to its economic orientation enabling the pooling of labour and capital, the *kongsi* was also a mechanism by which Chinese immigrants could bind together as a means of defence and self-protection in the politically unstable Malay States. Normally, individuals working in each *kongsi* were of the same linguistic group, often originating from the same community or regional area in China. These miners were dependent on the local Malay economy for rice and other supplies.<sup>29</sup>

While very little has been written about the pattern of employment in the tin mines during the early Chinese period, it is generally recorded that the miners worked for long hours but received relatively high wages. A contemporary account given by Newbold in 1839 describes a day's work in the Sungei Ujong mines as follows:

The Malays and Chinese employed in the mines were liberally paid. The rate of their wages will in another instance exhibit the different prices set upon the services of the two classes; a Chinese being paid at the rate of five to eight dollars per mensem; and a Malay from three to five only.

From daybreak to 7 am [the miners] are employed in emptying the mines of the water which accumulates during the night. From 7 to 8 they rest and breakfast. At 8, the process of digging out the earth and ore is commenced. At 11, they go to dinner, and return to work again about 1pm. At 5, their labour ceases for the day. No work is done at the periods of the new and full moon.<sup>30</sup>

(ii) *The Age of Great Capitans, 1850-1888*:

It was previously noted that from about 1840 Chinese merchants in the Straits Settlements began to advance money to the Malay chiefs to work newly discovered deposits. In return for the loan the merchants received all the tin-ore produced in the mines. Gradually, the merchants moved to finance individual tin miners through a system of direct advances. By 1850 both the ownership

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<sup>28</sup> All pioneer Chinese enterprise, whether mining or agricultural, was organised along *kongsi* lines. Literally meaning "public management", *kongsi* was the generic term for a range of social and economic configurations that included everything from a business partnership to clan and regional associations. The *kongsi* signified a kind of corporation or, most correctly, a "company" in which a group of individuals pooled economic resources. Each participant thus received a share in the enterprise. See Wang Tai Peng, "The Word *Kongsi*, A Note", *Journal of the Malaysian Branch of the Royal Asiatic Society*, Vol. 52, No. 1, 1979, pp. 102-105; Jackson, *Planters and Speculators*, p. 3.

<sup>29</sup> A detailed analysis of the interaction between the Chinese mines and the local Malay economy is given in Sullivan, *Social Relations of Dependence*, pp. 39-44.

<sup>30</sup> Newbold, *British Settlements*, Vol. II, p. 100.

of the mines and the control of production was monopolised by a few Chinese capitalists. These capitalists were called “Capitan China” and their monopolisation of production characterised the “Age of Great Capitans” that lasted until the 1880s.<sup>31</sup> In Selangor the most famous “Capitan” was Yap Ah Loy.<sup>32</sup> In Larut the most famous “Capitan” was Ah Quee (Chung Ah Kwee):

The four largest and richest mines in the Assam-Kumbong section belong to one firm, the Hap Seng Kongsee, which employs upward of 600 coolies. But the largest mine of any in the country is owned by the Kong Loon Kongsee, in Kamunting, under the direction of an enterprising Chinese gentleman Capitan Ah Quee... There are 300 coolies employed on this mine, which is the highest number of all the workings.<sup>33</sup>

Business organisation during the Age of Great Capitans continued along *kongsi* or *ta-kong* lines. However, as the scale of operations increased the Chinese capitalists in Singapore, Penang or Melaka did not, as a rule, finance the tin miner directly. Instead this was done through a middleman or mines advancer in the Malay States.<sup>34</sup> When a mines advancer made a loan to a tin miner the practice was known locally as *labor*.<sup>35</sup> In principle, the system worked as follows. A miner with some capital acquired some tin-bearing land and a mining lease. He then collected or imported a labour force and installed mining equipment, drainage and the labourers’ huts. Because the mine-owner could usually do no more with limited capital, a bargain was then struck with an

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<sup>31</sup> The term Capitan China originated in the China ports where men of wealth, prestige and influence were recognised by both the ruling authorities and the general community as an important instrument of indirect rule. In the Straits Settlements the Capitans antedated colonial rule. During the period of the Melaka Sultanate the rulers administered foreign merchants through headmen, or “Capitans”, appointed by each community. The system was continued throughout the period of Dutch occupation. Early British administration in the Straits also ruled the Chinese indirectly through the Capitans. Although the system was officially abolished in 1825 in the Straits, the Capitans continued to hold a significant position in the Chinese community, particularly in the interior Malay States. See Chan Gaik Gnoh, “The Kapitan China System in the Straits Settlements”, *Malaysia in History, Journal of the Malaysian Historical Society*, Vol.25, 1982, pp.74-80; C.S.Wong, *A Gallery of Chinese Kapitans*. Singapore, Oxford University Press, 1963

<sup>32</sup> Yap was one of the few immigrant mining coolies to become highly successful. See Middlebrook, *Yap Ah Loy*, pp. 26-32; Sharon A.Carstens, “From Myth to History: Yap Ah Loy and the Heroic Past of Chinese Malaysians”, *Journal of Southeast Asian Studies*, Vol.19, No.2, September 1988, pp.185-207.

<sup>33</sup> Doyle, *Tin Mining in Larut*, pp.6-10.

<sup>34</sup> There were obvious reasons for this. A loan to a tin miner was a risky business since the average Chinese miner was seldom rich enough to provide any sound security for a loan: all he possessed were his *chin-chia* and various digging tools used to work the mine. The repayment of the loan depended entirely on the amount of tin produced. In such situations constant personal contact between the financier and the miner was essential to prevent default. But the Chinese capitalist in the Straits Settlements lived too far away, and the Chinese tin miners in the Malay States were too widely scattered, for this to be feasible. Thus the mines advancer in the Malay States fulfilled the crucial function of being on the spot to provide the necessary contact with the tin miner. Financing the tin miners through advances to the mines advancer was a less risky business for the Chinese capitalist in the Straits Settlements.

<sup>35</sup> A detailed description of the *labor* system is given in Yip, *The Development of the Tin Mining Industry*, pp.90-94.

advancer to provide the working expenses of the mine. The terms of the loan normally included the right of the advancer to claim one-tenth of the tin output; the right to buy the remaining tin at a price four per cent below the market rate; the right to supply money loans, provisions and other necessities to the labourers at above market rates; and first option to buy the mining lease should the mine-owner decide to sell.

An important difference in the *kongsi* system during the Age of Great Capitans was that, in addition to supplying the finance for mining operations, the Capitans were also involved in the supply of labour to the mines. This was primarily indentured *sin-kheh* labour that had been imported under the credit-ticket system. Free labourers or *lau-khehs* (those labourers who had completed their original indentured contract but who had chosen to remain on the mines for a specified period of time), were engaged in the mines for only relatively short periods. The general situation was that the capitalists in Singapore, Melaka and Penang financed the importation of labourers from China and the provision of food and supplies to the mine. The mine advancers in the mining districts received the labourers and the supplies and transacted them to the headmen in charge of the individual mines, from whom the labourers then received their food, took their orders and protection, and for whom they fought in common cause when called upon.

Under this system the miners had little choice but to live in a social and economic order completely dominated by the employer and the headman of the mine. The life of the *sin-khehs* was particularly circumscribed by the fact that they were bound to work for their employer until the expenses incurred during their passage had been repaid. The basis of the relationship was not a formal contract but a verbal promise to the employer regarding remuneration. This placed the coolies at the mercy of their employer. As the usual "cost of passage" was not in any way the prevailing price of *sin-kheh* labour due to speculation, it was usual for an employer to require the *sin-kheh* to work until it was thought that at least enough work for the price paid to the ship-owner or private recruiter had been obtained. Generally, the labourers were paid little or no wages beyond the food they ate and the clothes they wore. As a result, many coolies attempted to abscond from

the mines. But, since communications were difficult, successful escape from a *kongsi* was rare; it was inevitable that the labourers were recaptured. The punishment for attempting to abscond from a mine was flogging.

The Capitan's control over labour was centred on their connections with secret society organisations of which they were usually the headmen. With rigid laws and the means of enforcing them, the secret societies provided Chinese immigrants in the Straits Settlements with a ready-made organisation whereby they could govern themselves and their community as an *imperium in imperio*.<sup>36</sup> More importantly, they were a mechanism for the effective control of labour. The secret societies became intimately involved in the recruitment and employment of labour. Membership of one of the secret societies was obligatory for newly arrived immigrants.<sup>37</sup>

It was a matter of course that when the Chinese capitalists began to speculate in the mines in the Malay States and to import immigrant labour on a large scale, the secret societies would follow. All tin mining *kongsis* became associated with one or other of the Straits Settlements secret societies that established branches in the Malay States.<sup>38</sup> It was through this network that indentured labourers were imported for the mines. From the labourer's perspective the secret societies provided the institutional framework that governed the economic and social order within which they lived and worked. They were also the means by which, in the last resort, they were

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<sup>36</sup> The secret society in the Malay States was believed to have been an offshoot of one parent society, the Triad (also called the *Tien ti Hui* or Heaven and Earth Society), founded in China. The societies became powerful under the liberal British administration. Triad lodges were founded in Penang in about 1790 and were firmly established in Singapore by 1825. In the course of the 19th century several secret societies hostile to the Triad emerged. Detailed studies of secret society organisations in the Straits Settlements and Malay States are given in Blythe, *Impact of Chinese Secret Societies*; M.L. Whynne, *Triad and Tabut- A Survey of the Origin and Diffusion of Chinese and Mohammedan Secret Societies in the Malay Peninsula, AD 1800-1935*, Singapore, Government Printing Office, 1941; Leon Comber, *Chinese Secret Society in Malaya, A Survey of the Triad Society from 1800 to 1900*, New York, Monograph of the Association of Asian Studies, No.6, 1959; W.A. Pickering, "The Chinese in the Straits Settlements", *Fraser's Magazine*, October 1876, pp.438-445; Yen Ching-Hwang, "Early Chinese Clan Organisation in Singapore and Malaya, 1819-1911", *Journal of Southeast Asian Studies*, Vol.12, No.1, March 1981, pp.62-87.

<sup>37</sup> In contrast to their counterparts in China, the secret societies in the Straits Settlements and Malay States were characterised by economic rather than political orientation centred on the overthrow of the Ch'ing dynasty in China. Although a political element ideally continued to exist among the early settlers, the societies were more like trade unions, freemasons or mutual benefit clubs. The societies concentrated on looking after the welfare of newly-arrived settlers, fitting them into the existing political and social structure. Blythe, "Historical Sketch", p.107. In 1841 Newbold recorded that the *Hai San* and *Ghee Hin* societies "...are scattered all over the settlements...Every stem and every branch has its headman who is designated senior brother. Emigrants from the hills of Tang (China) are called *Sin-kheh*. As soon as they arrive in any settlement the brotherhood send persons to invite them to join the confederacy. If they decline, they are forthwith persecuted...". Quoted in Purcell, *Chinese in Malaya*, p.158. See also Jackson, *Immigrant Labour*, pp.46-47; Khoo, *The Western Malay States*, pp.111-118.

<sup>38</sup> The societies were at their strongest in the Malay States where Government was weakest, as in Perak and Selangor before British intervention. By 1860 the Triad and its rival the *Hai San* had lodges in each of the tin states of Perak, Selangor and Sungai Ujong. These societies were connected with, or controlled by, their counterparts in the Straits Settlements. In 1884 it was recorded that the headmen in Larut and Selangor were appointed by the societies in Penang, Melaka and Singapore. These headmen had great power in respect of having a more independent command and being the recipients of initiation fees and subscriptions. Jackson, *ibid.*, p.50.

disciplined. In fact the social and economic “closed shop” that the societies enforced by internal discipline amounted to serious oppression. The secret societies enforced their own system of law and order so that the labourer was both controlled and protected. Indeed, the labourer could not hope to survive in the politically unstable Malay States without the protection of one of the societies.

(iii) *The Rise of Kinta, 1880-1900:*

Following the opening of the Kinta tin-fields in the 1880s there was a dramatic change in the business organisation and pattern of employment in the mines. The bulk of the workings in Kinta were not directly dominated by a few capitalists. Rather, they were operated by a large number of individual miners or groups of miners who had embarked on independent ventures. These ventures tended to be small-scale and offered labourers a life of greater freedom through the adoption of liberal labour policies. The change in business organisation was stimulated by the settled political conditions concomitant on British intervention in the Malay States.<sup>39</sup> More importantly, there had developed by the 1880s a large body of *ex-sin-khehs* who had served their period of indenture but continued to work as mining labourers in their own enterprises.<sup>40</sup>

Enterprise in these small individual operations was organised under the tribute or *hun* system (also known as the co-operative or *chabu'* system). The system was characterised by a prearranged distribution of profits among participants in the venture - the owner of the mining land, the advancer and the miners.<sup>41</sup> Thus, under the tribute system the workers were not labourers in the accepted sense of persons who sold their labour for a fixed remuneration, but were speculators who

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<sup>39</sup> The introduction of technical advances such as the *lanchnut* also contributed to the ease in which small groups of miners could “go it alone”. In 1891 it was estimated that ten miners working on surface soil with the *lanchnut* extracted an average of 25 pikuls of tin sand daily for a period of 15 days. The tin sand was sold for \$6,750 which worked out at \$675 each miner for a month's work. Wong, *The Malayan Tin Industry to 1914*, p.63.

<sup>40</sup> As shown in Table 10 above, the numbers imported under the credit-ticket system had begun to decline by 1880.

<sup>41</sup> *Hun* was the local term for “share”. The origin of the *hun* system is difficult to ascertain but a contemporary Chinese miner vouched for the fact that it developed later than the *ta-kong* system. The system was recorded to be operating in Larut in 1875 and throughout Perak by 1880. In Sungei Ujong it was noted in 1883 to be “everywhere to a certain extent”. In Selangor, the system was observed in 1885 to exist contemporaneously with the *ta-kong* system, but it was not until the 1890s that tribute mining became popular. Wong, *The Malayan Tin Mining Industry to 1914*, p.62; *Labour Commission Report 1891* in CO 275/41.

risked their labour for economic gains.<sup>42</sup> The system generally operated as follows.<sup>43</sup> A mine-owner who wished to avoid the risk incident to working his property would allow a gang of mining labourers under a headman (known as the *towkay lombong* or *hang kong*), to work the mine upon the payment as tribute of a fixed percentage of the tin-ore recovered. The percentage demanded by the mine-owner depended upon the richness of the deposit and the ease with which the *karang* could be raised and treated, but was usually ten per cent of the gross value of the output if the mine-owner provided only the labourers' huts, the *chin-chia* and digging tools, and 20 per cent if a steam engine and centrifugal pump were provided.

Having secured a mine the headman would seek a mines advancer as "backer" (if the mine-owner was not one already), to meet the working costs of the mine.<sup>44</sup> The advancer monopolised the supply of opium and provisions to the labourers on credit, and possessed the right to buy the ore at current rates for smelting.<sup>45</sup> Sometimes the advancer allowed the labourers to sell their tin to smelters of their choice subject to their handing over the proceeds of the sale. The advancer kept all the accounts which were settled at the end of the 8th and 12th month after the mine had been opened. Out of the receipts from the sale of the tin-ore the mines advancer paid tribute to the mine-

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<sup>42</sup> Despite the prevalence of the *hun* system during the 1880s and 1890s, tribute labourers were not legally recognised until 1904. At this time they were described as labourers who worked a mine for personal gains, rationing for themselves the value of the total output subject to paying the mine-owner and advancer. Tribute miners preferred to regard themselves as "shareholders", not in the sense of holders of share capital but as partners having a share in profits by virtue of their labour. They also had the attributes of employers in that they could engage contract workers (to keep the deadwork of the mine ahead of the productive work) and skilled labourers such as carpenters and blacksmiths. The wages of these employees were paid out of the tribute miners' share of the profits, and were given prior claim. Wong, *The Malayan Tin Mining Industry to 1914*, p.61; Ta Chen, *Chinese Migrations*, pp.86-87.

<sup>43</sup> First-hand accounts of the operation of the *hun* system are given in Jackson, *Immigrant Labour*, pp.85-90; De la Croix, "Some Account of the Mining Districts of Lower Perak", pp.34 *et seq.*; J.C. Pasqual, "Chinese Tin Mining in Selangor", *Selangor Journal*, pp.43-45; Doyle, *Tin Mining in Larut*, pp.6-10.

<sup>44</sup> In the case where the mine-owner and the mines advancer were one and the same person, the mines advancer would be providing not only the variable capital (ie. provisions to the mining labourers), but also the fixed capital (ie. the *chin-chia*, digging tools etc.), and land (ie. the mine). Consequently, the returns to capital and land for the advancer were often as high as 50 per cent of the total gross value of the output of the mine. The system of credit enabled capital to be drawn anywhere from successful merchants to petty shopkeepers. Furthermore, the system enabled larger merchants to spread their investment risks over a number of mines. Thus in 1893 of the four Perak advancers who commanded sufficient capital to invest in more than five mines simultaneously, two were each committed to nine mines, one to ten individual mines and the other to nineteen mines. Generally, the richer advancers speculated in the large and deep mines from which the petty shopkeepers were precluded by the larger initial outlay. See Yip, *The Development of the Tin Mining Industry*, p.92; Wong, *ibid.*, p.63; Pasqual, *ibid.* pp.25, 100.

<sup>45</sup> This latter situation was connected with the advancer's subordinate role as tin-ore dealer, whether as a licensed dealer or as an agent. Before the establishment of the agencies of the foreign-owned Straits Trading Company in the main tin mining districts, the role of the mines advancer as tin-ore dealer lay in the purchase of tin-ore from the mines and delivery to financiers in the Straits Settlements. The chief source of supply was from those mines that had borrowed from the advancer under the *labor* system, but a significant proportion also came from other tin-ore dealers who, in their capacity as mines advancers, had borrowed from the original advancer under the *banji* system. Early tin-ore dealing by the Chinese also included the smelting of tin-ore, but the method employed, besides being extremely wasteful was so inefficient that the tin usually had to be re-smelted in Singapore or Penang before being exported. Overall, the mines advancer held the monopsony of the local market for tin-ore. The extent of this monopsony varied in direct proportion with the size and extent of the advances made. Since a tin-ore dealer usually purchased ore from those mines whose operations were financed by him, it invariably followed that every successful tin-ore dealer was at the same time an important mines advancer.



owner, who had prior claim on the profits. The mines advancer had second claim on the profits and deducted the amount charged by him for provisions.<sup>46</sup> The balance was distributed to the labourers among whom the headman was classed as one. Payment was made according to “shares” with the headman usually holding two or three shares to the labourers’ one share.<sup>47</sup> In the first settlement the labourers received seven-tenths of their earnings. The balance, if any, was paid in the second settlement. If the labourers received nothing in the first settlement, they had to continue working until the second settlement. If the mine was worked out before the eighth month the accounts would be settled after the sale of the ore. If it was a loss, the labourers discharged their debts to the extent of the ore that had been extracted. In such an event the labourers had to forego the value of their labour, but, in the meantime, had been fed, housed and clothed.

The popularity of the tribute system with the Chinese lay in the fact that there was always the possibility of “striking it rich”.<sup>48</sup> The *hun* system was found to be by far the most satisfactory form of employment with the labourers usually working harder than under the *kongsi* system. The overwhelming preference for tribute mining also shows the enterprise of Chinese tin mining labour. Every *hun* labourer was, in the sense of risk-bearing and decision-making, an entrepreneur. Thus despite possessing little or no capital of their own, the labourers were prepared to invest their labour in a mining venture in the hope of larger profit in return.

The Capitans China opposed the development of tribute mining in the early 1880s because it led to increased numbers of workers absconding from their mines.<sup>49</sup> The workers were induced to abscond by the higher potential wages and better conditions offered under the tribute system. In

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<sup>46</sup> The tribute miners had the right to change their advance if the original advancer could or would not provide adequate provisions and loans. Where there was more than one advancer, the claims on the proceeds were in the order of priority of the latest advancer being first and the first advancer last. This was based on the argument that the second advancer had, by virtue of his opportune support, saved the mine from being a total loss to the original advancer.

<sup>47</sup> This arrangement was based on the argument that the *uang kong* managed the day-to-day work of the mine and was responsible for the behaviour of the workers to the other members of the tripartite agreement. In large mines the headman often delegated some authority to one or more assistants who likewise obtained more than one share in the profits.

<sup>48</sup> In 1891 a tribute worker mining on land of average richness usually earned as much as a wage labourer in a *ta-kong* mine, but might easily get thrice as much if the mine turned out to be on land of higher tin content.

<sup>49</sup> In one instance it was recorded that “the Larut coolies ran away in hundreds and began to work in smaller *kongsis* in Kinta under new *lowkays*, at first under very similar conditions to Larut but, as roads and bridle-paths were opened up and facilities for absconding became greater, under much easier circumstances than heretofore”. . . *Annual Report FMS, 1904*, quoted in Jackson, *Immigrant Labour*, pp.81-82.

Perak, the Capitans persuaded the Government to introduce a “discharge-ticket” system of registration for mine workers. However, the system generally proved ineffective and was quickly abolished. A contemporary account recorded:

Under [the discharge-ticket system] every coolie signed a contract for a year, and on leaving at the end of the year had to receive a discharge-ticket from his *towkay*, without which he could not leave the kongsi house, nor could he re-engage in another mine unless he produced a ticket from his last *towkay*. There were to be half-yearly settlements in the presence of the Protector<sup>50</sup> or a member of his staff, and quarterly musters of the coolies in each kongsi by the police, who were to enquire into any case of ill-treatment of coolies, etc., and any coolie found on the road without a discharge-ticket was liable to arrest by the police, and there were a number of other elaborate rules and regulations. The system was doomed to failure from the day it started---and was after some time abolished.<sup>51</sup>

When the discharge-ticket system proved ineffective, the general system of employing labour in the *kongsi* mines altered to take account of the new situation. The large capitalists, in order to keep their workers, were forced to adopt the *nai-chiang* and *kongsi-kung* systems. *Nai-chiang* labourers were employed on piece-work to strip and uncover the mining area.<sup>52</sup> Many of the newly-arrived labourers from China who worked as *nai-chiang* were not indebted to their employers for the passage money, “the great majority [being] men who have come on their own account to friends and fellow-clansmen, with money sent them by people here”. *Kongsi-kung* labourers (some *sin-khehs* but mostly wage coolies), were employed on day wages lifted out the tin-bearing *karang*.<sup>53</sup> Moreover, legally enforceable contracts between employers and labourers were made compulsory from 1877 onwards. All mine labourers were required to sign a contract before leaving the Straits ports. Under the contract the *sin-kheh* was bound for one calendar year and received free food and

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<sup>50</sup> i.e. Protector of Chinese. The establishment of the Chinese Protectorate will be discussed in greater detail in the following section.

<sup>51</sup> *Annual Report Federated Malay States, 1903*, p.10, quoted in Jackson, “Changing Patterns of Employment”, p.117. See also Gov. to Sec. State, 28 December, 1882 in CO 273/117.

<sup>52</sup> The removal of the overburden was usually contracted out at piece-rates to a gang of labourers employed through a contractor. The labourers were paid per *chiang* (a Chinese measurement of earth of 1,350 cubic feet). They were expected to work for 22 days per month and for 7 hours each day. The employer provided rice and the labourers were obliged to buy their requirements of opium, tobacco and oil from the employer. *Nai-chiang* labourers were normally the least skilled of all mining labour.

<sup>53</sup> *Kongsi-kung* labourers were considered skilled workers and received a fixed monthly wage but were actually paid only once every six months after each half-yearly sale of tin-ore. They were provided with free food by the employer but had to purchase their own clothing, opium and any other luxuries usually on credit from the employer. These advances were deducted from the half-yearly wage settlement. *Kongsi-kung* labourers worked a seven-hour day. If they wished to work overtime they could start a mine of their own away from the main mine. According to practice the tin-ore they produced had to be sold to the employer. In another system of overtime work a coolie worked so long as one joss-stick burns for so many cents. A joss-stick normally burned for half an hour.

accommodation, some clothes and a fixed wage.<sup>54</sup> The labourer was required to work eight hours a day and for overtime work, which could be done only on agreement between the employer and employee, at the payment of 10 cents per hour. The labourer was required to work at least 24 days a month and faced a penalty of a fine of 10 cents for each day's absence. In the event of illness the employer would bear the loss of labour to a maximum of thirty days. Beyond this, or if the labourer had brought the illness upon himself (for example through the contraction of venereal disease), the labourer was required to make good the days of illness in addition to paying the employer 15 cents as cost of his food for each day's absence. The conditions of the *lau-kheh's* indenture were similar except that he received a cash advance from the employer at the time of signing the contract. This advance was to be repaid during the duration of the contract by monthly deductions from wages. Neither wages nor the recoverable advances were fixed.

By 1903 there were 223,600 Chinese engaged in the tin mining industry in the FMS. This figure included labourers employed in cutting timber and firewood, crushing stone, washing tin and various other trades connected with the industry. Those engaged in actual mining work numbered 186,337.<sup>55</sup> Of these 65,656 were employed under contracts (either *sin-khehs* under initial contracts of one year, or *lau-khehs* who had signed on for a further contract); 29,015 were employed as wage-earning labourers (both *kongsi-kung* and *nai-chiang* labourers); and 91,666 were tribute labourers.<sup>56</sup>

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<sup>54</sup> This development was consequent upon the passing of the 1877 Ordinance, details of which are given in the following section. At the time of the 1890 Labour Commission this wage was \$42 per year. Of this amount \$22 (to be paid in two equal instalments of \$11 each), was to be deducted as passage-money with the remainder being given to the labourer. Examples of mining contracts are given in Appendix E.

<sup>55</sup> Of this number 143,028 Chinese were engaged in underground mines, 20,918 in hydraulic mines, and 22,319 in *lampan* mines.

<sup>56</sup> FMS, *Mines Department Report, 1904* quoted in Yip, *The Development of the Tin Mining Industry*, Table 1-6, p.79.

### *Conditions of Immigration*

Of the immigrant mining labourers the *sin-kiehhs* were the most exploited and experienced the poorest conditions because of their indentured status. As indentured labourers they faced abuse and hardship even before they boarded the ships that would take them to the Straits Settlements.<sup>57</sup> Most significantly, organised extortion became widespread with the increased demand for labour to the *Nanyang* and elsewhere. In recruiting coolies the sub-ordinate brokers in particular had the upper hand. Like the principal brokers, the sub-ordinate brokers came mostly from the members of the lower classes and had a burning desire to “get rich quick”. The demand for coolies was so large and the business of supplying them so lucrative that the brokers in the Chinese ports were quite unscrupulous in their methods of recruitment. Many accounts were recorded of prospective Chinese emigrants to the Straits Settlements (and elsewhere) being enticed by immoral means.<sup>58</sup>

The broker’s power lay in their monopolisation of news about the demand for labour and information about foreign lands. Vivid pictures were drawn by recruiters of the lucrative work awaiting Chinese coolies in the Straits Settlements and Malay States. Versed in local dialects the brokers also became interpreters of the contents contained in labour contracts and could manipulate the prospective emigrants to their advantage. Secondly, the sub-ordinate brokers had the financial backing of principal brokers and coolie agents that enabled them to satisfy the immediate material needs of the prospective emigrants.<sup>59</sup> Thirdly, the sub-ordinate brokers often held considerable power in the secret society organisations that operated in the coastal ports, in

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<sup>57</sup> Detailed accounts of the conditions of immigration are given in Crawford-Campbell, *Chinese Coolie Emigration*, pp.2-20; Yen, *Coolies and Mandarins*, pp.57-73. See also Potts, *The World Labour Market*, pp 85-91.

<sup>58</sup> For example, many coolies were lured to the city and introduced to gambling houses where they lost all their money. The recruiter or lodging-house keeper would then cajole or force them to emigrate in order to pay their gambling debts. Blythe, “Historical Sketch”, p.69. In 1852 a proclamation of scholars and merchants in Amoy described that the sub-ordinate brokers “...would follow the course of their interest wherever it might lead, without any scruple. They have daily in the country, along the coast, sought about in all directions for persons whom they might entice away, with the end of making gain for themselves by the detriment of others”. Quoted in Yen, *ibid.*, p.89. In 1853 the brokers were given a capitation fee of \$3 per head but, in the absence of checks the brokers often also appropriated (on the basis of defraying expenses), the money advanced to the emigrants which at the outset was \$5 each but in a period of high demand was as much as \$100. Purcell, *Chinese in Southeast Asia*, p.286.

<sup>59</sup> The provision of food, clothes and lodgings was a very significant incentive to many paupers who roamed the coastal cities seeking employment, food and accommodation. In 1852 a contemporary observer in Amoy noted that “one great temptation they [the sub-ordinate brokers] held out is that they at once offer to supply plenty of food and lodgings for the day to everyone willing to be mustered, whether he be eventually accepted or not...Fifty cash a day are allowed for each man who comes to the muster, a sum significant to provide him with rice and fish, and he is lodged at night in some...ruinous tenement rented by the crimp for a trifle...”. Quoted in Yen, *ibid.*, p.89.

particular Fukien and Kwangtung. The precise relationship between the sub-ordinate brokers and the secret societies is unclear but because both operated outside the law, and because the secret societies penetrated into the life of the lower classes, the brokers found in the societies the perfect organisational tool for recruiting operations and in obtaining information about prospective emigrants. The societies also enabled the brokers to act promptly in fulfilling their contracts by helping in the coercion and even kidnapping of coolies when necessary.<sup>60</sup>

Whether the coolies were pushed, dragooned, enticed or freely chose to emigrate, they travelled from China under conditions that had a distinct colouring of the slave trade and which justified the opprobrium *chue tsai* or “pig business”. Prior to the enforcement of ordinances in 1874 that regulated the number of immigrants to the Straits Settlements in proportion to the size of the vessel on which they travelled, many of the coolie ships were precariously overcrowded, especially the small sailing junks which had very high rates of mortality among the passengers.<sup>61</sup> Even the modest twelve square feet allowed by the Hong Kong Ordinance was provided only in a few ships; in general, the space allotted to the coolies was only eight square feet in slow sailing vessels.

On arrival in the Straits Settlements the indentured coolies were kept under restraint on board the vessels until claimed by employers. Those coolies unclaimed after a few days were taken to lodging-houses. To avoid the possibility of escape, restrictions were placed on the liberty of the new immigrants to such an extent as to constitute serious abuse.<sup>62</sup> Abuses were attached not only to the method of detention; the depot-keepers were unscrupulous and made large profits by

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<sup>60</sup> Yen, *Coolies and Mandarins*, pp.89-90.

<sup>61</sup> A contemporary account recorded, “...By their deaths, though there may be a loss of profit, there can be none of capital to the shipper. The men cost nothing and the more [he] can cram into his vessel the greater must be his profit. It would be a better speculation for the trader, whose junk could only carry properly 300 men, to take on board 600 and lose 250 on the way down, than it would be for him to start with his legitimate number and then land them all safely, for in the first case he would bring 350 men to market and in the other only 300.” Quoted in Crawford-Campbell, *Chinese Coolie Emigration*, p.4.

<sup>62</sup> For instance, in two lodging-houses visited by the Colonial Secretary and Straits Settlements Chief of Police in June 1876, it was recorded that the windows were barred to prevent exit and the doors guarded by a number of *samsengs* (fighting men of the Chinese secret societies). Fifty *sin-khehs* had been locked up in these houses for a week. *Ibid.*, pp.6-7. In other cases coolies were huddled together 40-50 in a room in which there was space for only 8-10. Siew Yoong Ng, “The Chinese Protectorate in Singapore, 1877-1900”, *Journal of Southeast Asian History*, Vol.2, March 1961, p.97.

encouraging the *sin-khehs* to gamble and by selling goods to them at high prices. The debts incurred by the *sin-khehs* from the advances given were recovered upon engagement by an employer.

### *Living Conditions and the Health of the Miners*

Conditions for the Chinese mining labourers did not improve once they were employed on the mines. The coolies worked under harsh conditions and were universally exploited. Yen Ching-Hwang argues that this exploitation was due to the fact that the Chinese immigrants did not bring with them a class structure.<sup>63</sup> Thus, where the employer-employee relationship was based on impersonal ties, it tended to be easily strained. When mine-owners recruited a number of coolies on contract, they saw that they were not as obliged to do as much for the labourers as they would for kinsmen, relatives or fellow villagers. This made the employers more exorbitant in their demands for working value from the labourers. On the other hand, the prevalence of indenture and the absence of labour organisation on the part of the labourers placed them in a disadvantageous position *vis-a-vis* the employers; being completely dominated by their secret societies the labourers could not organise into groups and possessed little bargaining power. Immigrant mine workers were therefore characterised by poverty, ignorance and transience.

The most widespread form of worker exploitation by mine-owners was the practice of keeping labourers in debt. The system that enabled this was known as the “truck” or “tommy” system. The practice was widespread in the tin mining areas throughout much of the 19th century, but was most prevalent during the “Age of Great Capitans”. In essence the truck system was characterised by payments to labourers in goods instead of money, or in money on the understanding that the labourers would purchase their provisions from the employers. Whether

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<sup>63</sup> Yen Ching-Hwang, *Class Structure and Social Mobility in the Chinese Community in Singapore and Malaya 1800-1911*, Adelaide, University of Adelaide Centre for Asian Studies Working Paper No. 15, 1983, pp. 11-12.

paid in cash or in kind, the labourers were exploited because they were made to pay exorbitant prices for their provisions. A contemporary account was made of the system operating in Larut;

All payments go through the *hang kang*...As might be expected, the coolies wages are paid differently, according to circumstances; some share in the results, others by petty contract or task, and some few by monthly wages. Individual earnings range from \$6 to \$8 per mensem, food and necessaries costing \$3 to \$4, leaving apparently a comparatively large balance, but from the objectionable custom of only adjusting accounts once a year, the unfortunate cooly is compelled to exist on supplies advanced at an enormous increase on the bazaar price, and as a consequence receives very little, if anything, at the final settlement.<sup>64</sup>

Furthermore, it was an inevitable rule that all advances of money and goods made to the coolies were charged with interest. An account of the truck system operating in 1897 recorded;

The mines were...almost without exception worked on the truck system, nine-tenths of the tin produced going to the coolie and one-tenth to the *towkay* who supplied the coolies with their food and stores at mining prices - ie. about double the market rates. The settlements were annual - at the Chinese New Year, when the accounts were made up, the coolies credited with nine-tenths of the amount of tin sold and debited with the amount of stores consumed, and received the balance, if any. If the coolies were in debt to the mine- and they very often were- they went on and worked for another year, and still another if they did not get out of debt... The hours of work were long, eight hours a day being the usual thing. There were few or no amusements. A few brothels in Taiping, but no theatres and very little gambling, except at New Year, so there was very little to distract the cooly from his work, and the few *towkays*, Ah Kwee and others, prospered exceedingly.<sup>65</sup>

The truck system was not confined to *kongsi* mines. Under tribute mining, tools and provisions were usually advanced to the coolies (or more correctly to the headmen), by the mines advancer. The provisions were debited to the miners' account. Small cash advances were also made. If the mine looked like being poor the workers would demand larger advances so that they could get as much as possible "while the going was good". As payment for interest the provisions and advances were usually charged at considerably higher than market rates. It was also customary for the advancers to have two sets of weighing scales; one calculated to give the advancer an advantage when issuing provisions to the miners, the other to give him an advantage when

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<sup>64</sup> Doyle, *Tin Mining in Larut*, pp.6-10. See also Owen, "Tin Industry of the Malay Peninsula", p.653.

<sup>65</sup> *Annual Report Federated Malay States, 1903*, p.10, quote in Jackson, "Changing Patterns of Employment", pp.115-16.

receiving the tin-ore.<sup>66</sup> Accounts were made up at the end of eight months and the share of profits due to the coolies was divided according to the number of days worked. The mines advancer first deducted the money owed by each miner on provisions advanced by him. In some cases the miners received nothing from the first settlement. A contemporary account recorded;

...the workers [on tribute] are supported during the preliminary period, which has to elapse between the breaking ground and getting out of the tin-ore, upon advances in money and kind made by an investor, to whom the tin, when won, has to be sold at a comparatively low price. He risks his money; they risk their time and labour. If the work is successful the advancer makes a large profit, both from the goods supplied (charged at the highest price which the miners will pay) and the profit in the re-sale of the tin, and the miners clear off their debt and are left a balance to the good.<sup>67</sup>

From the employer's perspective, the truck system was an integral part of the mining enterprise because it enabled a significant proportion of the wages paid to the labourers to be recouped. In this way many mining ventures which otherwise would have been closed, were able to remain in operation. As a result, many Chinese *towkays* became quite wealthy. This was particularly the case where they functioned as mines advancers, shopkeeper, and tin-ore dealer. The labourers on the other hand, were kept poor and in debt. The majority failed to realise their goal of returning to their homeland as wealthy men. In the last two decades of the 19th century the old mining customs, including the truck system, were crystallised into law in Perak and Selangor.<sup>68</sup>

In addition to the truck system, through which employers recovered most of the wages paid to their labourers, were the "revenue farms" - the monopolies of selling opium and spirits and the monopoly of operating pawnbroking and gambling houses.<sup>69</sup> Prior to British intervention these

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<sup>66</sup> This practice was an accepted custom recognised by every miner. Doyle, *Tin Mining in Larut*, pp.9-10.

<sup>67</sup> Quoted in Blythe, "Historical Sketch", 90.

<sup>68</sup> Between 1885 and 1888 various Regulations were issued in Perak, the main effect of which was to confirm existing practices, including truck and the flogging of coolies who absconded or refused to work. Selangor had similar regulations and in cases unprovided for by regulations the Magistrate could take evidence of mining customs in the locality and give judgement accordingly. *Labour Commission Report 1891* in CO 273/41.

<sup>69</sup> In 1897 Flower-Ellis observed: "the...organisation of labour which prevails amongst the Chinese mine-owners, who bring out the coolies on contract, supply them with rice and at the same time are the licensees of the gambling and opium dens where the coolie spends a great part of his leisure and the whole of his wages, so that it may pay a Chinaman to work an almost unpayable mine, and depend upon the vices of his workmen for his profits." Flower-Ellis, "A Brief Account", p.9-10. See also Memorandum on Perak Revenue Farms, 5 July, 1879, E. in Gov. to Sec. State, 5 August, 1879 both in CO 273/99; Confidential Diary of the Taiping Riot, E. in Gov. to Sec. State, 18 October, 1879 in CO 273/100; Notes on the Proposed Revenue Farms, E. in Acting Gov. to Sec. State, 5 August, 1879 in CO 273/99.



monopoly rights were held by Chinese capitalists in the Straits Settlements. After 1874 they were “farmed out” annually by the administration to leading Chinese *towkays* who were already wealthy and successful miners, advancers and mine-owners. The annual bidding for these farms was usually very keen and enormous prices were paid for their control.

Gambling and opium smoking in particular were two well-known vices of the Chinese.<sup>70</sup> The prevalence of these past-times was due to the social structure of the mining communities. As outlined earlier, Chinese mining populations were almost exclusively young adult males, the majority of whom were single. In the absence of the satisfaction resulting from the activities of normal family life, there was excessive indulgence in alternative forms of amusement. In terms of gambling, Swettenham described a scene in Kuala Lumpur in 1880 where, between the market and the river, “[stood] a huge Gambling Booth of jungle rollers roofed with *attaps*, in which literally all day and all night long gambling is pursued by a crowd of excited Chinese and Malays.” Isabella Bird, writing in 1883 of her visit to Seremban, also recorded that: “...In the middle of the village there is a large, covered, but open-sided building like a market, which is crowded all day- and all night too- by hundreds of these poor half-naked creatures standing round the gaming tables, silent, eager, excited, staking every cent they earn on the turn of the dice, living on the excitement of their gains- a truly sad spectacle”.<sup>71</sup>

The second major indulgence, opium smoking, appears to have been undertaken by the majority of Chinese labourers, especially those working in harsh and unhealthy places or under strenuous conditions such as existed in the mines. The majority of Chinese opium smokers acquired their habit after arriving in the Malay States. Many Chinese smoked opium “for fun”, as one of the few pleasures available in their harsh life they led. It was described as an indulgence

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<sup>70</sup> For example, Swettenham recorded: “With miners living in the jungle, with no sources of amusement open to them and plenty of time on their hands, no power short of an incorruptible police constable, attached to each Chinese, could stop [gambling and opium smoking].” Swettenham, *British Malaya*, p.256.

<sup>71</sup> Both quoted in Jackson, *Immigrant Labour*, p.53. See also *Report of the Commission Appointed to Inquire into the Question of Public Gaming*, 24 September, 1886, Confidential Memorandum on Gambling in Perak, 20 March, 1884, in Selangor, 30 November, 1894 and in Protected Malay States, 9 July, 1894 all in CO 273/202; High Comm. to Sec. State, 12 October, 1898 in CO 273/241.

“which, both in its sedative effects and in the restful position which it must be practised, appeals most strongly to the Chinese temperament”. For others opium was a medicine to cure aches and pains and to ward off disease particularly tuberculosis, diabetes, and malaria.<sup>72</sup> The most common method of taking opium was to smoke it three times daily after each meal, but many miners smoked only twice, and a few smoked once daily. Opium-smoking was described as an evil- “a confirmed smoker may have to spend a greater part of his income on opium, no matter how high the price may be, at the expense of other necessities of life, ...in some cases there is no doubt that the man is physically incapable of work without opium”.<sup>73</sup>

In terms of the health of tin mining labourers, the harsh conditions of working in the Malayan jungle took its toll on many. For much of the 19th century large numbers of Chinese labourers suffered health problems due to diseases and malnutrition; the annual death rate was as high as 50 per cent and was heaviest amongst coolies engaged in clearing the jungle and in opening new mines.<sup>74</sup> The principal causes of death were beri-beri, malaria and “fevers unspecified”, tuberculosis, pneumonia, and dirt diseases such as dysentery, enteric fever, typhus and ankylostomiasis (hookworm). The imbalance in the sex ratio among Chinese mining populations also meant that many miners frequented brothels in nearby towns and subsequently contracted venereal diseases.

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<sup>72</sup> A Chinese tin miner and planter of 28 years standing, who was himself an opium smoker, said in 1924: “The average mining coolie takes to opium smoking more for the sake of preserving his life than for playing with it. In the Federated Malay States there is primary jungle, primitive work and an unmodified climate...” *British Malaya Opium Committee Report* 1924, cited in Jackson, *Immigrant Labour*, p.55. Some interesting insights into opium and opium smoking in the Malay peninsula are given in Carl A. Trocki, *Opium and Empire- Chinese Society in Colonial Singapore, 1800-1910*, London, Cornell University Press, 1990; Cheng U Wen, “Opium in the Straits Settlements 1867-1910”, *Journal of Southeast Asian History*, Vol.2, No.1, March 1961, pp.63-68; Memorandum on Consumption of Opium in the Straits Settlements, 8 March, 1894 in CO 809/44; Memorandum on Opium in Perak, 15 April, 1891 in CO 273/178.

<sup>73</sup> Quoted in Jackson, *ibid*.

<sup>74</sup> Windstedt & Wilkinson, “A History of Perak”, p.82. It was noted earlier that in the opening of the mines at Ampang, 69 of the original 87 miners transferred from Lukut had died from fever within a month of arriving at the mine. In 1873 the Mentri of Larut stated that the emigration from China to Larut direct was about 2,000 to 3,000 coolies yearly but that about 10 to 20 per cent of these new immigrants died from fever when clearing the new jungle. Blythe, *Historical Sketch*, p. 11. Despite its significance, health conditions and general colonial health policy is a much neglected area. Some details can be found in Mills, *British Malaya*, pp.297-303; Lenore Manderson, “Health Services and the Legitimation of the Colonial State: British Malaya 1786-1910”, *International Journal of Health Services*, Vol.17, 1987, pp.91-112; J.Norman-Parker, “Estate Workers’ Health in the FMS in the 1920s” in P.J.Rimmer, L.Manderson & C.Barlow (eds.), *The Underside of Malaysian History*, Singapore, Singapore University Press, 1990.

Beri-beri was a particular disease common among mine workers.<sup>75</sup> In 1890 a Dutch doctor in Java connected the disease to dietary deficiency, in particular the predominance of polished rice which lacked the vitamins B1 and B2. In 1879 Doyle described that the miner's diet was very simple and "...generally consists of rice, with a little dried fish, and a small quantity of vegetables, with pork on feast days". In 1899 the Pahang Medical Department Report stated that "improper food arising from high prices and from the difficulties and costs of transport, played a part in the production of disease, particularly among settlers in newly opened and remote areas...a diet deficient in fat, fresh flesh, fresh vegetables and fruits are powerful predisposing causes of beri-beri among the settlers".<sup>76</sup> The second most common cause of death amongst miners was malaria, the incidence of which was associated with the proximity of water to the mining operations. Fever was always highest on newly opened mines. When the miners cleared the land they erected tunnels to bring the flow of water to operate the *chin-chia*. When these preparations were completed the miners then began to open the mine by enlarging the trial bore-holes. As the land was cleared and excavations began to deepen, water collected in the holes and hollows. This water provided excellent breeding ground for the mosquitoes that carried the malaria germ.

For their part the Chinese *towkays* seemed to care little about the health of their workers.<sup>77</sup> This was probably due to the fact that labourers lost through disease and poor health were quickly replaced by the constant supply of fresh immigrants.<sup>78</sup> Likewise, the British administration was slow to implement a sound health policy in the interior Malay States. The British Residents

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<sup>75</sup> In the period 1883-1884 there were over 22,000 cases of beri-beri in Perak with almost 3,000 deaths in Larut alone. In one epidemic the death rate in Taiping was 40 per cent. In 1896 there were 12,000 beri-beri cases in the FMS and in 1904 beri-beri was still the third highest cause of death, with a recorded 15 per cent case mortality rate. Manderson, "Health Services", p.103.

<sup>76</sup> Both quoted in Doyle, *Tim Mining in Larut*, pp 10, 104.

<sup>77</sup> In 1890, for example, it was reported that employers in Jelebu sent their sick workers to hospital on the verge of death because it was more convenient for them to die there. In 1893 it was claimed that employers in Ulu Selangor worked their sick labourers to the point of death and threw them out of the mines to die by the road side. *Annual Report Jelebu, 1890; 1893, British Parliamentary Papers: Accounts and Papers* cited in Yen, "Class Structure", p.12.

<sup>78</sup> Yap Ah Loy had established one of the first hospitals in the Malay States but this provided little attention beyond food and shelter. The hospital was maintained by a tax of \$1 on every pig slaughtered in the neighbouring mining area. Kennedy, *A History of Malaya*, p.227. Early hospitals were located in the administrative centres and mining towns. Many were financed partly by a special tax on Chinese miners; others were built and maintained by Chinese philanthropists and contributions from the Chinese community. Nearly all hospitals dispensed western medicines, although some private Chinese hospitals such as the Tung Shin Hospital in Kuala Lumpur also dispensed Chinese medicine.

provided medical facilities first to government employees. The first Government hospital, built at Taiping in 1874, offered medical facilities for up to 50 patients, as did a similar hospital established in Selangor in the same year. On the whole, however, hospital and medical facilities were seriously inadequate and poorly distributed; by 1896 there were only 15 hospitals in Perak, 14 in Selangor, 3 in Negri Sembilan, and 1 hospital in Pahang. Moreover, rural areas were not as well serviced as the towns. Overall, although some preventative measures were attempted (for example, through the establishment of a Sanitary Board in Kuala Lumpur that encouraged the use of piped water), major efforts to improve the general health of the population did not gain priority until the 1920s.<sup>79</sup>

### III. COLONIAL LABOUR POLICY AND CHINESE LABOUR:

The major factor contributing to the poor conditions and exploitation of Chinese tin mining labour was the absence of effective colonial government legislation regarding Chinese immigration and labour conditions. A brief study of the evolution of colonial labour policy with respect to Chinese labour therefore contributes significantly to a study of labour conditions in the mines.<sup>80</sup>

For much of the 19th century British policy towards the administration and control of the Chinese was one of limiting interference to a minimum and leaving the Chinese to their own devices. It was this non-supervision by the colonial authorities that enabled the secret societies to establish their *imperium in imperio* in the system of immigration and gave them an avenue to enforce strong control over labour in the mines, in particular the *sin-khehs*. This policy was in line with the government's aim to promote economic development by private enterprise by ensuring a continuous supply of cheap labour. Even in the late 1870s, when a series of policies was

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<sup>79</sup> See Manderson, "Health Services", pp.91-112

<sup>80</sup> Detailed studies of colonial government labour policy are given in Yip, *The Development of the Tin Mining Industry*, pp.73-77; Campbell, *Coolie Emigration*, pp.12-20. See also J.N.Parker, *Colonial Labour Policy and Administration: A History of Labour in the Rubber Plantation Industry in Malaya. c.1910-1941*, New York, J.J.Augustin, 1960, pp 18-21.

implemented ostensibly to protect Chinese labourers against abuse and exploitation, these laws tended to protect the interests of employers rather than employees.

Government attempts to cope with some of the rampant abuses of the credit-ticket system were made as early as 1823 when Raffles endeavoured to regulate the system by an Ordinance that limited the amount of passage money to \$20 and the period of the *sin-khehs's* indenture to two years. Every engagement was also to be entered into with the free consent of the parties and made in the presence of a magistrate. However, the policy was never properly enforced and the British administration in the Straits remained completely ignorant to the abuses of the trade.<sup>81</sup>

During the early 1870s a number of developments forced the British administration to take a more active interest in Chinese immigration and labour conditions.<sup>82</sup> The first effective step was taken in June 1876 with the appointment of a Committee to consider whether protective legislation in favour of Chinese labour was required. The Committee found that the immigrants were legally free agents in that employers had “no hold over the men for whose passage [they had] advanced a large sum, but their good faith and respect for custom”. However, the Committee found that malpractices began at the ports of disembarkation; abuses occurred in the Straits ports as credit-ticket passengers were forcibly detained until redeemed, while paid passengers were cramped, usually for work outside the Straits, in particular Sumatra. Moreover, the Committee gravely observed that while the Government knew little or nothing about the Chinese, the majority of Chinese knew even less about the Government.<sup>83</sup>

Three recommendations were made in light of the Committee's findings. Firstly, it was recommended that European officers conversant in the Chinese dialects be appointed in Singapore

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<sup>81</sup> The Ordinance remained unendorsed because it was considered “ultra vires”. See Mills, *British Malaya*, p.107.

<sup>82</sup> In 1871 a number of Chinese merchants and citizens in Singapore, concerned over the absence of government supervision of immigration, petitioned the Governor requesting the appointment of a trustworthy officer to superintend the new arrivals and for the planning of a general scheme of protection for Chinese immigrants. A second petition in 1873 was reinforced by articles in the local and Chinese press that illustrated the many abuses connected with the credit-ticket system. At the same time, the internecine struggles among the Chinese in the Malay States, which were beginning to threaten peace and the continuation of economic activity, also played a significant role in the government's decision to establish a less harsh system of recruitment and to improve labour conditions. Jackson, *Immigrant Labour*, pp.70-71.

<sup>83</sup> *Labour Commission Report, 1876*, p.ccxliv cited in Yip, *The Development of the Tin Mining Industry*, p.74.

and Penang as Protectors of Chinese. The second recommendation supported the detention of credit-ticket immigrants or a legalisation of a *lien* on their services. Thirdly, it was recommended that government depots be built in the ports in place of illegal detention on board ships or in lodging-houses. These depots were to receive immigrants on arrival and detain them until payment was made. Encompassed into this recommendation was the aim to bring all *sin-khehs* into immediate contact with government officials who could speak their dialects and who, it would be stressed, were there to protect them. The third recommendation also directed that written engagements for service were to be legalised and made compulsory. These contracts were to be entered into in the presence of a Protector of Chinese. Coolie-brokers and their agents were also to be legalised and registered.

Two Ordinances- No.II *The Chinese Immigrants Ordinance* and No.III *The Crimping Ordinance*- were passed in the Straits Settlements in 1877. Ordinance No.II provided for the appointment of a Protector and an Assistant Protector of Chinese, for written engagements between employers and employees, and for the establishment of depots for the reception and detention of *sin-khehs*. In the event only the first two measures were implemented. The sections relating to the establishment of government depots remained inoperative because, "...it was considered then to be premature to go the whole length...to take charge of the immigrants on arrival in the Colony, and give them direct Government protection. It was thought ...further...that any system which would recognise the baracoons was inexpedient in any civilised Government."<sup>84</sup> Instead, several of the private Chinese lodging-houses were licensed to serve the function of depots.<sup>85</sup> The depots were to be inspected regularly by officers of the Chinese Protectorate to ensure that there was no overcrowding and that conditions were satisfactory. Ordinance No.III of 1877 had as its aim the abolition of abuses and the kidnapping of coolies. Under this Ordinance it became an offence to

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<sup>84</sup> *Labour Commission Report, 1876*, p.ccxliv cited in Yip, *The Development of the Tin Mining Industry*, p.74; Gov. to Sec. State, 29 March, 1877 in CO 273/112.

<sup>85</sup> In 1877 there were 22 such depots in Singapore. In Penang 8 depots had been licensed by 1879. The number of depots with licences varied with the immigrant traffic. Jackson, *Immigrant Labour*, p.73.

recruit labour, or to procure engagements for them to work at places outside the colony, without a licence from the Protectorate. The Government proscribed the rules of conduct and duties for labour recruiters and determined the rate they could charge for their services.<sup>86</sup>

Under the two Ordinances, the provision for the appointment of the Chinese Protectorate was the most significant change. In Singapore and Penang the Chinese Protectorate was charged with the responsibility of dealing with all matters Chinese and to act as intermediary between the Government and the Chinese community.<sup>87</sup> Initially, the work of the Protectorate was confined to the Straits Settlements but by 1883 a branch had been established in Perak, in the tin mining centre at Taiping. A second branch had been established in Selangor (in Kuala Lumpur) by 1890.<sup>88</sup>

As a first step in the supervision and protection of Chinese immigrants, the Protector was bound to go on board every immigrant ship on arrival and examine each immigrant to see whether he was in debt for his passage-money. Hand bills were distributed amongst the passengers telling them that the government would protect them against any oppression. Those *sin-khehs* whose passage had been paid were then released. All the indentured labourers were taken to the licensed depots. At the depots further protection for the immigrants was provided by the requirement that labour contracts had to be signed in the presence of the Protector. The terms of the contracts were limited to three years for contracts made within the Colony and five years for contracts made elsewhere. Breach of contract involved imprisonment after the option of a fine. The terms of the contracts were carefully explained to the labourers and the agreement was registered with each labourer and employer then receiving a copy of the contract.

A second Chinese Immigration Ordinance was introduced in 1880. This Ordinance was to ensure that the immigrants were taken charge of on arrival and that the credit-ticket passenger was

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<sup>86</sup> Jackson, *Immigrant Labour*, pp.73-74.

<sup>87</sup> Amongst its numerous functions the Chinese Protectorate had three areas of special interest, viz., Chinese immigration; the traffic in women and girls; and the suppression of secret societies. The general policy was one of gradual suppression and control. For a detailed study of the functions of the Chinese Protectorate see Blythe, "Historical Sketch", pp.74-84. See also Ng, "The Chinese Protectorate in Singapore", pp.89-116: *ARC P Singapore 1881* in CO 275/13.

<sup>88</sup> The jurisdiction of the Kuala Lumpur branch was subsequently extended to Pahang. A Negri Sembilan branch was set up in 1914 at Seremban.

not burdened with a greater debt than the exact amount of the passage. Greater powers were given to the Chinese Protectorate to provide more efficient regulations for examination of *sin-khehs* on arrival and all male deck passengers were examined by the Protector on board ship. Those who were claimed by the licensed depots as being in debt for advances were then transferred and could be kept legally for ten days under the Protector's supervision.

With the decline in the number of credit-ticket immigrants arriving in the Straits Settlements towards the end of the 1880s, a second Commission was appointed in 1890 to "enquire into the state of labour in the Straits Settlements and Malay States, with a view of devising a scheme for encouraging Immigration and thereby supplying the demand for labour". The Commission recommended that to increase the flow of credit-ticket immigrants from China, the Straits Government should endeavour to obtain the full sanction of the Chinese government to the credit-ticket system. Since the Chinese government objected to the system as conducted by private individuals, the Commission felt that the Straits Government should itself undertake the business of labour importation. The existing system of detention in private depots was to be abolished and replaced by depots owned and managed by the Government. At the same time, Government depots were to be established in Hong Kong and Swatow under the control of European superintendents whose duties were to examine the emigrants and to arrange their passage. No credit-ticket immigrants could be transported to any of the Straits ports except through a government depot. By eliminating the services of the *kheh-thau* the depot-keeper and the coolie-brokers, and in turning the business into a state monopoly, the Committee envisioned that the price of Chinese labour in the Straits Settlements would be reduced considerably.<sup>89</sup>

In the event, none of these recommendations were adopted until the end of the century. Therefore, in essence, the system of recruitment of Chinese credit-ticket immigrants, including those for work on the mines, remained unchanged. Moreover, the protection afforded to the

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<sup>89</sup> *Report of the Commissioners Appointed to Enquire into the State of Labour in the Straits Settlements and Protected Native States* in CO 275/41: Gov. to Sec. State, 17 January and 16 March, 1893 in E. in Co 273/186; Gov. to Sec. State, 9 March, 1882 in CO 273/113.



immigrants by the Chinese Protectorate was inadequate. Although the measures incorporated into the 1877 Ordinances were a significant step, they only partially remedied the situation of labour abuse; many of the abuses arising from the immigrant's detention continued undeterred. In 1890 the Singapore Free Press reported that labourers were still being exploited by labour brokers and that great disorder was created on board immigrant ships by the large number of coolie-brokers, depot-keepers and crimps who swarmed on board as soon as the immigrant ships as they docked. Many immigrants were discharged before the ship was even inspected. At the same time, although the system of inspection and registration by the Protectorate had succeeded in curtailing kidnapping of *sin-khehs*, once in the depot there was nothing to prevent the depot-keeper acting as agent for the employer to influence and persuade the *sin-khehs* to accept the engagement from which the greatest profits could be obtained by the depot-keeper. Furthermore, the Protectorate lost its effective supervision over the labourers after the contracts had been signed. The Protectorate was not concerned with the implementation of the contract and the terms of the *sin-kheh's* release on its expiration. The lack of inspection and supervision outside the Protectorate meant that the labourers continued to be abused and exploited on the mines. The majority also continued to be indebted to the mine-owners long after their contracts had expired.

In summary, Chinese tin miners were generally an exploited group. In terms of the techniques of mining, the labour-intensive methods adopted by the miners necessitated a constant supply of cheap labour. The coolie was the mainstay of production and the labourers usually worked long hours in inhospitable conditions. As a result, the general health of the workers was poor. Moreover, the system of credit that formed the basis of all types of business organisation in the mines kept the labourers indebted to their employers long after they had repaid their passage-money. Even those labourers employed on the tribute mines were kept in debt by money owed to advancers under the truck system. Furthermore, the general situation of labour exploitation was underscored by the absence of any effective government legislation concerning labour conditions. Although the

establishment of the Chinese Protectorate late in the century abolished some of the abuses associated with the credit-ticket system, the inability of the Protectorate to regulate and supervise working conditions in the mines themselves meant that the lives and working conditions of the labourers were still very much controlled by the mine-owners, their headmen, and their secret societies.