

# A Brief Analysis of the Commercial Relationship Between the Government and an Iron Works of Bengal During the British Rule : A Case Study of the Bengal Iron and Steel Company (BISCO) of Kulti [1870-1910]

Chiranjit Gorai

Ph.D. Research Scholar, Department of History, Kazi Nazrul University, Asansol, West Bengal, India

Email – chiranjit.gorai000@gmail.com

**Abstract:** *The present article wishes to explore and analyse the commercial relationship between the government and the Bengal Iron and Steel Company (BISCO) during the colonial period, especially from 1870 to 1910. In other words, the paper wishes to analyse the commercial agreements and negotiations between the government and BISCO. Availability of essential raw materials in the eastern zones of British India and the discovery of rich deposits of coal in Burdwan district, especially in the Raniganj coalfield had enabled the establishment of an iron works in the Barakar-Kulti region of Bengal. Thus, in 1870, India's first recognisably modern iron works was established at Kulti under the name of the Bengal Iron Works Company. This company started to produce pig iron in 1877 but unfortunately it was closed down in 1879. In 1881, the iron works was taken over by the government under the name of the Barakar Iron Works and operated it as public enterprise for 8 years, and then sold the works to a group of British businessmen who re-established the enterprise as the Bengal Iron and Steel Company (BISCO) in 1889. During the 1890s and 1900s, BISCO had negotiated with the government and few agreements were signed between the government and BISCO regarding the purchase of pig iron and steel. In the post-First World phase, the iron works was further modified and the company was renamed as the Bengal Iron Company in 1926, and finally amalgamated with IISCO in 1936. The present paper, thus, has attempted an evolutionary documentation in an attempt to trace the commercial relationship between the government and the Kulti iron works from 1870s to the first decade of the 20<sup>th</sup> century.*

**Key Words:** *Barakar-Kulti, iron works, BISCO, pig-iron and steel, agreements, the government, contract.*

## 1. INTRODUCTION:

Kulti, under the Asansol Sub-division of Paschim Bardhaman district is a well-known place for its iron and steel industry. The development of iron industry at Kulti can be traced back in the second half of the 19<sup>th</sup> century. During the colonial period, the discovery of rich deposits of coal and iron ore in Burdwan district (especially in the Raniganj coalfield area) naturally sowed the seeds for the establishment of an iron works in the Barakar-Kulti region of Bengal. Besides, availability of other essential raw materials in the eastern zones of British India laid the foundation of the establishment of iron and steel industries in these regions. Thus, the region of Barakar-Kulti was found suitable for the establishment of an iron industry. In 1870, the first recognisably modern iron works in India was established at Kulti under the name of the Bengal Iron Works Company.<sup>1</sup> Initially, this was a private sector enterprise but in 1881, the Government of Bengal took over the iron works and operated it as a public enterprise under the name of the Barakar Iron Works. During the late 1870s, when the company was facing financial difficulties, Lord Lytton's government did not support much more to the company but in the early 1880s, Lord Ripon's government showed some support towards the iron works and purchased it in 1881. In 1889, the works was taken over by the Bengal Iron and Steel Company (BISCO).<sup>2</sup> The commercial relationship between the government and BISCO is an interesting subject to study. During the 1890s, contracts were signed between the government and BISCO regarding the purchase of pig iron. Towards the beginning of the 20<sup>th</sup> century, steel work was also initiated by BISCO and again negotiation was done between the government and BISCO regarding the purchase of steel. But there were a lot of conditions given by the government to BISCO. However, after few years the steel project was abandoned and the iron works went through several modifications. The post-World War I phase witnessed further modification and the company was renamed as the Bengal Iron Company in 1926.<sup>3</sup> And finally, the Bengal Iron Company in 1936 was amalgamated with IISCO.<sup>4</sup> In this article, I have analysed the commercial relationship between the government and the Kulti iron works during the colonial period. The first four decades have been taken as the time span of this study since the establishment of the Bengal Iron Works Company in 1870. In attempting this task, I have highlighted the establishment of the Bengal Iron Works Company at

Kulti, commercial relationship between the works and the government in the 1870s and 1880s, formation of BISCO, negotiations and agreements between the government and BISCO in the 1890s and in the first decade of the 20<sup>th</sup> century.

## 2. Establishment of the Bengal Iron Works Company at Kulti :

India's first modern iron works (Bengal Iron Works Company) was established in 1870 in the Barakar-Kulti region of Bengal. Barakar, about 10 miles away from Asansol, which was a small village in the Raniganj subdivision<sup>5</sup> of the district, thus, this place earned the honour of its name as the first successful iron works in India. The opening of the grand chord line of the East Indian Railway (EIR) had placed Barakar on the rail line at a distance of about 218 KM from Howrah. Towards the beginning of the 20<sup>th</sup> century, Barakar had a scanty population, only 385 persons were recorded in the census report in 1901, but the name of Barakar was ordinarily understood to include the villages of Begunia, Manberia, Ladna and several small collieries with total population of nearly 5000.<sup>6</sup> Kendwa was a small village situated at a distance of about 2 miles from Barakar, and Kulti was yet another hamlet adjoining Kendwa. In 1870, Mr. James Erskine of England founded the Bengal Iron Works Company at Kulti, near Barakar.<sup>7</sup> An official publication of IISCO (1961) stated- "*The name of Kulti has been associated with the pioneering days of iron and steel production in India and Kulti works of the Company was the oldest unit in India producing pig iron by modern methods.*"<sup>8</sup> In fact the geographical location of Kulti was suitable place for starting an iron plant as it had the River Barakar on the west, Grand Trunk road on the south, East Indian Railways (EIR) on the north, and iron ore was available on the north. In the early days, local people used to call the works "*Kendwa Karkhana*".<sup>9</sup> The Kulti iron works was situated at a distance of about 214 KM from Howrah on the grand chord line of the East Indian Railway (EIR). Moreover, the plant was advantageously situated to utilise Raniganj coal and the clay-ironstone and flux available in the coalfield within a few miles of the works.<sup>10</sup> The iron works was started with 2 open top blast furnaces, both furnaces were capable to produce 20 tonnes of pig iron per day.<sup>11</sup> When the construction of the iron works was taken up in the 1870s, Mr. Mac Lellan, a director from London, used to visit Kulti regularly every year. Mr. W. T. Craddock was the first chief engineer and he was in charge of the construction.<sup>12</sup> It may be noted that Mr. W. Mc Farlane was the first General Manager of Kulti works and he appears to have been the head of operations at least till 1907.<sup>13</sup>

## 3. Commercial Relationship Between the Government and Kulti Works: 1870s and 1880s :

The Bengal Iron Works Company of Kulti originally started its journey in 1875. It began with a capital of Rs 1 million.<sup>14</sup> In September, 1876, the Railway Branch placed the first order with the company for the supply of only 5,500 tons of iron for three years.<sup>15</sup> Thus, the company started its operation and began to produce pig iron in 1877.<sup>16</sup> But there was no demand for the pig iron as the foundry industry had not developed sufficient to absorb the production, and in those days the government was the only major buyer but they wanted castings and not pig iron. Added to this, at the same time company was facing financial difficulties, as a consequence, the blast furnaces were closed down in 1879.<sup>17</sup> Thus, the Bengal Iron Works Company was closed down within the two years since the production commenced. So, we need to understand the relationship between the government and the company in the late 1870s.

In 1877, the company requested the government 'to guarantee 5 per cent, on capital', so that they could raise fresh capital in order to equip the works with up-to-date plant.<sup>18</sup> In 1878, the Government of Bengal estimated that it would take an added investment of Rs. 3.2 million to put the operation firmly on its feet.<sup>19</sup> The company (Bengal Iron Works Company) claimed that such a sum could not be privately mobilised without the government guarantee of a 5 per cent rate of return.<sup>20</sup> The government did not accede to this request. In September, 1878, Ashley Eden, the Lieutenant-Governor of Bengal, with full support of the Public Works Department, representing the Government of India realised the importance of supporting the local industry and recommend 'a guarantee on capital of 32 lakhs'.<sup>21</sup> In 1879, the company made a fresh appeal to the government and proposed that the government 'should guarantee 5 per cent, on the undertaking to the extent of 12 lakhs expended' or they 'should receive the property on mortgage at 4 per cent, advancing 8 lakhs'.<sup>22</sup> The Bengal Government strongly supported the proposal; Ashley Eden feelingly wrote about the 3,000 workers who would be thrown out of employment if the company suspended operations. However, Lord Lytton's Government (1876-1880) remained consistent in their opposition to offering the iron works any tangible help and averred that 'in no case could the Government of India give a guarantee of interest on capital on any such undertaking', nor would they purchase the works.<sup>23</sup> The company was unable to survive without this additional subvention, therefore, shut down in 1879.<sup>24</sup> As H. C. Bhardwaj has shown, the short supply of coal and non-sanction of a loan by the government, the factory was closed down in 1879.<sup>25</sup> Thereafter, the management was taken over by Marillier & Edwards, a large engineering and contracting firm of Calcutta, who worked the foundries for some time but they were forced to discontinue the operations.<sup>26</sup> Meanwhile Lord Lytton was succeeded by Lord Rippon in June, 1880, and because the Government of India felt strongly about the need to develop a modern iron industry, therefore, the government purchased the defunct firm in 1881 at something less than half the value of the original investment and operated it as a public enterprise until 1889.<sup>27</sup> After taking over by the government, the plant was renamed as the Barakar

Iron Works and the operations were carried on for 8½ years under the same name until 1889. During this period, the Barakar Iron Works had produced a variety of products for railway, public works and agricultural uses.

#### 4. Formation of the Bengal Iron and Steel Company (BISCO) :

After taking over by the government, several promoters of the Barakar Iron works in England approached the secretary of states for India, London and arranged for a takeover of the works in 1889.<sup>28</sup> As a consequence, the Bengal Iron and Steel Company (BISCO) was incorporated in 1889 in England with a capital of £150,000.<sup>29</sup> This company (BISCO) took over the Barakar Iron Works in 1889 and the works started its journey as the Bengal Iron and Steel Company (BISCO). A lease was granted by the secretary of state for India for 999 years.<sup>30</sup> The company paid the insignificant sum of £31,000 for a property that included 1,500 acres of land bearing large coal and iron deposits, two blast furnaces with an annual capacity of 7,000 tons and a foundry.<sup>31</sup> It may be noted that, BISCO was incorporated by a group of British businessmen.<sup>32</sup>

#### 5. The Government and BISCO (1890s-1900s): Negotiations, Agreements and Development :

The new Bengal Iron and Steel Company (BISCO) was again undercapitalised, and lacked adequate information on input costs or market potentialities. During the early 1890s, BISCO was running into financial difficulties. In 1894, Messrs. Martin and Co., of Calcutta were appointed managing agents of the works.<sup>33</sup> By 1894 BISCO had expanded its initial capital and desperately needed more.<sup>34</sup> At about this time, when the company was running into difficulties in the mid-1890s, the government was approached for two subsidise loans. But the government refused to provide subsidise loans. As a consequence, BISCO had faced heavy financial crisis and did not make profit. Instead of profit, BISCO had faced heavy commercial loss during the mid-1890s. In 1895, the amount of loss was £10,961 and again in the very next year i.e., in 1896 the loss stood at £9,520.<sup>35</sup> The government did not grant any subsidise loans to BISCO but did reduce the royalty charge on coal by two-thirds.<sup>36</sup> The government also made an important agreement in 1897 with BISCO to purchase 10,000 tons of pig iron annually for ten years at rates 5 per cent below the import price, or the prices at which the English manufacturers could land it in India.<sup>37 38</sup> This offer encouraged the works to carry out its expansion progressively. Thus, in the next few years BISCO made good profit. In 1899, BISCO made a profit of £1,306.<sup>39</sup> By 1901, BISCO produced annually about 25,000 tons of iron of which some 40 per cent or 10,000 tons went to satisfy the contract with the state railways.<sup>40</sup> Commercially, the year of 1901 was very positive for BISCO. In 1901, BISCO made a huge profit of £29,863, followed by a profit of £26,324 in 1902.<sup>41</sup> During the first decade of the 20<sup>th</sup> century, BISCO had produced about 50,000 tons of pig iron per annum.<sup>42</sup> Most of the output—pig and cast-iron products—of BISCO were sold to the government departments.

Though, BISCO was producing pig iron in large quantity but the company had already realised the importance of producing steel. In 1897, the Director-General of Statistics pointed out that the market for pig iron was limited and that the great expansion in Indian demand was for steel.<sup>43</sup> As an aspect of its wider efforts to stimulate private enterprise, Lord Curzon's government (1899-1906) eased the rules for the issuance of prospecting licences and mining leases in 1899.<sup>44</sup> Responding to these more favourable signs, BISCO negotiated with the government regarding the set up of steel section. As the result of the negotiation with the government, BISCO offered to undertake steel production if it could be assured that the government would not start its own enterprise in competition and would agree to buy 15,000 tons of steel rail a year for five years.<sup>45</sup> The government refused it. But in 1903, a contract was signed between the Government of India and BISCO under which the government agreed to give a subsidy of £1,500 per year for 10 years.<sup>46</sup> According to this new contract, the works had to supply steel to the government but a reduction of Rs 3 per ton was to made on every ton supplied as a set-off against the subsidy of £1,500.<sup>47</sup> Thus, in 1903, BISCO decided to embark on the manufacture of steel and 17½ lakhs of rupees were invested in the steel-making plant.<sup>48</sup> Two open-hearth furnaces were set up for the steel section and a rolling mill erected.<sup>49</sup> Steel production was maintained for some times but unfortunately the project was a total failure. According to the *Indian Industrial Commission-Inspection Notes, 1916-18* (1918), the steel plant ran from June 1905 to January 1906.<sup>50</sup> However, on the other hand, Morris D. Morris has shown, the works went into steel production in November 1904 and closed down in 1906.<sup>51</sup> During this time (1905-06) 5½ lakhs of rupees were lost.<sup>52</sup> The speed with which the steel project of BISCO was planned and got under way and the equal speed with which it was shut down suggests that both technical and economic planning by the European entrepreneurs was grossly defective.<sup>53</sup> According to the *Report of the Indian Industrial Commission of 1916-18* (1918), the use of poor quality of iron ore was largely responsible for the failure of the company to make steel at a profit in 1905 and onwards.<sup>54</sup> Thus, the steel section was closed down permanently in 1906.<sup>55</sup> However, its pig iron production was continued. As H. C. Bhardwaj has shown, due to the high phosphorous content, the pig iron of Kulti works was not suitable for converting it to wrought iron or steel but was suitable for foundry purposes.<sup>56</sup> It has been mentioned earlier that an agreement was signed in 1897 between the government and BISCO regarding the purchase of 10,000 tons of iron annually. But in 1907, the government refused to renew its 1897 agreement to buy 10,000 tons of iron products annually.<sup>57</sup> This may be

considered as one of the major problems ever faced by BISCO during the first decade of the 20<sup>th</sup> century. Thereafter, during the next few years BISCO underwent considerable reorganisation, getting access to better ore and coal supplies and improving its efficiency. Thus, in 1910, Manoharpur ore mines were acquired by BISCO for better quality of iron ore.<sup>58</sup>

## 6. Conclusion :

In the last retort it may be said that, the Bengal Iron Works Company which was established in 1870 at Kulti had to contain with too many problems but every time the company dealt those problems fiercely. The establishment of the Kulti works significantly inaugurated the onset of an economic structure that was no doubt foreign sponsored but developed an industrial based economy which was indeed a novel growth. Regarding the commercial development of the works, it may be said that, every time before the First World War, the company had to rely on the government regarding the purchase of iron and steel. For this purpose, agreements were signed between the government and BISCO during the 1890s and the first decade of the 20<sup>th</sup> century. But, due to inadequacy of the orders from the government, railways and private buyers, the steel section of BISCO was closed in 1906. Meanwhile, in 1907, the government refused to renew its 1897 agreement to buy 10,000 tons of iron products annually. Reasons are not clear why. But there is some evidence that BISCO was a very high-cost producer and the quality of both its iron ore and coal were unsatisfactory.<sup>59</sup> The unfavourable turn from the government was no doubt a crucial factor in the commercial relationship between the government and BISCO but I would argue that the establishment of the Tata Iron and Steel Company (TISCO) in 1907 at Jamshedpur had changed the commercial scenario in the field of iron and steel. TISCO was more fortunate than most manufacturing companies in its relations with the colonial state. Thereafter, BISCO went through several modifications and made good profit during the First World War. In the post-war phase, it was further modified and renamed as the Bengal Iron Company in 1926 and finally amalgamated with IISCO in 1936.<sup>60</sup>

## Endnotes and References :

<sup>1</sup> 'KULTI WORKS', an official publication of the Indian Iron and Steel Company, 1961. According to the *Bengal District Gazetteers, Burdwan* of J. C. K. Peterson (1910), the Bengal Iron Works Company was established in 1874, and according to the *Indian Industrial Commission-Inspection Notes, 1916-18* (1918), the Bengal Iron Works Company was established in 1875.

<sup>2</sup> 'KULTI WORKS', *op. cit.*

<sup>3</sup> *Ibid.*

<sup>4</sup> The Indian Iron and Steel Company (IISCO) was established in 1918 at Burnpur, adjacent Asansol.

<sup>5</sup> At that time Raniganj was the Sub-division of this region. Asansol as a Sub-division came into existence in 1906.

<sup>6</sup> J. C. K. Peterson, '*Bengal District Gazetteers, Burdwan*', Bengal Secretariat Book Depot, Calcutta, 1910, p. 185.

<sup>7</sup> 'KULTI WORKS', *op. cit.*

<sup>8</sup> *Ibid.*

<sup>9</sup> N. R. Srinivasan, *History of the Indian Iron and Steel Company*, Public Relations Department of IISCO, Burnpur, 1983, p. 25.

<sup>10</sup> John. E. Brush, "The Iron and Steel Industry in India", *Geographical Review*, Vol. 42, No. 1, January, 1952, pp. 37-55, (see p. 48.).

<sup>11</sup> N. R. Srinivasan, *op. cit.*, p. 26.

<sup>12</sup> *Ibid.*, p. 39.

<sup>13</sup> N. R. Srinivasan, *op. cit.*, p. 39.

<sup>14</sup> Morris D. Morris, 'The Growth of Large-Scale Industry to 1947' in Dharma Kumar (ed.), *The Cambridge Economic History of India, Vol. II, 1757- 2003*, Orient BlackSwan impression, 2010, pp. 553-676. (see p. 585.).

<sup>15</sup> Sunil Kumar Sen, *Aspects of Industrial Policy and Development of India 1858-1914*, Ph.D. thesis, Calcutta University, 1962, p. 66.

<sup>16</sup> Morris D. Morris, *op. cit.*, p. 585.

<sup>17</sup> *Indian Industrial Commission-Inspection Notes, 1916-18*, Superintendent Government Printing, Calcutta, 1918, p. 24.

<sup>18</sup> Sunil Kumar Sen, *op. cit.*, pp. 66-67.

<sup>19</sup> Morris D. Morris, *op. cit.*, p. 585.

<sup>20</sup> *Ibid.*

<sup>21</sup> Sunil Kumar Sen, *op. cit.*, pp. 66-67.

<sup>22</sup> *Ibid.*

<sup>23</sup> *Ibid.*

- <sup>24</sup> *Indian Industrial Commission-Inspection Notes, op. cit.*, p. 24.
- <sup>25</sup> H. C. Bhardwaj, 'Development of Iron and Steel Technology in India during 18<sup>th</sup> and 19<sup>th</sup> Centuries', *Indian Journal of History of Science*, 17 (2), 1982, pp.223-233. (see p. 231.).
- <sup>26</sup> N. R. Srinivasan, *op. cit.*, pp. 32-33.
- <sup>27</sup> Morris D. Morris, *op. cit.*, pp. 585-86.
- <sup>28</sup> N. R. Srinivasan, *op. cit.*, p. 33.
- <sup>29</sup> Morris D. Morris, *op. cit.*, p. 586.
- <sup>30</sup> *Ibid.*
- <sup>31</sup> *Ibid.*
- <sup>32</sup> B. R. Tomlinson, *The Economy of Modern India, 1860-1970*, Cambridge University Press, New Delhi, 1998, p. 128.
- <sup>33</sup> *Indian Industrial Commission-Inspection Notes, op. cit.*, p. 24.
- <sup>34</sup> Morris D. Morris, *op. cit.*, p. 586.
- <sup>35</sup> *Indian Industrial Commission-Inspection Notes, op. cit.*, p. 24.
- <sup>36</sup> Morris D. Morris, *op. cit.*, p. 586
- <sup>37</sup> *Ibid.*, (also see- B. R. Tomlinson, *op. cit.*, p. 128.)
- <sup>38</sup> *Indian Industrial Commission-Inspection Notes, 1916-18, op. cit.*, p.24.
- <sup>39</sup> *Ibid.*
- <sup>40</sup> Morris D. Morris, *op. cit.*, p. 586.
- <sup>41</sup> *Indian Industrial Commission-Inspection Notes, 1916-18, op. cit.*, p.24.
- <sup>42</sup> E. R. Watson, *A Monograph on Iron and Steel Work in the Province of Bengal*, Bengal Secretariat Book Depot, Calcutta, 1907, pp. 13-14.
- <sup>43</sup> Morris D. Morris, *op. cit.*, p. 587.
- <sup>44</sup> *Ibid.*
- <sup>45</sup> *Ibid.*
- <sup>46</sup> N. R. Srinivasan, *op. cit.*, p. 36. (also see- *Indian Industrial Commission-Inspection Notes, 1916-18, op. cit.*, p. 25., also see- Morris D. Morris, *op. cit.*, p. 587., also see- B. R. Tomlinson, *op. cit.*, p. 128.).
- <sup>47</sup> *Indian Industrial Commission-Inspection Notes, 1916-18, op. cit.*, p.25.
- <sup>48</sup> *Ibid.*
- <sup>49</sup> *Ibid.*
- <sup>50</sup> *Ibid.*
- <sup>51</sup> Morris D. Morris, *op. cit.*, p. 587.
- <sup>52</sup> *Indian Industrial Commission-Inspection Notes, 1916-18, op. cit.*, p.25.
- <sup>53</sup> Morris D. Morris, *op. cit.*, p. 587.
- <sup>54</sup> *Report of the Indian Industrial Commission of 1916-18*, Superintendent Government Printing, India, Calcutta, 1918, p. 20.
- <sup>55</sup> *The Imperial Gazetteer of India, Vol. VI, Argaon to Bardwan*, Oxford Clarendon Press, 1908, p. 426.
- <sup>56</sup> H. C. Bhardwaj, *op. cit.*, p. 230.
- <sup>57</sup> Morris D. Morris, *op. cit.*, p. 587.
- <sup>58</sup> *Indian Industrial Commission-Inspection Notes, 1916-18, op. cit.*, p. 24.
- <sup>59</sup> Morris D. Morris, *op. cit.*, p. 587.
- <sup>60</sup> 'KULTI WORKS', *op. cit.*